

Year 3 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2020-June 30, 2021

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, 2020 and June 30, 2021 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Town of Pembroke, MA

EPA NPDES Permit Number: MAR041054

Primary MS4 Program Manager Contact Information

Name: Eugene B. Fulmine, Jr

Title: Director of Public Works

Street Address Line 1: 100 Center Street

Street Address Line 2:

City: Pembroke

State: MA

Zip Code: 02359

Email: efulminejr@townofpembrokemass.org

Phone Number: (781) 709-1426

Stormwater Management Program (SWMP) Information

SWMP Location (web address): N/A

Date SWMP was Last Updated: June 27, 2019

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

Located at DPW Office (100 Center Street, Pembroke, MA) and Town Library (142 Center Street, Pembroke, MA). In the process of posting SWMP on Town website.

Part II: Self-Assessment

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

Impairment(s)

- ☒ Bacteria/Pathogens
 ☐ Chloride
 ☒ Nitrogen
 ☒ Phosphorus
☐ Solids/ Oil/ Grease (Hydrocarbons)/ Metals

TMDL(s)

- In State:**
☐ Assabet River Phosphorus
 ☒ Bacteria and Pathogen
 ☐ Cape Cod Nitrogen
☐ Charles River Watershed Phosphorus
 ☐ Lake and Pond Phosphorus
Out of State:
☐ Bacteria/Pathogens
 ☐ Metals
 ☐ Nitrogen
 ☐ Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 3 Requirements

- ☐ Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
☐ Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary
☒ Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

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 3 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:

26% of the MS4 outfalls have been inspected and screened. Initial screening took place in 2019 and the Town is working to complete them all. Preliminary outfall/interconnection priority ranking was developed for the initial IDDE Plan and will be updated as outfall screening is performed.

In Year 3, the Town completed a review of their bylaws for consistency with the 2016 MS4 Permit. Proposed bylaw modifications will be considered during Pembroke's annual Town Meeting in spring 2022.

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 system map due in year 2 as necessary
- ☒ 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, 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:

Mapping of open channel conveyance and MS4 interconnections is ongoing. All other Phase I mapping requirements have been completed.

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- ☒ Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- ☒ Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

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

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

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Potential structural BMPs

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was

- ☐ estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

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

N/A

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

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Potential structural BMPs

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

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

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:

N/A

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

N/A

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:

As seen in the Massachusetts Year 2016 Integrated List of Waters, Indian Head River (MA94-04; Category 5 Water) is now impaired for E.coli in addition to the impairments listed in the Massachusetts Year 2014 Integrated List of Waters.

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: School curriculum, programs, press release, social media post

Message Description and Distribution Method:

The Town of Pembroke is partnered with the North and South Rivers Watershed Association (NSRWA) which is an organization that strives to provide educational and scientific support to communities in the North and South Rivers Watershed. This has been demonstrated through their virtual WaterSmart videos and in-school WaterSmart school program "Water All Around You" being taught as part of the Pembroke school curriculum.

A press release also went out to the town, The Globe, the Patriot Ledger, Wicked Local, and the Pembroke Mariner & Express, and the videos were also posted on the NSRWA Facebook page and YouTube channel.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Due to the Covid-19 pandemic, the school program had to go virtual. Environmental Educator Brian Taylor created videos on the school program content that teachers used with their students. There were 120 students who participated in the program in Pembroke, 371 views on the school program web page, and 270 views on the NSRWA YouTube 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:Spring Annual Message

Message Description and Distribution Method:

The Town provided a link to the North and South Rivers Watershed Association Facebook page, which distributed an annual message encouraging the proper use and disposal of grass clippings as part of their WaterSmart South Shore campaign.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

The post titled "Know Before You Blow" was posted on the Pembroke Connect Facebook page, receiving 13 engagements. The North and South Rivers Watershed Associations Facebook page reaches upwards of 5,000 people.

Distributed in accordance with the Town's Nitrogen and Phosphorus impairments.

Message Date(s): June 3, 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:

N/A

BMP: Lawn and Garden Tips

Message Description and Distribution Method:

The Town posted a link to Think Blue Massachusetts "Lawn and Garden Tips to Help Curb Stormwater Pollution". The online pamphlet includes tips on leaving grass clippings to fertilize your lawn naturally, how high to cut grass, and more.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke and ThinkBlue

Measurable Goal(s):

Distributed in accordance with the Town's Nitrogen and Phosphorus impairments.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP:Summer Annual Message

Message Description and Distribution Method:

On behalf of the Town of Pembroke, the North and South Rivers Watershed Association distributed an annual summertime message encouraging the proper use of slow-release and phosphorus-free fertilizers in a

Facebook post titled "You're not just fertilizing the lawn!" as part of their WaterSmart South Shore campaign.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

The post titled "You're not just fertilizing the lawn!" had 3,189 people and 172 engagements when it was boosted in Pembroke. There were also 209 page views on the stormwater web pages.

Distributed in accordance with the Town's Nitrogen, Phosphorus, and bacteria/pathogens impairments, as well as their bacteria/pathogens TMDL reports.

Message Date(s): May 19, 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:

N/A

BMP: Dog Waste Message

Message Description and Distribution Method:

On behalf of the Town of Pembroke, the North and South Rivers Watershed Association posted an annual message on their Facebook page in the summer encouraging the proper management of pet waste as part of their WaterSmart South Shore campaign. The post was titled "The Pet Waste Problem on the South Shore" and was posted on the NSRWA Facebook page and on the Pembroke Connect Facebook page.

In addition, an informative article was written "on Addressing the Dog Waste Problem on the South Shore" and was sent to The Globe, the Patriot Ledger, Wicked Local, and the Pembroke Mariner & Express. There was also a live interview done on WATD.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

The Problem of Dog Waste on the South Shore had 66 web page views, and 243 page views on the Pet Waste Education page.

Distributed in accordance with the Town's Nitrogen, Phosphorus, and bacteria/pathogens impairments, as well as their bacteria/pathogens TMDL reports.

Message Date(s): June 17, 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:

N/A

BMP:Pet waste Scoop It cards

Message Description and Distribution Method:

The North and South Rivers Watershed Association distributed pet waste Scoop It cards to the town clerk's office, Pembroke Animal Hospital, and Blue Ribbon Veterinary Services.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

100 cards were distributed to each facility listed, totaling 300 cards.

Distributed in accordance with the Town's bacteria/pathogens impairments and TMDL reports.

Message Date(s): June 17, 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:

N/A

BMP:Fall Annual Message

Message Description and Distribution Method:

On behalf of the Town of Pembroke, the North and South Rivers Watershed Association distributed an annual message on their Facebook page in the fall encouraging the proper disposal of leaf litter as part of their WaterSmart South Shore campaign. The post was titled "Don't Blow it!".

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

When the Facebook post was targeted to residents of Pembroke, it had a reach of 2,606 people and 129 engagements.

Distributed in accordance with the Town's Nitrogen and Phosphorus impairments.

Message Date(s): October 16, 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:

N/A

BMP: Rain Barrel Sale

Message Description and Distribution Method:

On behalf of the Town of Pembroke, North and South Rivers Watershed Association organized a Rain Barrel Sale as part of their WaterSmart South Shore campaign. A press release went out to: the town, The Globe, the Patriot Ledger, Wicked Local, and the Pembroke Mariner & Express. In addition, Facebook posts were distributed on the NSRWA page and town connect Facebook page. Information about the sale also went out in the NSRWA E-newsletter.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

9 rain barrels were sold to residents of Pembroke.

Message Date(s): April 7, 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:

N/A

BMP: Gardening Green Expo.

Message Description and Distribution Method:

On behalf of the Town of Pembroke, North and South Rivers Watershed Association organized a Gardening Green Expo, a week long event with live sessions each day as well as prerecorded speaker videos. A downloadable Greenscapes Guide was also promoted online, on the NSRWA Facebook page, and on the Pembroke Connect Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

There were 639 live attendees, as well as 1,007 YouTube viewers. Speaker videos online had 4,170 web page views and a drawing for free products and prizes in which 115 people registered. The Pembroke Connect Facebook page has upwards of 20,000 members.

Message Date(s): March 22, 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:

N/A

BMP: Septic Maintenance Message

Message Description and Distribution Method:

On behalf of the Town of Pembroke, the North and South Rivers Watershed Association organized and distributed a press release on septic maintenance that went out to: the town, The Globe, the Patriot Ledger, Wicked Local, the Pembroke Mariner & Express. A Facebook post highlighting the EPA's SepticSmart Week was created to spread awareness to residents as well.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

A Facebook post targeted to Pembroke reached of 7,998 people and 400 engagements.

Distributed in accordance with the Town's bacteria/pathogens impairments and TMDL reports.

Message Date(s): September 17, 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:

N/A

BMP: Construction Stormwater Pollution Prevention Guide

Message Description and Distribution Method:

On behalf of the Town of Pembroke, North and South Rivers Watershed Association organized and distributed a brochure entitled "Construction Stormwater Pollution Prevention Guide" to the Building Department. It was also posted on the Stormwater - What it is and How to Help - page of the Town's Website.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association, Nep

Measurable Goal(s):

The Building Department handed these brochures to developers when they receive their permits.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Proper Management of Waste Materials and Dumpsters Postcard

Message Description and Distribution Method:

On behalf of the Town of Pembroke, the North and South Rivers Watershed Association organized and distributed a "Proper Management of Waste Materials and Dumpsters" postcard" to all of the Businesses, Institutions, Commercial Facilities and Industrial Facilities in Pembroke.

Targeted Audience: Businesses, institutions and commercial facilities; Industrial Facilities

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

There were 136 postcards mailed in Pembroke.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Water for People WMA Grant: videos, online pledge, and lawn signs.

Message Description and Distribution Method:

The NSRWA also received a WMA Grant on behalf of the WaterSmart towns, which allowed them to produce a series of videos, an online pledge, and lawn signs. This campaign is scheduled to continue through the end of August.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

So far, there have been 10,991 people reached and 150 engagements on Facebook in Pembroke. There have also been 863 views on the NSRWAs YouTube channel.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Greenscapes: Create a Healthy Yard

Message Description and Distribution Method:

The Town posted a pamphlet entitled "Greenscapes: Creating a Healthy Yard" on the Stormwater - What it is and How to Help - page of the Town website. This pamphlet highlights the benefits and downsides between organic and synthetic fertilization techniques.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

Distribute two messages to each targeted audience during the permit term.

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:

N/A

BMP: Stormwater Solutions Brochure

Message Description and Distribution Method:

The Town posted a "Stormwater Solutions" brochure on the Stormwater - What it is and How to Help - page of their website, which highlights easy things residents can do in their every day lives to protect water resources.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke DPW

Measurable Goal(s):

The Stormwater - What it is and How to Help - web page is always available for Pembroke residents to look at and reference.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Greenscapes Stormwater Brochure

Message Description and Distribution Method:

The Town posted a "Stormwater Solutions" brochure on the Stormwater - What it is and How to Help - web page of their website, which explains the concept of stormwater and addresses the reasons why the public should care about stormwater.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, the North and South Rivers Watershed Association

Measurable Goal(s):

The Stormwater - What it is and How to Help - web page is always available for residents to look at and reference.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Stormwater: What the Heck is it and Why Should We Care?

Message Description and Distribution Method:

The Town posted a "Stormwater: What the Heck is it and Why Should We Care?" article on the Stormwater - What it is and How to Help - web page of their website, which explains what stormwater is, and how residents can become stormwater stewards.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, Debbie Cook, Greenscapes Manager, North and South Rivers Watershed Association

Measurable Goal(s):

The Stormwater - What it is and How to Help - web page is always available for residents to look at and reference.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP: Be a Leaf Hero Slide Show

Message Description and Distribution Method:

The Town posted a "Be a Leaf Hero" slide show on the Stormwater - What it is and How to Help - web page of their website, which stresses the importance of keeping leaf litter out of our waterways, as well as other stormwater leaf hero tips.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke, Cape Cod Stormwater Managers Group

Measurable Goal(s):

The Stormwater - What it is and How to Help - web page is always available for residents to look at and reference.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

N/A

BMP:Additional Messaging Related to Grass Clippings, Pet waste, and Leaf Litter

Message Description and Distribution Method:

Pembroke offered additional messaging related to grass clippings, pet waste, and leaf litter at the Town Clerks Office.

Targeted Audience: Residents

Responsible Department/Parties: Town of Pembroke

Measurable Goal(s):

Additional messaging related to grass clippings, pet waste, and leaf litter were made available at the Town Clerks Office on the counter.

Message Date(s): Ongoing

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

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

If yes, describe why the change was made:

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:**

Annual review and public comment of SWMP and posting of plan in DPW Office and Town Library.

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:**

biannual household hazardous waste collection days, and yearly waterway clean-ups.

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:

Mapping of open channel conveyances and MS4 interconnections are ongoing.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- ☒ No outfalls were inspected
- ☐ The outfall screening data is attached to the email submission
- ☐ The outfall screening data can be found at the following website:

N/A

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

Number of outfalls screened: 0

*Below, report on the percent of outfalls/interconnections screened **to date**.*

Percent of outfalls screened: 26

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

26% of outfalls were screened in 2019, the Town had a delay on continuing this work due to COVID-19 concerns and staffing, and look to complete this task soon.

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- ☒ No catchment investigations were conducted
- ☐ The catchment investigation data is attached to the email submission
- ☐ The catchment investigation data can be found at the following website:

N/A

*Below, report on the number of catchment investigations completed **during this reporting period**.*

Number of catchment investigations completed this reporting period: 0

*Below, report on the percent of catchments investigated **to date**.*

Percent of total catchments investigated: 0

Optional: Provide any additional information for clarity regarding the catchment investigations below:

N/A

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- ☒ No illicit discharges were found
☐ The illicit discharge removal report is attached to the email submission
☐ The illicit discharge removal report can be found at the following website:

*Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period.***

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

Employee Training

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

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

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:

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:

This assessment has been performed and is part of the memorandum regarding assessment of the Town of Pembroke's current Bylaws.

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:

This assessment has been performed and is part of the memorandum regarding assessment of the Town of Pembroke's current Bylaws.

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:

This assessment has been performed and is part of the memorandum regarding assessment of the Town of Pembroke's current Bylaws.

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: 1,728

Number of catch basins cleaned: 1,728

Total volume or mass of material removed from all catch basins: 387 cubic yards

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

Total number of catch basins: 2,592

If applicable:

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

N/A

Street Sweeping

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

☐ Number of miles cleaned: 275

☒ Volume of material removed: 130 cubic yards

☐ 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: 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:

In Year 3, the Town conducted a Stormwater Utility Feasibility Study.

COVID-19 Impacts

Optional: If any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

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)

Provide any additional details on activities planned for permit year 4 below:

In Year 4, the NSRWA will be completing the following outreach (in addition to NSRWA's annual initiatives):

- Parking Lot Maintenance - The NSRWA will provide education relevant to parking lot maintenance, salt storage, sweeping, catch basin cleaning, and fleet maintenance to Hanover businesses.
- Low Impact Development Information Targeted to Developers - The NSRWA will provide education relevant to reduction of impervious surfaces, use of alternatives to paving, decentralized approach to stormwater, rain gardens, swales, and bioretention area.
- WaterSmart Public Art Raffle or Contest - The NSRWA will come up with a stormwater message for residents to coincide with either an art raffle or a public contest to spread the message.

Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Name:

William D. Chenard

Title:

Town Manager

Signature:

William D.
ChenardDigitally signed by William D.
Chenard
Date: 2021.09.27 14:15:11 -04'00'

Date:

09/27/21

*[Signatory may be a duly authorized
representative]*