

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:

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)

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

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:

Stormwater ordinance revisions have been proposed and are under consideration by the Planning Board

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:

In Appendix 9 of the SWMP

- 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:

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:

No structural stormwater BMPs have been installed in the regulated area since the permit effective date of July 1, 2017

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:

The Town of Palmer currently reviews both small and large scale development projects for compliance with erosion and sediment control and post-construction stormwater management. Proposed revisions to the small and large stormwater project ordinances for compliance with the Small MS4 General Permit, such as

specifying the timeframe within which as-built plans are required and modifications to the post-construction stormwater standards to reflect the difference between the Massachusetts Stormwater Standards and the requirements of the Small MS4 General Permit, are currently under review by the Town's Planning Board, and are anticipated to be adopted by Town Council in the near future.

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 list of outfalls has been updated after the completion of the additional stormwater system mapping performed under an asset management grant and dry weather outfall screening in PY3. The updated map and outfall inventory are included in the SWMP.

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: Think Blue Massachusetts "Fowl Water" Advertisement

Message Description and Distribution Method:

Think Blue Massachusetts ran the "Fowl Water" advertisement to help viewers visualize how motor oil, pet waste, and trash become stormwater pollution. The advertisement took place via Facebook and Instagram sponsored videos and YouTube pre-roll advertisements.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

For Palmer:

5,081 Facebook/Instagram impressions

12,625 YouTube ad impressions

2,149 Spanish language impressions

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: Think Blue Connecticut River Website

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

A total of 3,196 people visited the Think Blue Connecticut River website during Year 3 and spent an average

of 1 minute, 38 seconds on viewing a total of 3,940 pages on stormwater best practices.

The Town's Land Management and Open Space Committee Facebook page posted a link to the Think Blue Connecticut River page that received 1 like and had 49 impressions.

Message Date(s): July 1, 2020 - June 30, 2021
Facebook post: September 21, 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:

As indicated in previous annual reports, the website was not mentioned in the NOI and SWMP, but with development now completed is most central to all messaging in the region.

BMP: Cigarette butts

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Decals on Public Works vehicles and public spaces had a roughly estimated 40,000 views per month in each community.

The Facebook advertisement reached 17,720 people identified as “smokers” and was shown 31,937 times; 152 smokers clicked on the link to check out the landing pages and there were 62 reactions. Facebook estimates that 4,330 viewers recall the campaign advertisement.

The posting on PVPC’s Facebook page shows 20 shares.

The Springfield Republican, which printed an article and followed with an editorial estimates its audience at 83,000 readers.

Message Date(s): Decals: throughout Year 3
Facebook ad: May 20 - 28, 2021
PVPC Facebook post: May 21, 2021
Springfield Republican: August 3 and 6, 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:

Postponed to Year 3 and rather than messaging through use of PVTA bus panels, decided to message with large decals on public works vehicles throughout the region, which was supplemented with press release,

Facebook messaging, and Think Blue Connecticut River website information on cigarette butts.

BMP: Dumpster waste and avoiding contaminated flows

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

An e-mail about Think Blue Connecticut River resources on dumpsters for Boards of Health went to the full membership of the Massachusetts Health Officers Association, 650 people.

Message Date(s): March 24, 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:

Message postponed from Year 2 to Year 3; changed strategy to work with Boards of Health to inform them and then get them to distribute the information to dumpster companies) and to businesses when health agents are doing routine inspections. The education and outreach effort became two pronged to include an additional flyer specifically for Boards of Health.

BMP: New MS4 development standards and erosion and sediment control

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Developers (construction)

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Think Blue Connecticut River Booth summary:
Total visits: 71
Documents viewed: 68
Videos viewed: 7

Message Date(s): October 21, 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:

Due to the Covid-19 pandemic, this messaging was moved to Year 3 and done virtually as a booth as offered by the Conference.

BMP: Fleet maintenance to avoid spills and leaks

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Industrial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Mailing to 126 MSGP permittees in the region.

Message Date(s): April 16, 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:

Postponed to Year 3 given likelihood of message getting lost in the mix during all the information around Covid-19 best practices and the struggle for industrial facilities to continue operations during the pandemic.

BMP: Proper management of pet waste - residents

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Google ad reached 19,227 people identified as dog owners in targeted communities with 34 people clicking through to the pet waste pick up pledge.

PVTA estimates that the bus panels produced more than 1.5 million impressions.

During Year 3, Think Blue Connecticut River pet waste page on the website had 700 page views with the analytics indicating that the average time spent by visitors on that resource page was 2 minutes and 3 seconds. Of the total 390 people who clicked on the pet waste pledge, there were about 100 new people who made the commitment to pick up pet waste in Year 3.

Google ad: February 8 - 19, 2021

Message Date(s): PVTA bus ads: late June - September 2021

Facebook ad: September 13 - 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:

The NOI/SWMP indicated pet waste messaging only in summer months as PVPC understood that messaging under the Appendixes could be combined. EPA has indicated that additional messaging to dog owners “at time of licensing” is required. Messaging at time of licensing was added, starting in Year 2, along with additional messaging on pet waste during “stay at home” orders with the pandemic (given the increased visibility of associated problems).

BMP: Proper septic system care

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

PVPC Facebook posts drew a total of 20 “shares.” There were a total of 42 views of the Think Blue Connecticut River website septic system landing page with people spending an average of 50 seconds. Of that total, 32 people clicked to the septic system infographic to learn more.

The Town's Facebook posts on September 21 had a total of 67 impressions.

Message Date(s): PVPC Facebook posts: September 16 and 17, 2020
Town Facebook posts: September 21, 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:

The NOI/SWMP indicated septic system messaging would be done in Year 3 only as MS4 permit language in Appendix H was not entirely clear on the timing of this message. EPA has since indicated that septic system messaging must occur each year and the Connecticut River Stormwater Committee has adjusted accordingly, starting in Year 2.

BMP: Proper disposal of leaf litter - businesses

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report->

Narrative-MCM-1-Year-3.pdf

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Mailing to 150 professional land care companies operating in Stormwater Committee member municipalities

Message Date(s): October 30, 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: Importance of soil test, proper use of fertilizers, disposal of grass clippings - businesses

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

80 lawn care professionals from across MA attended the "Virtual Spring Kickoff for Landscapers Education Program 2021" session

Message Date(s): March 26, 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:

Ongoing Covid-19 pandemic required adjusting from in-person workshop to virtual and to obtain access to likely most robust audience, worked with UMass Cooperative Extension to join planned program they were giving.

BMP: Proper management of pet waste - businesses

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report->

Narrative-MCM-1-Year-3.pdf

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Google analytics from the Think Blue Connecticut River website indicate that businesses and institutions continued to access “There is no Poop Fairy,” materials produced in Year 2, with 72 downloads of the template and the quotes provided to produce the sign.

Message Date(s): Google ad: February 8 through 19, 2021
 PVTA bus ads: late June to September 2021
 Facebook ad: September 13 through 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:

To provide additional messaging

BMP: Importance of soil test, proper use of fertilizers, disposal of grass clippings - residents

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Facebook ad reached 38,160 individuals in Stormwater Committee communities who match “gardening,” “home improvement,” or “do it yourself” identifiers. Of this number, Facebook estimates that 7,200 people will recall the ad. 99 people clicked on the “Learn More” button to go the Think Blue Connecticut River landing page on lawn care.

Website landing page was viewed 161 times, with an average time spent by visitors on that resource page of 1 minute and 42 seconds. There were a total of 132 downloads on the posted PDF resources.

Message Date(s): Facebook ad: June 25 - June 30, 2021
 PVPC regional Facebook message: June 23

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

Proposed work had included creating a brochure. Instead, work entailed improving the Think Blue

Connecticut River web page on lawn care so that information and resources are all more readily available during Covid-19.

BMP: Proper disposal of leaf litter - residents

Message Description and Distribution Method:

See: <https://thinkblueconnecticutriver.org/wp-content/uploads/2021/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-3.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

Google ad: 78,056 impressions, 110 clicks to the website landing page

There were 244 views of the Leaf Hero landing page with analytics indicating that the average time spent by visitors on that resource page was an average of 3 minutes and 10 seconds. There were a total of 192 clicks to download posted PDF resources.

The Town of Palmer's Facebook post on October 29, 2020 had 2 likes and 35 impressions.

The Town of Palmer's Facebook post on November 4, 2020 had 1 like and 40 impressions.

Google ad: October 28 to November 4, 2020

Message Date(s): PVPC Facebook posts: October 29 to November 4, 2020

Town of Palmer Facebook posts: October 29 and November 4, 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:

The change to this messaging began in Year 2, where initially the plan had been for one social media post and press release. Given the cohesion of these social media messages as a whole, the Connecticut River Stormwater Committee decided to run the full series, instead of a media release, and developed a Think Blue Connecticut River web page on best practices to which all posts could link.

BMP: Leaf Litter and Yard Waste Management Facebook Messages

Message Description and Distribution Method:

The Town's Land Management and Open Space Committee's Facebook page posted 8 messages in Fall of 2020 regarding keeping leaves away from storm drains and the need to bag or compost yard waste.

Targeted Audience: Residents and Businesses, institutions and commercial facilities

Responsible Department/Parties: Conservation Committee

Measurable Goal(s):

The 8 Facebook posts resulted in a total of 6 likes, 1 share, 2 comments, and 366 total impressions.

Message Date(s): September 22 - December 7, 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:

Additional outreach/messaging added

BMP: We all Live Downstream - Scoop the Poop

Message Description and Distribution Method:

The Town's Facebook page posted three messages in the summer of 2020 regarding the need to pick up pet waste based on "We all live downstream" messaging

Targeted Audience: Residents and Businesses, institutions and commercial facilities

Responsible Department/Parties: Conservation Committee

Measurable Goal(s):

3 Facebook posts received a total of 225 impressions

Message Date(s): July 6 and August 10, 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:

Additional outreach/messaging added

BMP: CMRSWC Facebook Posts

Message Description and Distribution Method:

The Central Massachusetts Regional Stormwater Coalition (CMRSWC) posted 35 Facebook messages during Permit Year 3 covering a range of topics that included septic system maintenance, fertilizer and lawn chemical use, pet waste management, information on fats, oils, and grease for businesses, hazardous material storage, winter stormwater pollution prevention, stormwater permit information for developers, car maintenance to prevent oil leaks, and information about downspout disconnection. The Town's Facebook page reposted these messages with links to additional information.

Targeted Audience: Residents, Businesses, institutions and commercial facilities, Developers, and Industrial

Responsible Department/Parties: Conservation Committee and CMRSWC

Measurable Goal(s):

CMRSWC posts reposted on the Town's Facebook page had a total of 35 likes, 1 share, and 1,820 lifetime post organic impressions.

Message Date(s): July 1, 2020 - June 30, 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:

Additional messaging added to reach all required audiences

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:**

Due to COVID-19, the SWMP was not reviewed during a public meeting as proposed. Instead, links to the SWMP were posted on the Town's website and on the Town's Facebook page and other community pages, and gave residents a 30 day period (June 1, 2021- June 30, 2021) to provide written comment on the SWMP updates. No comments were received.

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:**

Hosted an Earth Day River Cleanup/Town-wide cleanup event on 5/8/2021. The event included a photo contest. There were a total of 57 volunteers in attendance.
Organized a Community Rain Barrel and Compost Bin program to provide rain barrels/compost bins to residents at reduced price.

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:

The stormwater system map was updated in PY3 after additional stormwater system mapping was performed as part of an asset management grant and dry weather outfall screening. The updated map and outfall inventory are included in the SWMP.

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:

Outfall screening data is summarized in a dry weather outfall screening memorandum included in the SWMP, which is posted on the Town's stormwater website.

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

Number of outfalls screened:

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

Percent of outfalls screened:

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

All known outfalls within the regulated area were screened under dry weather conditions as summarized in a memorandum included in Appendix of the SWMP.

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:

*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:

Catchment investigations are scheduled to begin in PY4 after re-prioritization of the outfalls and catchments following the completion of dry weather outfall screening in PY3

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:

Appropriate staff participated in IDDE training on 5/26/2021 and MS4 SCP training on 5/11 - 5/12/2021

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: 29

Number of inspections completed: 88

Number of enforcement actions taken: 4

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

The 4 enforcement actions are related to land disturbance violations (started work prior to review and approve of a stormwater management permit). Additionally, the Mongo Pond Dam Repair project resulted in sedimentation of Dumplin Brook in May 2021 due to an inadequate dewatering setup during installation of the new water control structure; this has been addressed and sediment has been removed from the brook, restoring it to its pre-construction condition.

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: 3

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:

The Town of Palmer is on track to complete this work during Year 4 and will use several resources to help in developing the report, including EPA's technical support document entitled, "Assessing Street and Parking Design Standards to Reduce Excess Impervious Cover in New Hampshire and Massachusetts," at the following link: <https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/ImperviousAssessment.pdf>

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:

The Town of Palmer is on track to complete this work during Year 4 and will use several resources to help in developing the report, including Mass Audubon's checklist entitled, "Supporting LID in Your Community: How to Compare Local Land Use Regulations with Best Practices" at <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#pcsm>; and a code review checklist developed by PVPC: <http://www.pvpc.org/sites/default/files/files/PVPC-Code%20Review%20Checklist.pdf>.

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:

The Town of Palmer is on track to complete this work for Year 4 and will begin with an initial screening of properties that will include considerations of: hydrologic soil groups, drainage areas of waters designated as Category 4a or 5 on the MA List of Integrated Waters, impervious areas larger than 1 acre, and Environmental Justice Areas. These considerations may be supplemented and fine-tuned based on our local priorities and capital improvement plans. Additional investigation will be required following this initial screening to further identify the 5 priority locations.

MCM6: Good Housekeeping

Catch Basin Cleaning

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

Number of catch basins inspected:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

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: 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:

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

No corrective actions were necessary; regular maintenance of stormwater infrastructure, parking areas, and BMPs at the WWTP and DPW garage should continue to take place.

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:

The Town continues to partner with the Chicopee 4 Rivers Watershed Council on bacteria sampling for E. coli. The sampling protocols remain the same as in FY20; sampling locations have been modified. FY21 sampling locations included: Ware River at Bennett Street, Forest Lake Beach, Ware River at State Street, Swift River at First Street, Ware River in Three Rivers, and Quaboag River at Laviolette Field. Data is posted here: <https://c4rivers.org/monitoring/>.

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:

The Town of Palmer is a member of both the Central Massachusetts Regional Stormwater Coalition (CMRSWC) and the Connecticut River Stormwater Committee.

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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:

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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:

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: Title:

Signature: Digitally signed by Ryan
Date: 2021.09.27 16:28:06
-04'00' Date:

[Signatory may be a duly authorized representative]