

Year 4 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2021-June 30, 2022

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, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

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

Part II: Self-Assessment

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

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input 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 checked="" type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			Clear Impairments and TMDLs

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

Year 4 Requirements

- Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:
 - No updates were recommended
 - Updates were recommended. The anticipated date or date of completion for updates is/was:

- Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:
 - No updates were recommended
 - Updates were recommended. The anticipated date or date of completion for updates is/was:

- Identified a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

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

We are still assessing parking requirements. Reduced pavement widths for new subdivision roads are recommended but have not been formalized. We need to set a schedule for subdivision regulation update. We will formalize with a memo to SWMP folder. We are looking to update subdivision control regulations to reduce impervious roadway areas. Green Infrastructure practices are allowable under current regulations.

Green Infrastructure improvements are normally included with development and redevelopment proposals currently. A Green Infrastructure Master Plan was prepared in July 2021 and identified 21 publicly owned locations where Green Infrastructure could be implemented. Our stormwater regulations require no increase in volume of water leaving site which effectively makes green infrastructure a requirement for development. We are incorporating Green Infrastructure into our road reconstruction projects. Currently Cherry St is under reconstruction with Green Infrastructure components. For private development our no additional water volume leaving site requirement effectively requires green infrastructure for any significant development. See PVPC checklist included in SWMP folder.

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:
- 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:

IDDE training completed in July 2022 for DPW staff that maintain and manage storm water infrastructure. Only partial inspections for city owned treatment structures during FY 2022. Remaining structures will be scheduled for late fall/early spring when foliage is down.

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:

Septic system owner identification and mailer still being prepared.

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)

Nitrogen Source Identification Report

- Completed the Nitrogen Source Identification Report
 - The Nitrogen Source Identification Report is attached to the email submission
 - The Nitrogen Source Identification Report can be found at the following website:

<https://easthamptonma.gov/documentcenter/Index/125>

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:

Calculations completed during Year 3 included on web site.

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:

Public messaging completed by PVPC

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)

Phosphorus Source Identification Report

- Completed the Phosphorus Source Identification Report
 - The Phosphorus Source Identification Report is attached to the email submission
 - The Phosphorus Source Identification Report can be found at the following website:

<https://easthamptonma.gov/documentcenter/Index/125>

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:

<https://easthamptonma.gov/documentcenter/Index/125>

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:

Calculations completed during Year 3 included on web site.

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

1. Education and Outreach on Bacteria/Pathogens

- √ Annual Message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- √ Disseminated educational material to dog owners at time of issuance or renewal of dog license, or other appropriate time
- √ Provided web outreach information to owners of septic systems about proper maintenance

2. Education and Outreach on Nitrogen and Phosphorous (combined)

- √ 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

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:

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:1. Think Blue Connecticut River Website

Message Description and Distribution Method:

Message description and distribution method: The Think Blue Connecticut River website is at the core of all regional messaging about stormwater. The website at www.thinkblueconnecticutriver.org does the following:

- Covers major areas of messaging about reducing polluted stormwater flows, including lawn and yard care, pet waste management, car care, controlling soil erosion, soaking up the rain, and septic system care
- Addresses the key 4 audiences plus educators
- Serves as the “landing place” for information on nearly all social media messaging

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

A total of 2,114 people visited the Think Blue Connecticut River website during Year 4 and spent an average of 36 seconds on viewing pages on stormwater best practices. Beyond the web analytics reported on specific messages, there were the following views of the general audience pages of the Think Blue Connecticut River website, with businesses and educators each spending an average of 1.5 minutes looking at material. Resident views = 58; Businesses and Institutional views = 51, Developer views = 29; Industries views = 29; and Educator views = 39.

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:Nip Bottles - residents

Message Description and Distribution Method:

including students that come to the region for university studies.

PVPC staff took a staged photo of nip bottles along a stream bank that will serve as the image for this campaign and worked with Connecticut River Stormwater Committee membership to refine the message itself. The campaign includes:

- Message displayed on internal and external signs on PVRTA buses servicing the region in both English and Spanish
- Web page on Connecticut River Think Blue website with additional information on nip bottle litter
- Social media mini ad campaign that links to information on Think Blue CT River web page to be shared with large membership organizations in the region
- Press release to local media

Targeted Audience: Residents, but really all audiences in the Connecticut River Stormwater Committee region

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

To be reported in Year 5 report.

Message Date(s): To be reported in Year 5 report.

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:

: Campaign has not yet started, but one adjustment made to increase reach of campaign includes translation of PVRTA bus panels ads into Spanish. Furthermore, the SWMP had indicated messaging would occur in Year 4, but we have decided to push to Year 5 to reach wider audience (when area colleges back in session).

BMP:3. Installation of hooded catch basins to keep fuels from local surface waters

Message Description and Distribution Method:

Messaging to commercial and business owners with large parking lots involved development and distribution of a letter on the benefits of retrofitting with hooded deep sump catch basins and an offer of technical assistance from local public works officials. PVPC staff provided the draft letter to member communities to be customized and sent to local property owners.

Staff also drafted an article with similar content for publication in Business West and is working with teh publication on best approach

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

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

Member communities reported that the letter was sent to 31 property owners in South Hadley and 241 property owners in East Longmeadow. Agawam revised the letter into a flyer, and sent the flyer to 13,557 residents (including both households and businesses) as an insert to a publication being sent out. Letter to be sent out in Fall (Year 5) to institutional, commercial and industrial facilities.

Message Date(s): To be reported in Year 5 report.

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 optimize engagement with this audience, decided to add preparation and submission of an article to Business West. Furthermore, the work under this message will extend into Year 5 to respond to insights provided by Northampton: that letter ought to go beyond installation of hooded catch basins and recommend retrofit with planted green infrastructure facilities in parking lots. Both the letter and the article for Business West are being modified to include this additional recommendation for Year 5. Communities can opt to send out this updated letter in Year 5.

BMP:4. Low Impact Development Technologies and Strategies workshop - developers

Message Description and Distribution Method:

PVPC had several conversations with staff from the Center for Watershed Protect to prepare for a developers workshop in Western Massachusetts that would highlight new development standards in the MS4 permit and updated MA Stormwater Handbook, advance better site design practices, and promote several important new tools, including the 5 to 7 green infrastructure stormwater control measure template designs that PVPC and partner communities are developing with an engineering consultant thanks to a Section 604b grant from MassDEP. Stormwater Committee members agreed to postpone the workshop to Year 5 when it is hoped an updated Stormwater Handbook will be issued and the stormwater control measure design templates will be completed.

Targeted Audience: Developers

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

Number of people reached, including:
attending workshop
results from post workshop survey

Message Date(s): Now planned for Year 5

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 workshop had been planned for Year 4, but given that it will be important to promote new development

standards as part of the workshop, it seemed important to await issuance of the draft stormwater handbook. The workshop has been postponed to Year 5.

BMP:6. Proper disposal of leaf litter - residents

Message Description and Distribution Method:

PVPC reprised messaging used previously based on a Be a Leaf Hero social media posts developed by the Cape Cod Commission, but now customized for the Connecticut River Stormwater Committee.

The social media posts provide a series of tips and all tips contain a link to a page on the Think Blue Connecticut River website with more in-depth content and links. See website page at: <https://thinkblueconnecticutriver.org/be-a-leaf-hero/>. The content seeks to promote better practices with leaf litter and build understanding about potential contamination of stormwater with leaf litter.

PVPC also prepared a PDF document for member communities use on their municipal websites.

Targeted Audience: Residents

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

The Facebook ad was shown 101,008 times to 18,800 people, approximately 5 times per person, which drew 73 clicks to the website landing page.

There were 104 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 2 minutes and 27 seconds. There were a total of 97 clicks to download posted PDF resources.

Message dates: Facebook ad ran from October 22 to October 29,2021.
PVPC Facebook message was posted October 19, 2021.

Facebook ad ran from October 22 to October 29,2021.

Message Date(s): PVPC Facebook message was posted October 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:

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 other elements we have learned are important to social media messaging, especially a call to action, we also developed a Think Blue Connecticut River web page on best practices to which posts could link.

BMP:7. Importance of soil test, proper use of fertilizers, disposal of grass clippings - residents

Message Description and Distribution Method:

A social media ad and regional Facebook post, using idea of keeping lawns safe for families, were central to messaging on lawn care in Year 4. The link provided in the social media post connects to the Think Blue Connecticut River web page on lawn and yard care, which lays out important best practices and links to useful resources, including a video by Paul Tukey, organic lawn care celebrity, as well as guides to popular lawn care chemicals and their hazards. The link to Think Blue Connecticut River is: <https://thinkblueconnecticutriver.org/lawn-and-yard-care/>.

PVPC reached out to eight large garden centers in the region to see if they would be willing to share the Facebook ad on their own pages. Of those contacted, only Randall's Farm in Ludlow responded and shared the Facebook ad both on their own Facebook page and on their website. The Facebook page for Randall's Farm has 9,561 followers.

Targeted Audience: Residents

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

The Facebook ad reached 19,744 individuals in Stormwater Committee communities who match "gardening," "home improvement," or "do it yourself" identifiers in Connecticut Stormwater Committee zip codes. Two-hundred seventy-three people clicked on the "Learn More" button to go the Think Blue Connecticut River landing page on lawn care. Social media consultants noted that the audience tended to be older women and younger men (18 to 65 range) and that there was lots of engagement from mobile devices.

The PVPC Facebook post in the region was shared by several Stormwater Committee communities, as well as Randall's Farm in Ludlow, which has 9,561 followers, MassAudubon Sanctuary at Arcadia, with 6,600 followers, and Connecticut River Conservancy, with 7,100 followers. Despite the many followers who likely saw these posts, the likes and shares indicated from these other organizations was limited.

Together, these efforts helped to drive the number of views on the website landing page to a total of 105 views with analytics indicating that the average time spent by visitors on that resource page was 1 minute and 27 seconds. There were a total of 81 downloads on the posted PDF resources.

Message Date(s): Facebook ad ran for 7 days, from May 31st through June 7th; PVPC posted the regional Facebook message on May 26th. Randall's Farm shared the Facebook post on their page on June 21st, and on their website from June 15th through June 30th.

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 fact sheet and social media post on the Think Blue website. Over the course of the permit term to date, the social media work became more sophisticated and work has become a bit more targeted with use of advertising that makes use of zip codes and certain terms defining users. Advertising and posts include a call to action as well to "learn more," which aims to get people to the Think Blue website content on lawn care.

BMP:8. Proper management of pet waste – residentsMessage Description and Distribution Method:

Pet waste messaging in Year 4 was multifaceted at both the time of licensing and during the summer. All messaging is based on the “Think picking up Spike’s poop is gross? Try swimming in it,” and aimed at driving people to the pet waste pick up pledge on the Think Blue Connecticut River website.

At time of licensing

Based on a survey of municipal clerks/dog officers done in Year 3 about what might be the most effective methods for messaging through their licensing process, PVPC provided Towns an electronic message to be placed on the local licensing web page (something we learned that most municipalities now have) and an electronic postcard that could be printed and used in tandem with license distributions. To stress the importance of placing the message on dog licensing pages, PVPC sent an e-mail note with attachments to municipal clerks and licensing officers with a cc and referral to their respective Stormwater Committee representatives.

The Connecticut River Stormwater Committee had also planned to run a Facebook ad during this period, but the social media firm contracted for this work withdrew from its contract with PVPC. PVPC scrambled to find a new firm to handle social media advertising on stormwater, but locating and contracting with a new firm did not occur until spring of Year 4.

PVPC provided the above electronic message to be placed on municipal dog licensing web pages in member communities.

Messaging was slightly modified as shown above to also serve members communities as a postcard for distribution with dog licenses.

Following are the links to dog licensing pages in member communities where information has been posted:
<https://easthamptonma.gov/163/City-Clerk-Elections>

During summer months

Summer messaging included running a Facebook ad and preparing and distributing a media release to once again drive people in the region to the pick up poop pledge on the Think Blue Connecticut River website. Given the audience reached through the Facebook ad in July—largely women over 55—the Committee’s social media consultant will post another ad to Instagram in August in an effort to test reach to a younger audience. PVPC also included pet waste information in the August edition of the Pioneer Valley Progress Report, which goes to 1,876 people.

Targeted Audience: Residents

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

The Facebook ad reached 16,180 individuals in Stormwater Committee communities who match “pets at home” and “dog walking,” identifiers in the Connecticut Stormwater Committee zip codes. Three hundred seventy-four people clicked on the “Pledge Here” button to go to the Pick Up Poop pledge on the Think Blue Connecticut River website. Social media consultants noted that the audience tended to be women over 55 and 80% of those accessing the ad did so through mobile devices. Add information here on running Instagram ad.

The August media release went to 17 news outlets including, The Valley Advocate, Daily Hampshire Gazette, WWLP, WHMP, Western Mass News, New England Public Media, Westfield News, WAMC, Country Journal, Springfield Republican, Amherst Bulletin, The Register (Ludlow & Indian Orchard), Ware River News, Agawam Advertiser News, Chicopee Register, Belchertown Sentinel, Holyoke Sun. Add any follow up here on publication of article.

These efforts led to 53 new Pick Up Poop pledges in year 4 to a total of 275 in Year 4. Analytics for the Think Blue website indicate that another 183 people went to the pet waste landing page on the Connecticut River Think Blue website with analytics indicating that the average time spent by visitors on that resource page was 1 minute and 8 seconds. There were a total of 40 downloads on the posted PDF resources.

Message Date(s): The Facebook ad ran for 7 days, from July 29 to August 5. The Instagram ad ran from has been delayed due to identity confirmation issues for the social media consultants possibly due to teh upcoming election. We anticipate clearance to run the ad before teh end of September. The media release was issued August 19.

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). The change was made to provide additional messaging.

BMP:9. Proper septic system care - residents

Message Description and Distribution Method:

PVPC again timed messaging on septic system care to coincide with EPA’s Septic Smart Week, from September 20 to 24, with a Facebook ad and regional post to its Facebook page. These posts provide a link to a great infographic on septic system maintenance developed by Whatcome County Public Works and Health Department.

Targeted Audience: Residents

Responsible Department/Parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable Goal(s):

The Facebook ad were shown 5,458 times to 2,897 people whose interest matches “Septic Tank” in Connecticut Stormwater Committee zip codes. Facebook’s estimated ad recall is that 550 of them could remember the ad two days later.

The regional Facebook post drew a total of 16 “shares,” including member communities. There were a total of 142 views of the Think Blue Connecticut River website septic system landing page with

people spending an average of 1 minute 31 seconds. Analytics indicate that there were 204 clicks to download information.

Message Date(s): The Facebook ad ran between September 20 and 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:

BMP:Proper Disposal of Leaf Litter

Message Description and Distribution Method:

Targeted Audience: Business, Commercial, Institutional

Responsible Department/Parties: CT River Stormwater Committee

Measurable Goal(s):

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Message Date(s): Oct 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:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

BMP:Importance of Soil Test, Proper use of fertilizers and disposal of grass clippings

Message Description and Distribution Method:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Targeted Audience: businness, commercial amd institutional facilities

Responsible Department/Parties: PVPC staff and CT Ricer Stormwater Committee members

Measurable Goal(s):

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Message Date(s): May 6

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:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

BMP:Proper Management of Geese

Message Description and Distribution Method:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Targeted Audience: business, commercial and institutional facilities

Responsible Department/Parties: PVPC staff and CT River Stormwater Committee members

Measurable Goal(s):

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Message Date(s): May 16, 2022

Message Completed for: Appendix F Requirements Appendix H Requirements Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP:Fowl Water Messaging through State wide campaign

Message Description and Distribution Method:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf>

Targeted Audience: Residents

Responsible Department/Parties: Think Blue Massachusetts and Water Words that Work

Measurable Goal(s):

https://thinkblueconnecticutriver.org/wp-content/uploads/2022/09/CT-River-SWC-Annual-Report-Narrative-MCM-1-Year-4.pdf

Message Date(s): May 31 to June 17 2022

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

Welcome addition to year 4 program

BMP:[Message name here]

Message Description and Distribution Method:

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

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:**

An update was given on the SWMP and Stormwater program at the June 1, 2022 Board of Public Works meeting. The presentation provided an update on the Stormwater Program. The Powerpoint Presentation is available on the Stormwater Program web page.

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

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

We publicize the program and let people know that information is available on the Stormwater Management Program Page at <https://easthamptonma.gov/DocumentCenter/Index/125>

In the field we always explain MS4 and the Stormwater Program to interested residents.

Feedback from MCM1 efforts

Feedback from CRSC efforts

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 stormwater GIS mapping is regularly updated as we learn more about the infrastructure.

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:

<https://easthamptonma.gov/DocumentCenter/Index/125>

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

Number of outfalls screened: 81

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

Percent of outfalls screened: 83.3

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

We still have 34 unfound outfalls we are looking for. We're starting to look at Junction Manholes for dry weather sampling and will then start in on wet weather sampling where an SVF is present. We have a plan on looking at these manholes in place and were hoping to get some done before Yr 4 reporting but the weather has not cooperated. Some of them will require a Police detail.

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:

<https://easthamptonma.gov/DocumentCenter/Index/125>

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

Number of catchment investigations completed this reporting period: 81

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

Percent of total catchments investigated: 83.3

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

We have have identified all catchments in our drainage area as part of our Junction Manhole identification though we still have not field identified 34 outfalls.

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: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 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: 0

Total number of illicit discharges removed: 0

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**:

IDDE training was conducted in July for all DPW staff involved with stormwater after the end of the year 4 reporting - see above. Engineering staff take advantage of any PVPC and EPA web training that is made available.

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: 5

Number of inspections completed: 98

Number of enforcement actions taken: 0

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

Nearly all inspections are from City initiated public projects. Most are from weekly SWPPP inspection requirement.

[Empty text box]

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): June 2021

As-built Drawings

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

Number of as-built drawings received: 2

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

Required by With NOIs and Stormwater regulations

Retrofit Properties Inventory

Below, list the permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (at least 5):

See Green Infrastructure report located in Stormwater Management folder @ <https://easthamptonma.gov/DocumentCenter/Index/125> . The report lists 21 locations where improvements could be undertaken. Improvements are currently under construction at one of the identified properties - Cherry Street.

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: 239

Number of catch basins cleaned: 239

Total volume or mass of material removed from all catch basins: 206 tons

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:

At this point we are just compiling data on catch basins that fill up quickly. Crews are focused on getting to all of our catch basins. We will review collected data on GIS and will be looking to identify problem areas from the compiled data.

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: [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:

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

No corrective actions at the 3 sites with SWPPPs other than normal erosion control maintenance. Ferry St, 96 East Street, and Park Street Solar which is now closed out.

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:

Ongoing water quality sampling is occurring in the Manhan River by the Connecticut River Conservancy. We reached out to see if they would share collected data. A study was done by PVPC in 2016 to help identify sources of pollution in the Manhan River
<https://www.pvpc.org/projects/manhan-river-bacterial-source-tracking-project>

Additional Information

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

COVID-19 Impacts

Optional: If any of the above year 4 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 5 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 5 below:

A priority for this year is to continue dry weather work at all Junction Manholes followed by wet weather sampling in the spring where we have SVFs (most of system) and to continue work on our Green Infrastructure project on Cherry Street currently under construction. We're also starting design work in the New City neighborhood and will incorporate green infrastructure design in this project. It will be a multi year effort with several phases of construction work.

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:

Date:

[Signatory may be a duly authorized representative]