

Town of Southwick, Massachusetts
Year 3 Report: Massachusetts
Small MS4 General Permit

As Submitted to: U.S. EPA

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*Town of Southwick, Massachusetts
Year 3 Report: Massachusetts
Small MS4 General Permit*

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Permit Year 3 Report Form

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

Clear Impairments and TMDLs

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

Year 3 Requirements

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

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Stormwater-related bylaws were updated consistent with the permit requirements and approved at the annual Southwick town meeting in May 2021.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs

- The updated SSO inventory is attached to the email submission
- The updated SSO inventory can be found at the following website:

- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated 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:

COVID-19 impacts to Southwick Personnel and inter-departmental coordination capabilities have temporarily delayed the complete implementation of certain annual requirements as noted above.

Annual IDDE training was canceled due to health precautions. A portion of the municipal SWPPPs have not yet been implemented, including those for Public Safety, owing to COVID-19 precautions for municipal staff and first responders. Despite COVID-19 limitations, Town of Southwick staff inspected permittee-owned underground treatment structures and continue to inspect above-ground features. Unless COVID-19 restrictions return and impact municipal operations capacity, it is anticipated that all outstanding annual items will be completed in Permit Year 4.

COVID

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:

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:

Street sweeping of all town streets is performed in accordance with the "Municipal Stormwater Infrastructure Operations and Maintenance Plan."

The specifications relating to the nitrogen removal capacity of municipally-owned structural BMPs continue to be researched for increased accuracy of documentation.

Please see Appendix H for greater detail on public education and outreach efforts.

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

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes

No

If yes, describe below, including any relevant impairments or TMDLs:

The list of receiving waters and outfalls as cited within the SWMP has been updated due to continued refinement of the stormwater drainage network mapping and catchment area investigations.

No change to impairments has been made.

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: 14

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 Town of Southwick Stormwater Webpage

Message Description and Distribution Method:

The Town of Southwick maintains a robust webpage at <https://www.southwickma.org/stormwater>, providing visitors with a broad range of topics on reducing stormwater pollution - on both the residential and commercial/industrial scale.

Targeted Audience: General Public (Residents, Developers, Businesses, & Commercial/Industrial Facilities)

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

111 page views were logged during Permit Year 2, with an average time spent of 1 minute, 11 seconds. An additional 131 page views were logged under the municipal website for other "stormwater"-related content during this time period.

Message Date(s): July 1, 2020 through 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:

BMP:#2 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: Residents, business/institutional/commercial, developers, and industrial

Responsible Department/Parties: Connecticut River Stormwater Committee

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.
pages on stormwater best practices.

Message Date(s): July 1, 2020 through 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:

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:#3 Cigarette butts – 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):

Decals on Public Works vehicles and public spaces had a roughly estimated 40,000 views per month in each community. Stormwater Committee members counted views of decals using a simple Excel calculator tool that PVPC developed based on methodology from the outdoor advertising sector (see calculator tool in table next page). Several members commented that the calculator seems to yield high numbers.

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 that include Stormwater Committee members, the Connecticut River Conservancy, and Massachusetts Audubon Society’s Arcadia Sanctuary.

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

The press release to local media was published in the Springfield Republican in their Business Section on August 3, 2020, and then picked up as an editorial in the same paper on August 6, 2020. See editorial at right. Decals were displayed throughout Year 3 in each member municipality. Facebook ad ran for 9 days, from May 20 to 28, 2021
PVPC’s Facebook post went up on May 21, 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 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:#4 Dumpster waste and avoiding contaminated flows message - 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: Business, 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): The article went to the 650 members of the MHOA on 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:

Aside from postponing message to Year 3, we learned in the process of developing the campaign that distribution of flyers directly to dumpster companies to provide to customers was not going to be a fruitful strategy. Better to work with Boards of Health to inform them and then get them to distribute the information to dumpster companies (who are allowed/permitted by boards to operate in the community) and to businesses when health agents are doing routine inspections. The education and outreach effort became two pronged and now includes an additional flyer specifically for Boards of Health.

Given Covid-19 and the demands on Boards of Health during this time, the committee pursued a two pronged approach for Year 3:

Post information on Think Blue Connecticut River website with the two PDF documents/flyers on dumpsters, along with a checklist for Boards of Health to use when inspecting restaurants and looking at dumpsters and oil storage.

Prepare article for MA Health Officers Association Executive Director to announce resources about dumpsters to memberships in the Western MA Public Health Association and the MA Environmental Health Association.

With the continuation of the pandemic into Year 3 programming, communities recommending holding off on individual visits with boards of health. It is hoped that visits might occur at a time when the pandemic is not demanding so much attention from local boards of health.

BMP:#5 New MS4 development standards and erosion and sediment control - Developers

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: PVPC Staff & Connecticut River Stormwater Committee

Measurable Goal(s):

See statistics listed in Appendix H.

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:[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:

BMP:#6 Fleet maintenance to avoid spills and leaks – industrial facilities

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:#7 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 that had a total of 78,056 impressions and which drew 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.

Message Date(s): Google ad ran from October 28 to November 4; PVPC Facebook posts began on October 29 and ran through November 4.

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:#8 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):

The 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. Ninety-nine people clicked on the “Learn More” button to go the Think Blue Connecticut River landing page on lawn care.

The Facebook post in the region was shared by several Stormwater Committee communities, helping to drive the number of views on the website landing page to a total of 161 with analytics indicating that the average time spent by visitors on that resource page was 1 minute and 42 seconds. There were a total of 132 downloads on the posted PDF resources.

Message Date(s): Facebook ad ran for 6 days, from June 25th to June 30th; PVPC posted the regional Facebook message on 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:#9 Proper management of pet waste – residents and 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: Residents

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

The Google ad placed at time of licensing reached 19,227 people identified as dog owners in targeted communities with 34 people clicking through to the pet waste pick up pledge. It is not clear yet whether this poorer performance in Year 3 compared to Year 2 has to do with the difference between Google and Facebook or advertising versus boosting posts by zip code (with 4 Facebook posts boosted by zip code in Year 2, we reached 15,552 people who followed through with 406 clicks).

PVTA estimates that the bus panels run through a three-month period have 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. PVPC’s social media consultant has recommended a few adjustments to the pledge form to help increase likelihood of people pledging: better explain why important to pledge, and how data requested will be used. These changes have been made for Year 4.

- Time of licensing, Google ad ran for 11 days, February 8 through 19, 2021
- PVTA bus ads ran late June to September 2021
- Facebook ad ran week of September 13 through 17, 2021

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:

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:#10 Proper septic system care - 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 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.

Message Date(s): September 16 and September 17, 2020

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

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:#11 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/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:#12 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: Business/institutions/commercial facilities

Responsible Department/Parties: Connecticut River Stormwater Committee

Measurable Goal(s):

80 lawn care professionals from across MA attended the 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:

The 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:#13 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 also 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.

- Time of licensing, Google ad ran for 11 days, February 8 through 19, 2021
- PVTA bus ads ran late June to September 2021
- Facebook ad ran week of September 13 through 17, 2021

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:

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:#14 Fowl Water messaging through state-wide campaign

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 and businesses/institutions/commercial facilities

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

Measurable Goal(s):

Water Words that Work reports that within the Connecticut River Stormwater Committee region the campaign resulted in an estimated:
211,881 Facebook and Instagram impressions
471,252 YouTube ad impressions
83,101 Spanish language impressions

Message Date(s): May 17 to June 4, 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:

This message is a welcome addition to our program for Year 3 and will be part of the region's SWMP update.

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:

Public involvement opportunities during Permit Year 3 reporting period included the presentation of the Stormwater Management Program at a public meeting of the Southwick Select Board on September 15, 2020.

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:
Despite COVID-19 impacts, opportunities public involvement and participation included the annual North Pond Conservation Area Cleanup Day and continuing weir debris/waste removal efforts undertaken on a regular basis.

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 MS4 system mapping continues to grow in its breadth and accuracy, as street-by-street drainage network audits continue to advance.

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 maintained within a GIS-integrated online database and can be queried at:

<https://tinyurl.com/ms4-public-viewer-southwick>

Also, see the updated tables for inventory, ranking, and system vulnerability factors of MS4 outfalls in Southwick as detailed in the revised Stormwater Management Plan, located at:

<https://www.southwickma.org/public-works/files/stormwater-managment-plan>

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 MS4 permit jurisdiction have been reviewed under dry weather screening parameters.

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 have begun in Permit Year 3 but have not been completed and will continue to advance according to the IDDE plan and findings of the dry weather screening effort.

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: 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:**

General IDDE training for municipal staff during Permit Year 2 was cancelled due to COVID-19 impacts and precautions.

Multiple training sessions for the DPW Director and Stormwater Coordinator were completed in Permit Year 3 and are detailed in Appendix

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: 9

Number of inspections completed: 3

Number of enforcement actions taken: 2

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

The two (2) enforcement actions listed are continued items that were initiated during Year 2.

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

As-built Drawings

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

Number of as-built drawings received:

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

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

No street design or parking lot assessment has been completed at this time. No changes to local regulations and guidelines related to street design or parking lots are planned or completed at this time.

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 report and associated findings/progress on making the practice allowable have not yet been prepared.

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:

Sites and opportunities within the MS4 Permit jurisdiction continue to be identified and logged for this forthcoming Permit Year 4 item.

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: cubic yards

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

Total number of catch basins: 826

If applicable:

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

[Empty text box for reporting actions taken]

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: 417 [] 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: 2

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

No corrective actions were indicated from the SWPPP site reviews for approved facilities.

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):

[Empty text box for website information]

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

Additional Information

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

Southwick is pleased to report that the Nitrogen Source Identification Report for the Town of Southwick, a Permit Year 4 requirement, was begun in Permit Year 3 as part of a group effort through the Connecticut River Stormwater Committee.

The volume of swept material removed from Town roadways as reported on Page 20 reflects a gross figure across all municipally-managed roads & facilities. Future sweeping reports have been requested to provide a street-by-street breakdown to segregate those falling within and without the MS4-regulated areas.

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:

As noted above, COVID-19 impacts to Southwick's operations included SWPPP implementations, annual training, stormwater BMP inspection (primarily surface basins), and a portion of catch basin cleaning efforts until the Summer of 2020. The draft SWPPPs for municipally-owned or -managed sites will be finalized and implemented once in-person meetings between DPW and public safety personnel can be responsibly conducted. Remote and/or recorded training sessions will be utilized in Year 3 if COVID-19 restrictions are not suitably lifted.

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:

The Nitrogen Source Identification Report for the Town of Southwick will be published during Permit Year 4.

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:

Name: Title:

Signature: Date:

Name: Title:

Signature: Date:

Attachment A:

**Town of Southwick Select Board Meeting Minutes
September 15, 2020**

Select Board Meeting Minutes REMOTE PARTICIPATION for all or some Select Board Members *Tuesday, September 15, 2020* *5:30 p.m.*

All meetings of the Select Board are recorded

Date of this Meeting: September 15, 2020

Pursuant to the Governor Baker's March 12, 2020 Order Suspending Certain provisions of the Open Meeting Law, G.L. C.30A, 18, and the Governor's March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place, this meeting of the Town of Southwick Select Board is being conducted both at Town Hall and via remote participation by some members.

No in-person attendance of members of the public will be permitted, but every effort will be made to ensure that the public can adequately access the proceedings as provided for the Order.

Despite our best efforts, we are not able to provide for real-time access, and will post a record of the meeting on the Town's website as soon as we are able.

ATTENDANCE:

Chairman, Doug Moglin-Remote
Vice-Chairman, Joseph J. Deedy-Remote
Clerk, Russell S. Fox-Remote
Chief Administrative Officer-Town Hall
Administrative Assistant, Cindy Pendleton-Town Hall

OTHERS REMOTELY IN ATTENDANCE:

Chief Bishop	Jon Goddard
Dennis Hackett	Randy Brown
Mike McMahon	Joe Mitchell
Sergeant Bannish	Deb
Hope Trembley	Deputy Chief Stefanowicz
Annilia Hanson	Chris Boyd

Public Comments: None.

5:30 p.m.

DPW Director & Jon Goddard
RE: MS4 Annual Report discussion & approval

Mr. Brown and Mr. Goddard discussed the MS4 Annual Report. The Department of Public Works (DPW) has been working on the various aspects of the NPDES MS4 Stormwater Permit. The following list includes some of the activities performed by DPW over the past year as summarized in the Annual Report:

- Updated GIS-based stormwater maps by field inspections and record plan reviews
- Continued education and outreach activities to the general public thru collaboration with the CT River Stormwater Committee and local resources
- Performed annual street sweeping and catch basin cleanings
- Conducted site plan reviews and assisted in enforcement actions in coordination with the Planning Board and Conservation Commission
- Continued record keeping for all completed activities

Mr. Brown and Mr. Goddard then discussed the Stormwater Management Plan (SWMP). This document was originally developed in 2019 and is required to be updated annually and submitted to MassDEP and EPA. Overall, there were minor changes to the original SWMP. Some of these edits include:

- Updated the IDDE prioritization list and system vulnerabilities based on mapping updates
- Added Operation & Maintenance plans for the MS4 areas and Town properties in the appendices
- Updated list of current activities and proposed future activities

A MOTION was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve and sign the NPDES MS4 Stormwater Permit Application and the Stormwater Management Plan (SWMP) update.

ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.

5:45 p.m. Police Chief Position discussion

The Board stated that the official retirement date for Chief Bishop will be 6/30/2021. **A MOTION** was made by Mr. Fox, seconded by Mr. Deedy (Vote-Unanimous) to appoint Lt. Robert Landis as the next Chief of Police. Mr. Moglin stated it was a great motion **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**

A MOTION was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to grant permission to Mr. Moglin and Mr. Stinehart to negotiate a contract for same. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**

Chief Bishop thanked the Board for appointing Lt. Landis to become the next Chief of Police.

6:00 p.m. Eversource update by Deborah Boucher and Joseph Mitchell
RE: LED program street lights and Capital projects in town

The above came to the meeting to discuss the LED program, street lights and capital projects. They presented a copy of the tariff for the lighting owned by Eversource. See Attached "A" 9 Page(s).

6:15 p.m. High Speed Internet
RE: MLP option/poles

The above came to the meeting to discuss a MLP options/poles. The Committee would like to move forward with this, however, the technology will be big competition.

Payables, Payroll and Minutes:

- The Board acknowledged Payables Warrant #2107B, dated 9/8/2020, in the amount of \$318,647.41.
- The Board acknowledged Payroll Warrant #2105, dated 9/3/2020, in the amount of \$227,062.10.
- The Board acknowledged Payroll Warrant #2106, dated 9/15/2020, in the amount of \$234,258.12.
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve the Open Session Minutes #1 for 8/31/2020. **ROLL CALL VOTE: Mr. Moglin-Yes Mr. Deedy-Yes, Mr. Fox-Yes.**
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve the Open Session Minutes #2 for 8/31/2020. **ROLL CALL VOTE: Mr. Moglin-Yes Mr. Deedy-Yes, Mr. Fox-Yes.**
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve the Executive Session Minutes for 8/31/2020. **ROLL CALL VOTE: Mr. Moglin-Yes Mr. Deedy-Yes, Mr. Fox-Yes.**

Meeting Discussion Items, Action Items, Bills, Mail, Correspondence, Vendor and/or Personnel Contracts, Personnel Decisions, Policy Adoptions, Payroll Actions, Old Business, New Business, Etc.-Possible Motions/Votes:

- Greens of Southwick Road Name Changes-Approval per TOS Code Ch.52, Section 9:
A MOTION was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve the following name changes for Greens East:
Blackstone Drive to Silvergrass Lane
Doral Lane to HoneyBird Run
Pebble Beach Circle top Tall Pines Trail
ROLL CALL VOTE: Mr. Moglin-Yes Mr. Deedy-Yes, Mr. Fox-Yes.
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to ratify the signing of a PVPC Invoice #5 for CDBG Grant Admin Fees for \$10,190.67. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- The Southwick Police Department Reserve and Auxiliary Officer Policy Revision will be addressed at the next meeting.
- Reorganization vote for Auxiliary Police//Firefighters: I, Mr. Joseph J. Deedy, move to authorize the Select Board establish and appoint Auxiliary Firemen and Policemen in accordance with the Massachusetts Civil Defense Act as set forth in Sections 11 and 11A of the acts of 1950, Chapter 639 and further to authorize the Select Board to establish any positions it deems necessary to effectuate the same. Training will be through the Southwick Police Department. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**

Meeting Discussion Items, Action Items, Bills, Mail, Correspondence, Vendor and/or Personnel Contracts, Personnel Decisions, Policy Adoptions, Payroll Actions, Old Business, New Business, Etc.-Possible Motions/Votes continued:

- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve a revised Job Description for the SEMA Director. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to appoint the following 6 Southwick Fire Department per diem paramedics per meeting State HRD Standard and paid at established rates by Fire Commission. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.** See Attachment "B" – 1 Page(s)

Jessica Bishop
Pavel Gut
Nicholas Laroche
Michael Marafuga
Timothy O'Keefe
Clarke Robinson

- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve a \$100.00 donation from Janet and Norm Blakely for the K9 and a \$600.00 donation to the Police Department Gift Account from Run Walk of Southwick. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to sign the Water Systems Improvements Project, Change Order #3, with Ludlow Construction, in the amount of \$151,370.18 reduction. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to approve the FY 21 Paving Projects bid awards for Tannery Road, Lexington Circle and Patriots Way, etc. as follows:

Cold-in-Place Recycling Asphalt Paving on Tannery Road
Palmer Paving - \$407,332.00
Surface Treatments on Lexington Circle and Patriots Way
Indus - \$172,478.00
Crack Sealing on Various Roads
Indus - \$59,950.00

ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.

- **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to authorize the Chief Administrative Officer and Chairman to pursue the FY 21 Community Compact IT Grant. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- Preparation is under way getting ready for the Town Hall for voting for the 11/3/2020 Election. **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to shut down the Treasurer/Collector/Clerk and Assessors part of the lobby for the day to keep the traffic at a steady flow and help with the elections. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- DPW chipper unit repair or replacement: **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to purchase a rebuilt chipper and purchase a new chipper for the Transfer Station. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**
- There was a conversation regarding the water ban. When the Town renews their permit with Mass DOT they will seek an increase in water that can be drawn.

Old Business & Dates to Remember:

- Approve Conservation Restriction for Greens East Subdivision on College Highway – on hold
- The Road Name Change for Southwick Hill Road to Iron Horse Lane will have a hearing in October.
- Water Commissioner Vacancy-waiting on Letters of Interest-due date by 9/25/2020
- Adhoc Cable Advisory-Finance Committee will be contacted and possibly designate 2 members
- Green Energy Program-on hold
- Request to reprogram funds Capital from I-Plan Table to complaint software tracking program-Mr. Moglin is in agreement with this and it will now be sent to Finance Committee.
- Mr. Stinehart will ask the Town Planner to put a potential time line in writing with regards to a cell phone tower on Town property.

New Business:

- Mr. Deedy brought up Halloween-he will touch base with the Board of Health.
- Mr. Stinehart asked the Board for any amendments to the Department Heads Goals and Objectives.
- The Board will have the Union Proposals for next meeting.

Being no further business to be brought before the Board **A MOTION** was made by Mr. Deedy, seconded by Mr. Fox (Vote-Unanimous) to adjourn at 7:42 p.m. **ROLL CALL VOTE: Mr. Moglin-Yes, Mr. Deedy-Yes and Mr. Fox-Yes.**

There was no Executive Session.

Respectfully submitted,



Sondra S. Pendleton
Administrative Assistant

CC: T/C/C

Attachment B:

**Town of Southwick Inventory of Structural Stormwater Best
Management Practices (BMPs)**

Town of Southwick
Inventory of Structural Stormwater Best Management Practices (BMPs)

Location	Stormwater Management Description	Approx. Storage Volume (cu. ft.)	Equiv. Storage Area for 1" rainfall (sq. ft.)	Estim. Imperv. Area (sq. ft.)	Actual Area ≤ Equiv. Area	Regulated Under MS4 GP?	MS4 GP BMP Classification for Nitrogen Reduction	Total Nitrogen Load to BMP (Pounds per Year)	Percentage Nitrogen Load Reduction	Nitrogen Reduction (Pounds Per Year)
160 Berkshire Avenue (former Town Beach)	Retention pond with sediment forebay	8,500	102,000	40,000	Yes	Yes	Infiltration Basin (Surface)	12.95	95%	12.30
4 Oak Street	Deep sump catch basin with linear infiltrator	150	1,800	900	Yes	Yes	Infiltration Basin	0.29	95%	0.28
5R South Longyard Road	Retention pond with sediment forebay and stormwater treatment unit	720	8,640	7,000	Yes	Yes	Infiltration Basin (Surface)	2.27	88%	1.99
140 Summer Drive	Deep sump catch basins, stormwater treatment unit, and horizontal infiltrators	900	10,800	6,000	Yes	Yes	Infiltration Basin	1.94	94%	1.83
36 Grove Street	Deep sump catch basin, drop manholes, and four linear infiltrators	350	4,200	1,800	Yes	Yes	Infiltration Basin	0.58	95%	0.55
146 Berkshire Ave	Deep sump catch basin and adjacent linear infiltrators	150	1,800	1,200	Yes	Yes	Infiltration Basin	0.39	90%	0.35
7 Oak Street	Linear infiltrator added to replace failed slotted CMP serving existing catch basin	150	1,800	1,000	Yes	Yes	Infiltration Basin	0.32	94%	0.30
93 Feeding Hills Road	Four (4) vertical infiltrators at Town Library	2,000	24,000	15,000	Yes	No	-	-	-	-
93 Feeding Hills Road	Network of horizontal & vertical infiltrators and bioretention basins	46,500	558,000	180,000	Yes	No	-	-	-	-
93 Feeding Hills Road	Network of horizontal & vertical infiltrators	10,367	124,404	30,000	Yes	No	-	-	-	-
Bugbee Road	Deep sump catch basins with linear infiltrator	5,000	60,000	18,000	Yes	Yes	Infiltration Basin	5.83	95%	5.54

**Town of Southwick
Inventory of Structural Stormwater Best Management Practices (BMPs)**

Location	Stormwater Management Description	Approx. Storage Volume (cu. ft.)	Equiv. Storage Area for 1" rainfall (sq. ft.)	Estim. Imperv. Area (sq. ft.)	Actual Area ≤ Equiv. Area	Regulated Under MS4 GP?	MS4 GP BMP Classification for Nitrogen Reduction	Total Nitrogen Load to BMP (Pounds per Year)	Percentage Nitrogen Load Reduction	Nitrogen Reduction (Pounds Per Year)
16 - 21 Lakeview Street	Three (3) new deep sump catch basins, DMH, and fourteen (14) linear infiltrators	1,100	13,200	1,800	Yes	Yes	Infiltration Basin	0.58	95%	0.55
12 & 14 Woodside Circle	One (1) new deep sump catch basin, DMH, and nine (9) MC3500 linear infiltrators	1,800	8,640	12,000	Yes	Yes	Infiltration Basin	3.88	94%	3.65
21 Woodside Circle	One (1) new deep sump catch basin and seven (7) SC740 linear infiltrators	600	7,200	5,000	Yes	Yes	Infiltration Basin	1.62	90%	1.46
98 Feeding Hills Road	New stormwater system with deep sump CBs, DMHs, and linear infiltrators (2500' of road between Powder Mill & Hudson Drive)	2,200	26,400	28,000	No	No	-	-	-	-
38 - 48 Point Grove Rd	Deep sump catch basins and underground infiltrators					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
56-58 Buckingham Dr	Three (3) MC3500 linear infiltrators	3,000	36,000	32,000	No	Yes	Infiltration Basin	10.36	87%	9.01
63 Congamond Road	Subsurface infiltrators	2,410	28,920	47,800		No	-	-	-	-
20 Congamond Road	Detention Pond	22,440		5,350		No	-	-	-	-
37 Pineywood Road	Deep sump catch basins with underground infiltrators					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Nicholson Hill Road	Deep sump catch basins, stormwater treatment units, and infiltrators	1,500	18,000	12,000	Yes	No	-	-	-	-
42 Powder Mill Road (Whalley Park)	Deep sump catch basins and retention ponds with sediment forebays	122,000	1,464,000	300,000	Yes	No	-	-	-	-

**Town of Southwick
Inventory of Structural Stormwater Best Management Practices (BMPs)**

Location	Stormwater Management Description	Approx. Storage Volume (cu. ft.)	Equiv. Storage Area for 1" rainfall (sq. ft.)	Estim. Imperv. Area (sq. ft.)	Actual Area ≤ Equiv. Area	Regulated Under MS4 GP?	MS4 GP BMP Classification for Nitrogen Reduction	Total Nitrogen Load to BMP (Pounds per Year)	Percentage Nitrogen Load Reduction	Nitrogen Reduction (Pounds Per Year)
Lexington Circle	Outfall structure and forebay reconstructed at existing retention pond/forebay, 5 drop manholes, plunge pool & grassed swale	50,000	600,000	200,000	Yes	Yes	Infiltration Basin (Surface)	64.74	95%	61.50
93 Point Grove Road	Grassed infiltration area serving public parking area & boat ramp parking	8,333	100,000	37,000	Yes	Yes	<i>Data Pending</i>	-	-	-
Amberleaf Manor	(Existing Subdivision - Data Pending)					No	-	-	-	-
Deer Run	Subsurface Infiltration					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Hunters Ridge	Subsurface Infiltration					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Laurel Ridge	Retention pond with sediment forebay					No	-	-	-	-
Pearl Brook	Retention pond with sediment forebay					No	-	-	-	-
Pine Knoll II	Surface Infiltration Basin					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Pine Knoll III	Subsurface Infiltration					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Secluded Ridge	Retention Pond with forebay					No	-	-	-	-
The Greens - West (Under Construction)	Subsurface Infiltration System					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
The Greens - West (Under Construction)	Detention Pond					Yes	Infiltration Basin (Surface)	<i>Data Pending</i>	-	-
The Greens - West (Under Construction)	Infiltration units at homes					No	-	-	-	-

**Town of Southwick
Inventory of Structural Stormwater Best Management Practices (BMPs)**

Location	Stormwater Management Description	Approx. Storage Volume (cu. ft.)	Equiv. Storage Area for 1" rainfall (sq. ft.)	Estim. Imperv. Area (sq. ft.)	Actual Area ≤ Equiv. Area	Regulated Under MS4 GP?	MS4 GP BMP Classification for Nitrogen Reduction	Total Nitrogen Load to BMP (Pounds per Year)	Percentage Nitrogen Load Reduction	Nitrogen Reduction (Pounds Per Year)
Noble Steed Crossing (Under Construction)	Surface Infiltration Basin					No	-	-	-	-
56 Buckingham Drive	Catch basins with ten (10) MC3500 infiltrator units	2,400	28,800	25,000	Yes	Yes	Infiltration Basin	8.09	87%	7.04
23 - 55 Point Grove Road	Catch basins with infiltrator units	2,800		30,000		Yes	Infiltration Basin	9.71	86%	8.35
31 Hillside Road/Coes Hill Road Intersection	Catch basins with four (4) MC3500 infiltrator units	850	10,200	8,000	Yes	No	-	-	-	-
Vining Hill Road (near entrance to shopping plaza)	Catch basin with infiltrator units	650		6,000		No	-	-	-	-
Veteran Street/Point Grove Road	Catch basins with infiltrator units					Yes	Infiltration Basin	<i>Data Pending</i>	-	-
Woodland Ridge	(Existing Subdivision - Data Pending)					Yes	-	<i>Data Pending</i>	-	-
Great Brook Drive	Surface Infiltration Basin					No	-	-	-	-

Attachment C:

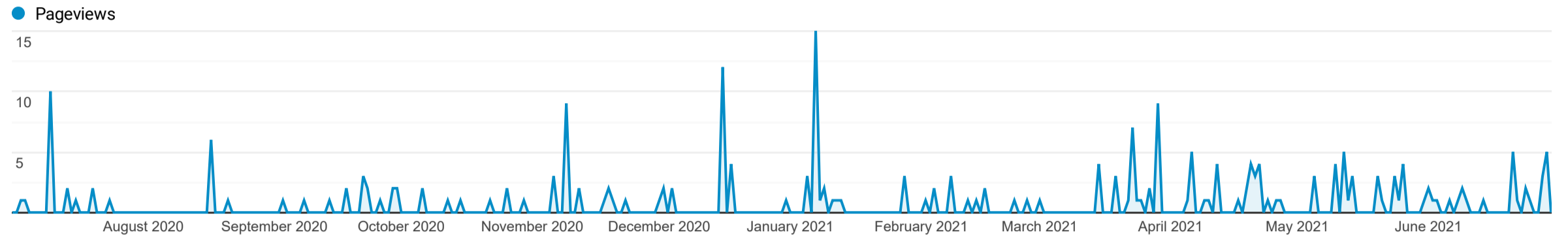
**Town of Southwick Stormwater Website Analytics –
Permit Year 3**

Pages

Jul 1, 2020 - Jun 30, 2021

All Users
100.00% Pageviews

Explorer



This data was filtered with the following filter expression: **stormwater**

Page	Pageviews ↓	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	242 % of Total: 0.08% (301,546)	160 % of Total: 0.07% (237,806)	00:01:24 Avg for View: 00:01:18 (7.77%)	50 % of Total: 0.04% (119,439)	62.00% Avg for View: 42.89% (44.54%)	30.99% Avg for View: 39.61% (-21.76%)	\$0.00 % of Total: 0.00% (\$0.00)
1. /planning-board/pages/stormwater-forms	114 (47.11%)	76 (47.50%)	00:01:27	19 (38.00%)	63.16%	26.32%	\$0.00 (0.00%)
2. /stormwater	111 (45.87%)	75 (46.88%)	00:01:11	31 (62.00%)	61.29%	39.64%	\$0.00 (0.00%)
3. /advanced-search?keywords=stormwater+permit	4 (1.65%)	2 (1.25%)	00:02:52	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
4. /advanced-search?keywords=stormwater	3 (1.24%)	1 (0.62%)	00:00:16	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
5. /advanced-search?keywords=stormwater&created[date]=&created_1[date]=	3 (1.24%)	1 (0.62%)	00:00:22	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
6. /advanced-search?created[date]=&created_1[date]=&keywords=stormwater&page=1	2 (0.83%)	1 (0.62%)	00:00:16	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
7. /advanced-search?keywords=stormwater permit&page=1	2 (0.83%)	1 (0.62%)	00:09:22	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
8. /404.html?page=/sites/southwickma/files/uploads/stormwater_management_plan.pdf&from=	1 (0.41%)	1 (0.62%)	00:00:13	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
9. /404.html?page=/southwick-open-space-and-recreation-planning-committee/pages/open-space-recreation-plan&from=https://www.southwickma.org/planning-board/pages/stormwater-forms	1 (0.41%)	1 (0.62%)	00:00:23	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
10. /advanced-search?created[date]=&created_1[date]=&keywords=stormwater&page=2	1 (0.41%)	1 (0.62%)	00:00:00	0 (0.00%)	0.00%	100.00%	\$0.00 (0.00%)

Rows 1 - 10 of 10

Attachment D:

**Connecticut River Stormwater Committee MS4 Permit
Annual Report for Public Education and Outreach**



C O N N E C T I C U T R I V E R

S t o r m w a t e r C o m m i t t e e

MS4 Permit Annual Report
for Public Education and Outreach
MCM 1 and additional requirements in Appendixes F and H

July 1, 2020 through June 30, 2021

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The Connecticut River Stormwater Committee annual report provides a summary of all the work undertaken during the July 1, 2020 to June 30, 2021 reporting period. All of this work is directly applicable to all member communities' EPA annual reporting requirements.

Content has been formatted in a manner consistent with the format of the EPA annual report template for Year 3. Because the Connecticut River Stormwater Committee is a regional partnership program, these sections are written from a "regional" perspective rather than municipality-by-municipality. Additional details of community-specific efforts are reported in each municipality's annual report.

In communication with PVPC, who facilitates the coalition, EPA has endorsed and encouraged a regional Annual Reporting approach whereby Connecticut River Stormwater Committee member communities can satisfy the Public Education and Outreach reporting requirement (within MCM 1 and Appendixes F and H) by referencing the coalition's annual report with a url link in their own annual report.

Introduction

1. Coalition Purpose and Membership

The Connecticut River Stormwater Committee is an intergovernmental compact of 19 municipalities, the University of Massachusetts-Amherst, and the Pioneer Valley Planning Commission organized to work cooperatively in meeting US EPA Municipal Separate Storm Sewer System Permit (“MS4 Permit”) requirements for stormwater education and outreach. Facilitated and staffed by the Pioneer Valley Planning Commission, the Committee also works together to meet other permit compliance activities where appropriate and needed. Work for the group is funded through annual dues paid by each member, including PVPC, and through occasional grants. Member communities are shown in Table 1 below.

Table 1: Connecticut River Stormwater Committee Member Communities

Member Community	Committee Representatives and Departments
Agawam	Tracy DeMaio and Mike Albro, Department of Public Works
Belchertown	Steve Williams, Department of Public Works and Erica Cross, Conservation Department
Chicopee	Quinn Lonczak, Department of Public Works
East Longmeadow	Bruce Fenney and Tom Christensen, Department of Public Works
Easthampton	Dan Murphy, Department of Public Works
Granby	Dave Derosiers, Highway Department
Hadley	Chris Okafor, Department of Public Works
Holyoke	Michael McManus and Robert Peirent, Department of Public Works
Longmeadow	Craig Markham and Tim Keane, Department of Public Works
Ludlow	Jim Goodreau, Department of Public Works
Northampton	Doug McDonald, Department of Public Works
Palmer	Angela Panaccione, Conservation Department
South Hadley	Melissa LaBonte, Department of Public Works
Southampton	Randall Kemp and Joesette Picard, Highway Department
Southwick	Randall Brown and Jon Goddard, Department of Public Works
Springfield	Kevin Chaffee, Planning/Conservation Department
West Springfield	Jim Czach and Jesse English, Department of Public Works
Westfield	Casey Berube and Joe Kietner, Department of Public Works
Wilbraham	Tonya Basch and Dean Grochmal, Department of Public Works
University of Massachusetts - Amherst	Neils LaCour and Terri Wolejko

2. Water Quality Considerations in the Region

All Connecticut River Stormwater Committee communities are subject to additional MS4 permit requirements in Appendix F based on waters that are tributaries to the Long Island Sound, which has an approved TMDL for nitrogen.¹ Some member communities are also subject to additional MS4 permit requirements based on the following:

- Lakes and ponds with approved TMDLs for phosphorous (additional requirements within Appendix F of the MS4 permit)
- Waterbodies and their tributaries that are impaired for water quality due to phosphorous (additional requirements within Appendix H of the MS4 permit)
- Waterbodies and their tributaries that are impaired for water quality due to bacteria or pathogens (additional requirements within Appendix H of the MS4 permit)
- Waterbodies and their tributaries that are impaired for water quality due to solids (total suspended solids) (additional requirements within Appendix H of the MS4 permit)

It is important to note that the MS4 permit stipulates that certain additional requirements for public education and outreach messaging in the appendixes can be combined where appropriate. Specifically, Appendix H part I and II as well as Appendix F part A.III, A.IV, A.V, B.I, B.II and B.III.

3. Social Media Challenges

The Year 3 permit period presented certain challenges on educational messaging through social media that could not have been foreseen. The rampant spread of misinformation and election security concerns translated to far greater restrictions, making it far more difficult to message on social media. Facebook algorithms became so restrictive that PVPC could no longer boost educational posts by zip code. PVPC hired a consultant for help and initially worked with the social media consultant to set up a Facebook business account to place ads. That approach also did not prove workable so social media messaging for the Connecticut River Stormwater Committee moved to Google ads. For the most part, messaging did not rely completely on social media so where efforts were delayed, messages got out to audiences via other pathways as is indicated in the reporting below.

¹ TMDL = identifies the Total Maximum Daily Load of nitrogen that can be discharged, in this case to Long Island Sound, without significantly impairing the health of the Sound.

Annual Report Part II: 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 information to owners of septic systems about proper maintenance

See in sections below numbered: 9, 10, and 13

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

See in sections below numbered: 7, 8, 9, 11, 12, and 13

Annual Report Part IV: MCM 1 – Public Education and Outreach

1. *Think Blue Connecticut River* Website

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 audiences: Residents, business/institutional/commercial, developers, and industrial

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

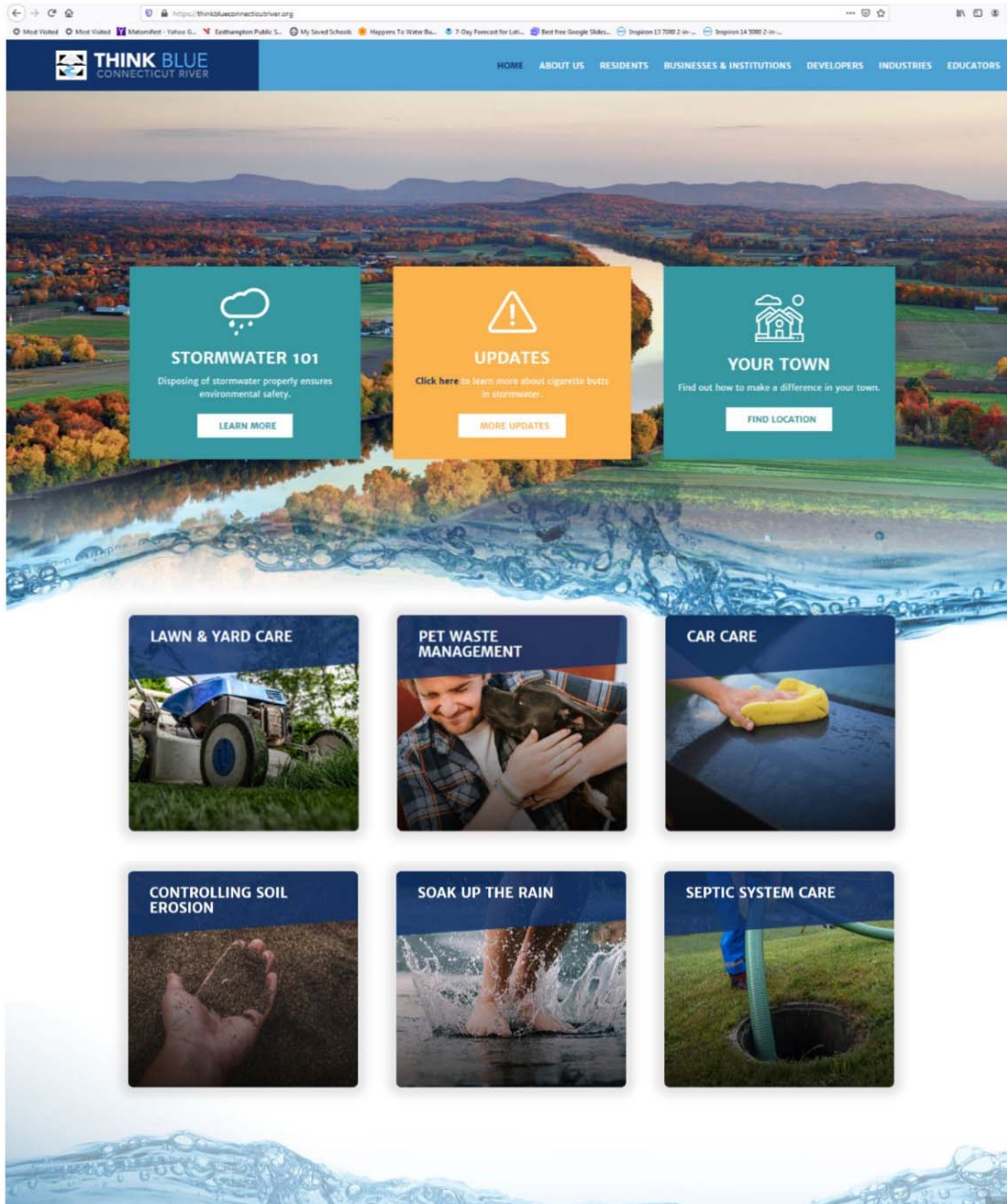
Measurable goal(s): A total of 3,196 people visited the *Think Blue Connecticut River* website during Year 3 and spent an average of 1minute, 38 seconds on viewing a total of 3,940 pages on stormwater best practices.

Message dates: July 1, 2020 through June 30, 2021

Message completed for: Appendix F requirements ✓ Appendix H requirements ✓

Was message different than what proposed in your NOI/SWMP? 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.



2. Cigarette butts – residents

Message description and distribution method: Materials and messaging for this campaign to reduce cigarette butt litter were developed in Year 2. Due to a general sense among members that messaging would get lost in the mix given far greater public concern with the Covid-19 pandemic, actual launch of campaign messaging occurred in Year 3. At the heart of the campaign is an image of a baby bird with a cigarette butt in its mouth. PVPC obtained permission for use of this image through a photographer who is associated with the Florida Audubon Society. The campaign includes:

- Image of baby bird with cigarette butt in its mouth with message (as shown below)
- Large decals (2x3 feet) for public works vehicles throughout the region
- Web page with additional information on cigarette butt litter and link to informational video from Canadian Broadcast System
- Press release to local media published and then media followed with editorial
- Facebook advertisement and post shared with MA Audubon and the Connecticut River Conservancy that links to resources on *Think Blue Connecticut River* website

While many communities successfully displayed the DPW truck decals, there were important lessons learned. In some cases, the decals were too large for certain trucks. One idea for the future is to print two sizes of decals. Also, some stormwater committee members found that once they had decals in hand, they did not have support for putting the decals on trucks. Some then used the decals to make banners or signs that got posted in public locations.


The *Think Blue Connecticut River* web location for more information is at:

<https://thinkblueconnecticutriver.org/wp-content/uploads/2020/07/cigarette-butt-bird.pdf>



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

<p>Business</p> <h3>Butt out! Connecticut River Stormwater Committee wants cigarette butts out of waterways</h3> <p>Updated Aug 03, 2020; Posted Aug 03, 2020</p>  <p>This image urging smokers not to carelessly discard cigarette butts where they might end up in waterways will go on local public works vehicles. (photo provided)</p> <p>By Jim Kinney jkinney@repub.com</p> <p>Cigarette butts — either casually flicked aside or dumped on the ground from a full ashtray — that end up on streets or parking lots eventually wash into storm drains where they flow to streams and rivers where they pose a danger to birds, fish and other animals.</p>	<p>Connecticut River Stormwater — a group made up of 20 local towns and cities along with the University of Massachusetts at Amherst — has launched a public awareness campaign. It will feature decals on municipal trucks bearing an image taken by Florida Audubon member Karen Mason showing a bird feeding cigarette butts to its babies.</p> <p>"Fish mistake cigarette butts for food. Birds mistake butts for food," said Patty Gambarini, principal environmental planner at Pioneer Valley Planning Commission which convenes and does administrative work for the Watershed Committee.</p> <p>And of course, all the things that make cigarettes bad for people — nicotine and other substances — make them bad for wildlife, Gambarini said.</p> <p>"We are still seeing a lot of cigarette butts," she said. " People who still smoke ... just flick it away and don't think of it as litter."</p> <p>A single butt can contaminate between 500 and 1,000 liters of water with compounds like nicotine and heavy metals, according to the news release. The filter is made of a non-biodegradable form of plastic called cellulose acetate, which deteriorates and disperses as plastic microfibers.</p> <p>The Source to Sea Clean Up will keep track of the numbers of butts and of e-cigarette and vaping waste said Stacey Lennard of the Connecticut River Conservancy and organizer of the cleanup.</p>
<p><i>The Springfield Republican newspaper picked up on the Committee's press release with publication of the article shown above on August 3, 2020.</i></p>	

Measurable goal(s):

Decals on Public Works vehicles and public spaces had a roughly estimated 40,000 views per month in each community. Stormwater Committee members counted views of decals using a simple Excel calculator tool that PVPC developed based on methodology from the outdoor advertising sector (see calculator tool in table next page). Several members commented that the calculator seems to yield high numbers.

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 that include Stormwater Committee members, the Connecticut River Conservancy, and Massachusetts Audubon Society’s Arcadia Sanctuary.

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

Name of Community	Example Municipality			
Number of Fleet Vehicles with Decals	Example number			
	Total Fleet Hours per Month	Passing Vehicles per hour*	Impressions per Hour**	Monthly Totals
Parked (in public) ***	0	300	450	0
Driving Intertate or US Highway	0	450	675	0
Driving surface street	0	800	1200	0
Total Impressions this Month	—	—	—	0
* ** ***	Based on number of cars per mile (15 / highway; 40 / surface street as per ARD White Paper) Based on vehicle load factor of 1.5 passengers per vehicle (transformative-mobility.org) Includes pedestrian impressions Monthly totals = total fleet hours per month * impressions per hour			

The table above shows a simple tool created by PVPC for counting impressions. This counter draws on methodology from the outdoor advertising industry.



The posting on PVPC’s Facebook page included 21 shares that included Stormwater Committee members, the Connecticut River Conservancy, and Massachusetts Audubon Society’s Arcadia Sanctuary.

Message dates: The press release to local media was published in the Springfield Republican in their Business Section on August 3, 2020, and then picked up as an editorial in the same paper on August 6, 2020. *See editorial at right.*

Decals were displayed throughout Year 3 in each member municipality.

Facebook ad ran for 9 days, from May 20 to 28, 2021

PVPC's Facebook post went up on May 21, 2021.

Was message different than what proposed in your NOI/SWMP?

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.

EDITORIAL

Filters from cigarettes destructive

AS WE'RE DRIVING AROUND TOWN ON A balmy summer night enjoying the moonlit sky, listening to the ball game on the radio and smoking a cigarette, how many of us toss the butt out the window when we're finished? According to the Truth Initiative, lots of us. The tobacco awareness group indicates cigarettes top the list of littered things in the U.S. And worldwide, 4.5 trillion cigarettes are discarded each year. While smoking is incredibly bad for our health, the filters are incredibly harmful to the environment.

Nearly 98% of cigarette filters are made of plastic fibers. And the substance, cellulose acetate (it takes 12,000 strands to make one filter), only degrades under certain conditions—like when they collect in sewage. When the filters are tossed on the beach or in the street they can take years to degrade. And, according to the Truth initiative, cigarette butts leach toxic chemicals, like arsenic, that can leak into the environment, damaging fragile eco-systems.

According to some experts, filters don't have any real benefit as they don't block all the bad chemicals in smoke and some states are looking to ban them. In 2014, this space called to ban cigarette filters and we reiterate that position.

The Connecticut River Stormwater Committee consisting of 20 local towns and cities, along with the UMass/Amherst, has launched a public awareness campaign. The campaign will feature decals on municipal trucks with an image taken by a Florida Audubon member showing a bird feeding cigarette butts to its chicks. "Fish mistake cigarette butts for food. Birds mistake butts for food," said Patty Gambarini, principal environmental planner at Pioneer Valley Planning Commission which convenes and does administrative work for the Watershed Committee.

Several New York lawmakers are calling for a ban on filters. State Sen. Liz Krueger and several colleagues recently introduced the Tobacco Product Waste Reduction Act.

"Cigarette butts are everywhere - littering our streets, our parks, and our waterways, and spreading plastic pollution and toxic chemicals into our environment and our food supply," said Krueger. "The evidence is clear that in spite of all the Big Tobacco propaganda, filters do not make cigarettes any safer, and they may in fact make cigarettes even more deadly."

Massachusetts lawmakers should push for a similar ban.

The Republican.

Established in Springfield, MA, September 8, 1824

George Arwady
Publisher and CEO

Cynthia G. Simison Executive Editor	Raymond E. Kelly Associate Editor
Robert Genest Manager, Reader Engagement	David Starr President 1977-2019 <i>In Memoriam</i>



Decals of cigarette butt messaging were placed on DPW vehicles throughout the region.

3. Dumpster waste and avoiding contaminated flows - businesses

Message description and distribution method: Materials and messaging for this campaign on dumpster waste and avoiding contaminated flows were developed in Year 2, but strategy further evolved in Year 3 given constraints presented with messaging to Boards of Health during a pandemic. Rather than try to meet regionally or individually, strategy pivoted to notifying Boards of Health about the issue and availability of flyers through the membership of the Massachusetts Health Officers Association. The campaign included:

- Update to the *Think Blue Connecticut River* Website to include:
 - Flyer to inform Boards of Health on proactive regulatory and educational steps to curb stormwater pollution from dumpsters
 - Flyer for Boards of Health for use as part of routine interactions with retail complexes, restaurants/food establishments, and apartment complexes
 - Check list for Boards of Health (developed by Town of Palmer Conservation Agent) to use when inspecting restaurants and looking at dumpsters and oil storage
- An article prepared for the Massachusetts Health Officers Association (MHOA). Initially planned for publication in MHOA's newsletter, MHOA sent the article as a special e-mail blast to their 650 members. They also sent the information with a request for distribution to members of the Massachusetts Environmental Health Association (MEHA), Massachusetts Association of Health Boards (MAHB), and Western Massachusetts Public Health Association (WMPHA).
- A presentation that was to be given at Western Mass Health Officers Association/MassDEP annual spring seminar focused on environmental health was not used in the end, but remains at the ready once the pandemic subsides.

Targeted audience: Business, institutions, and commercial facilities

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

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.

Analytics from the *Think Blue Connecticut River* website show a total of 84 people retrieved PDF resources posted on dumpster waste.

Message dates: The article went to the 650 members of the MHOA on March 24, 2021.

Was message different than what proposed in your NOI/SWMP? Yes No

If yes, describe why the change was made: Aside from postponing message to Year 3, we learned in the process of developing the campaign that distribution of flyers directly to

dumpster companies to provide to customers was not going to be a fruitful strategy. Better to work with Boards of Health to inform them and then get them to distribute the information to dumpster companies (who are allowed/permitted by boards to operate in the community) and to businesses when health agents are doing routine inspections. The education and outreach effort became two pronged and now includes an additional flyer specifically for Boards of Health.

Given Covid-19 and the demands on Boards of Health during this time, the committee pursued a two pronged approach for Year 3:

- Post information on *Think Blue Connecticut River* website with the two PDF documents/flyers on dumpsters, along with a checklist for Boards of Health to use when inspecting restaurants and looking at dumpsters and oil storage.
- Prepare article for MA Health Officers Association Executive Director to announce resources about dumpsters to memberships in the Western MA Public Health Association and the MA Environmental Health Association.

With the continuation of the pandemic into Year 3 programming, communities recommending holding off on individual visits with boards of health. It is hoped that visits might occur at a time when the pandemic is not demanding so much attention from local boards of health.

Dumpster & Stormwater Best Practices
for Massachusetts Boards of Health

What Do Leaky Dumpsters Have to do with Boards of Health?
Rain that falls into and around dumpsters can pick up oil, grease, sediment, and bacteria. When this stormwater ends up in our lakes, rivers, and streams, it can harm wildlife, ruin outdoor recreation, and make our water unsafe to drink.

These best practices are proactive, practical, and affordable techniques to reduce stormwater pollution; protect and improve water quality; and comply with the EPA federal stormwater (MS4) permit, which can reduce liabilities and penalties for your community.

Dumpster Ordinance & Regulations
Do your ordinances and regulations require the following best practices?

- Dumpsters shall be covered at all times. Keep sliding doors and top lids closed except when filling or emptying the dumpster.
- Dumpsters shall be leak-proof. There should be no holes, rust, or liquids leaking from them on a daily basis. Ensure the drain plug for the container is in place. The sanitation company/owner must replace the plug immediately to ensure liquids from the dumpster do not leak out and enter the stormwater drainage system.
- All material must be securely bagged before being deposited in the dumpster. Do not put liquids or cooking greases in the garbage dumpster.
- Ensure enforcement authority. The BOH and/or its agents may conduct random inspections and sanitary surveys of dumpsters and surrounding areas to verify compliance.

Education & Outreach
Consider employing an education campaign targeting sanitation companies and dumpster users.

- Supply dumpster users (including commercial tenants, such as restaurants and retail stores; and residential tenants of apartment complexes) with educational material on proper waste disposal.
- Work with sanitation companies to engage in education of their clients.

For more information on stormwater best practices, and to find model educational material to share with your constituents, visit: <https://ThinkBlueConnecticutRiver.org>

THINK BLUE
CONNECTICUT RIVER

One flyer is designed to inform Boards of Health on proactive regulatory and educational steps to take to curb stormwater pollution from dumpsters.

DID YOU KNOW?
RAIN THAT FALLS INTO AND AROUND YOUR DUMPSTERS CAN PICK UP OIL, GREASE, SEDIMENT, AND BACTERIA. MUCH OF THIS STORMWATER ENDS UP IN OUR LAKES, RIVERS, AND STREAMS. IT CAN HARM FISH AND WILDLIFE, RUIN OUTDOOR RECREATION, AND IT CAN ALSO MAKE OUR WATER UNSAFE TO DRINK.

DUMPSTER JUICE
Not a cocktail you want to drink! Put waste in its place for clean water in your town.

Keep dumpsters and compactors covered at all times so that rainfall does not run through garbage, leak "juice" onto parking lots, and wash off into storm drains. If you see this liquid, work with your solid waste contractor to make sure the dumpster is frequently emptied, lids are in good condition, and that the dumpster and/or compactor are water tight. Also, locate your dumpster and compactor as far away from storm drains as possible.

As a business owner, you play a big role in keep our waterways clean and healthy. Do your part by keeping your property clean and properly storing your trash until pick-up.

For more information on how your business can help stop water pollution, visit our website at www.thinkblueconnecticutriver.org/

MAKE SURE LIDS ARE KEPT CLOSED AND LOCKED.

CHECK FOR LEAKS AND REPLACE THE DUMPSTER IF NEEDED.

SCHEDULE REGULAR PICK-UPS SO IT DOESN'T GET TOO FULL.

THINK BLUE
CONNECTICUT RIVER

Another flyer is designed for Boards of Health use with dumpster users as part of routine interaction with retail complexes, restaurants & food establishments, and apartment complexes.

4. New MS4 development standards and erosion and sediment control - developers

Message description and distribution method: PVPC staff hosted a *Think Blue Connecticut River* table at the day-long virtual Western Massachusetts Developers' Conference held on October 21, 2020. The 3-d virtual booth featured hyperlinks to key documents, video, and websites, along with an opportunity for attendees to chat and collect documents for their "swag bags" from booths. The booth was organized as follows with links to resources:

About Us – link to Think Blue CT River <https://thinkblueconnecticutriver.org/about-us/>

Erosion & Sediment Control Resources

1. Rhode Island Handbook Excerpt on Project Phasing
2. EPA Construction Industry Brochure
3. Site Inspection Checklist for Use by Pioneer Valley Municipalities

New Stormwater Management Standards Resources

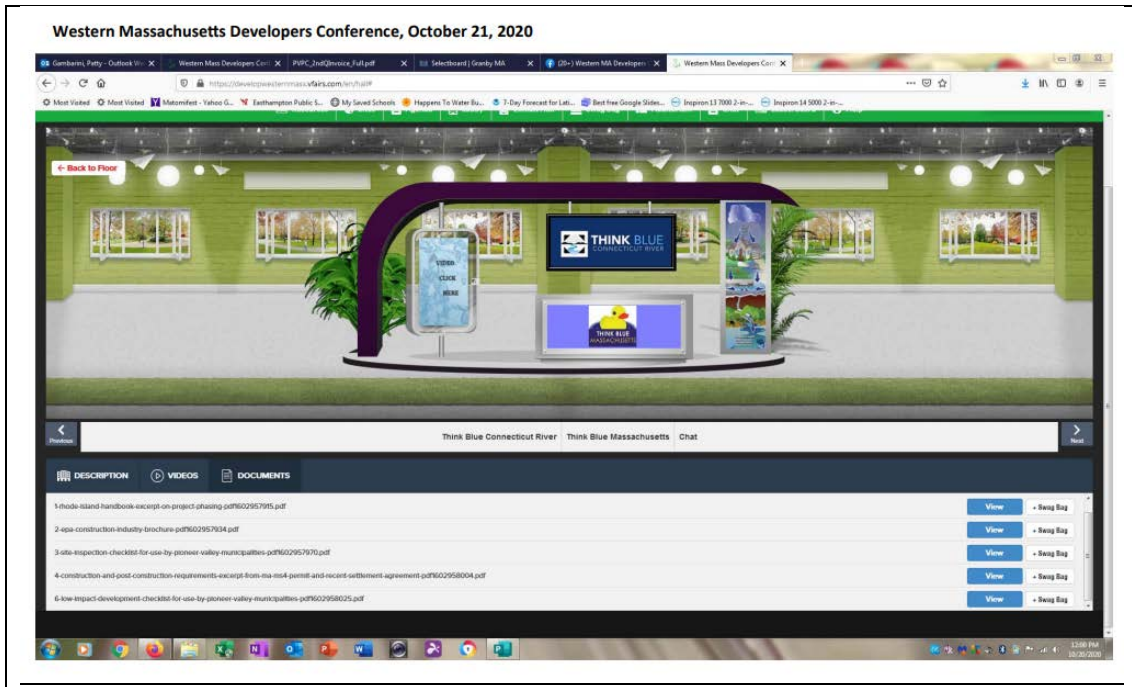
4. Construction and Post Construction Requirements Excerpt from MA MS4 Permit and Recent Settlement Agreement
5. Video Presentation on MS4 Permit from Sept. 10, 2020 Valley Development Council Meeting
6. Low Impact Development Checklist for Use by Pioneer Valley Municipalities

Chat with Us

The *Think Blue Connecticut River* booth was well attended by developers with a total of 71 visiting the virtual booth. Through participation in this conference, PVPC now has a list of the developers who attended the conference, which will prove helpful for future outreach.

Targeted audience: Developers

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members



At the Think Blue Connecticut River virtual booth, developers could enter and chat with PVPC staff. They could also view and collect Think Blue resources for their “swag bag.”

Measurable goal(s): Following are statistics from the Western MA Developers Conference.

Think Blue Connecticut River Booth Summary	
Total Visits	71
Documents Viewed	68
Videos Viewed	7
Document	Views
1-rhode-island-handbook-excerpt-on-project-phasing-pdf1602957915.pdf	11
2-epa-construction-industry-brochure-pdf1602957934.pdf	14
3-site-inspection-checklist-for-use-by-pioneer-valley-municipalities-pdf1602957970.pdf	16
4-construction-and-post-construction-requirements-excerpt-from-ma-ms4-permit-and-recent-settlement-agreement-pdf1602958004.pdf	13
6-low-impact-development-checklist-for-use-by-pioneer-valley-municipalities-pdf1602958025.pdf	14
Video	Views
PVPC MS4 Permit Presentation	7
Tab	Clicks
Think Blue Massachusetts	6
Think Blue Connecticut River	5

Message dates: October 21, 2020

Was message different than what proposed in your NOI/SWMP? 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.

5. Fleet maintenance to avoid spills and leaks – industrial facilities

Message description and distribution method: This message is aimed at ensuring that industrial operators with vehicle fleets take care to manage vehicles so as to avoid spills and leaks. PVPC staff adapted the *Think Blue Massachusetts* flyer developed by Water Words that Work for the *Think Blue Connecticut River* region. After several attempts to acquire MSGP permittees through various on-line sources, PVPC obtained the list of MSGP permittees in Massachusetts directly from EPA Region 1 staff. PVPC staff mailed the flyer to all 126 MSGP permittees in the region on April 16, 2021.

Targeted audience: Industrial facilities

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s): Mailing to 126 MSGP permittees in the region.

Message dates: April 16, 2021.

Was message different than what proposed in your NOI/SWMP? 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.



FLEET MAINTENANCE

PREVENT LEAKS AND SPILLS TO REDUCE POLLUTED FLOWS FROM YOUR SITE

Based on our research, your industrial facility is covered by a Multi-Sector General Permit. Under this type of permit, your facility needs to have a Stormwater Pollution Prevention Plan that shows the steps you will take to reduce stormwater pollution.

Fleet maintenance is one important area of consideration for this plan. Gasoline, oil, and grease from vehicles and equipment can wash into storm drains. Water that enters storm drains eventually ends up in our lakes, rivers, and streams. Once pollutants reach these waterways, they can harm fish and other wildlife. This pollution can even make our water unsafe to drink.

Worst Management Practices



Don't leave chemicals and other materials uncovered and open to the elements. Dumpster lids and drains shouldn't be left open. Don't defer maintenance on vehicles and other equipment.

Best Management Practices



Inspect your vehicles and equipment for leaks regularly. Store materials indoors, and use drip pans to catch fluids and keep a cleanup kit nearby in case a spill occurs. Clean up spills immediately.

For more information on how your business can help stop water pollution, visit our website at [www.http://thinkblueconnecticutriver.org/](http://thinkblueconnecticutriver.org/)

PVPC staff adapted the Think Blue Massachusetts flyer to serve the communities of Think Blue Connecticut River.

6. Proper disposal of leaf litter - residents

Message description and distribution method: Messaging for this campaign was adapted from a series of four *Be a Leaf Hero* social media posts developed by the Cape Cod Commission, which PVPC 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.

Initial efforts to run 4 boosted Facebook posts failed, so the Committee's consultant ran one ad on Google instead. PVPC did run the 4 leaf litter posts as part of its regional Facebook page, but these could not be boosted by zip code as had been done previously due to new restrictions. Shares on these posts included stormwater committee member municipalities and the Massachusetts Audubon Society's Arcadia Sanctuary in the region.

PVPC had also prepared a door hanger for member communities to print and distribute in areas where leaf litter is problematic. While most communities did not make use of door hangers in Year 3 given the continuation of the Covid-19 pandemic, one community did hand out the door hangers at their transfer station.

Targeted audience: Residents

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s):

Google ad that had a total of 78,056 impressions and which drew 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.

Message dates: Google ad ran from October 28 to November 4; PVPC Facebook posts began on October 29 and ran through November 4.

Message completed for: Appendix F requirements Appendix H requirements

Was message different than what proposed in your NOI/SWMP? 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.



Pioneer Valley Planning Commission

October 29, 2020 · 🌐



Leaf litter leaches nutrients into storm runoff and pollutes nearby rivers, streams, lakes, and ponds.

<https://thinkblueconnecticutriver.org/be-a-leaf-hero/>



👍 You and 7 others

8 Shares

👍 Like

💬 Comment

➦ Share

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

Message description and distribution method: Social media ad and post, using idea of keeping lawns safe for families. 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. Link to *Think Blue Connecticut River* is: <https://thinkblueconnecticutriver.org/lawn-and-yard-care/> PVPC also provided members with a flyer to distribute locally. As they were able, committee members put flyers in Town Hall or Building Inspection Services.

Targeted audience: Residents

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members



Facebook advertisement that ran for 6 days in June of Year 3.

Measurable goal(s): The 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. Ninety-nine people clicked on the “Learn More” button to go the *Think Blue Connecticut River* landing page on lawn care.

The Facebook post in the region was shared by several Stormwater Committee communities, helping to drive the number of views on the website landing page to a total of 161 with analytics indicating that the average time spent by visitors on that resource page was 1 minute and 42 seconds. There were a total of 132 downloads on the posted PDF resources.

Message dates: Facebook ad ran for 6 days, from June 25th to June 30th; PVPC posted the regional Facebook message on June 23.

Message completed for: Appendix F requirements ✓ Appendix H Requirements ✓

Was message different than what proposed in your NOI/SWMP? 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.

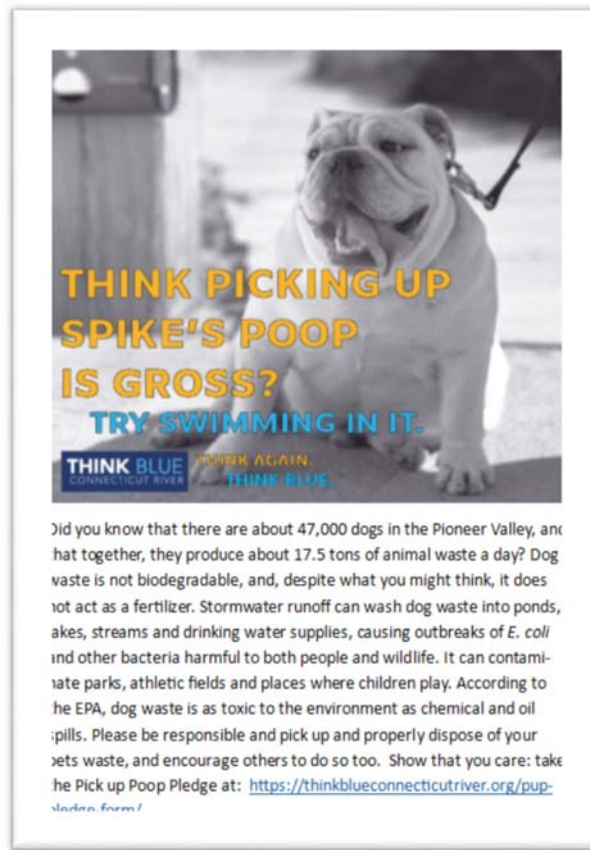


8. Proper management of pet waste – residents and businesses

Message description and distribution method: Pet waste messaging in Year 3 was multifaceted at both the time of licensing and summer messaging. 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.

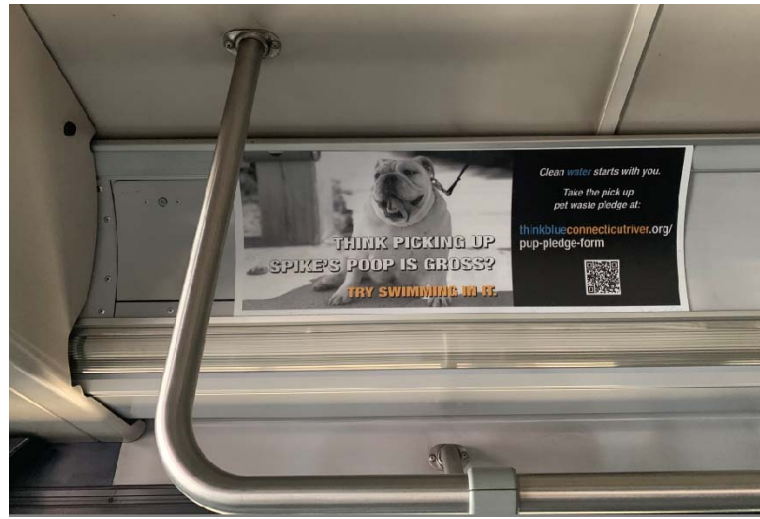
Before time of licensing messaging, PVPC surveyed municipal clerks/dog officers to understand what might be the most effective methods for messaging through their licensing process. Based on the responses, PVPC provided a variety of tools directly to municipal clerks to help them in getting out the pet waste message during time of licensing, including flyers in different sizes based on envelope sizes used in corresponding with dog owners, and an electronic message to be placed on the local licensing web page (something we learned that most municipalities now have). While several communities made use of the flyers, PVPC noted that uptake of the electronic element (shown in image below) on local licensing web pages in Year 3 was limited across member communities. The lesson learned to be advanced in Year 4, will be for committee members to make the push directly with their clerks/dog officers in making better use of this element at time of licensing.

Elements for Year 3 also included a social media ad on Google at time of licensing.



Electronic element created for municipal dog licensing web pages.

For summer messaging, internal and external ads have been running on the PVTA buses in the region. This investment is aimed at covering both the residential and business audience in Year 3. PVTA bus ads ran on buses operating out of three different garages in the region: Springfield Garage, Northampton Garage, and UMass Garage. There were a total of 6 panels run on the outside of buses and 12 panels in the interiors. To supplement the summer messaging on pet waste, a Facebook ad will run just after Labor Day, in early September.



Panels ran on both the interior and exterior of buses for three months in the Pioneer Valley.

Targeted audience: Residents and Businesses (for Year 3)

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s): The Google ad placed at time of licensing reached 19,227 people identified as dog owners in targeted communities with 34 people clicking through to the pet waste pick up pledge. It is not clear yet whether this poorer performance in Year 3 compared to Year 2 has to do with the difference between Google and Facebook or advertising versus boosting posts by zip code (with 4 Facebook posts boosted by zip code in Year 2, we reached 15,552 people who followed through with 406 clicks).

PVTA estimates that the bus panels displayed through a three-month period have produced more than 1.5 million impressions.

Numbers from the supplemental Facebook ad are not yet available.

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. PVPC's social media consultant has recommended a few adjustments to the pledge form to help increase likelihood of people pledging: better explain why important to pledge, and how data requested will be used. These changes have been made for Year 4.

Message dates:

- Time of licensing, Google ad ran for 11 days, February 8 through 19, 2021
- PVTA bus ads ran late June to September 2021
- Facebook ad ran week of September 13 through 17, 2021

Message completed for: Appendix F requirements Appendix H requirements

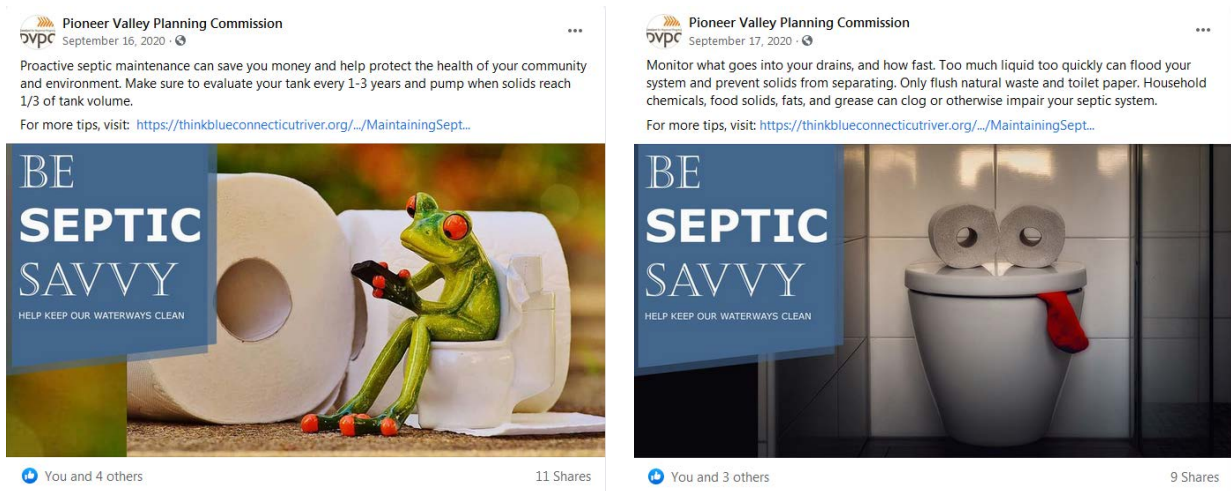
Was message different than what proposed in your NOI/SWMP? Yes No
The NOI/SWMP indicated pet waste messaging only in summer months as PVPC understood that messaging under the Appendixes could be combined. EPA has indicated that additional messaging to dog owners "at time of licensing" is required. Messaging 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).

If yes, describe why the change was made: To provide additional messaging.

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 with two posts on 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. Unfortunately, these posts could not be boosted given the difficulties with Facebook prior to the national election, but member communities with septic system users were encouraged to share posts on their local Facebook sites.

PVPC also reissued a draft letter for distribution by Boards of Health to septic system owners. Several communities used this letter in Year 2, and another community used the letter in Year 3. Others noted that it remains difficult for Boards of Health to help with such messaging give the Covid-19 pandemic. It is important to note too that among the Connecticut River Stormwater Committee, there are several member communities that are highly urbanized with no properties presumed to be using septic systems for sanitary waste disposal.



PVPC developed and distributed two Facebook posts for Year 3 on Septic Systems to coincide with EPA’s Septic Smart Week in September.

Targeted audience: Residents

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s): 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.

Message dates: September 16 and September 17, 2020

Message completed for: Appendix F requirements Appendix H requirements ✓

Was message different than what proposed in your NOI/SWMP? 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.

10. Proper disposal of leaf litter - businesses

Message description and distribution method: Mailing to landscapers in the region that promotes best practices and identifies locations for proper disposal of leaf litter. Best practices noted in letter are:

- Keep leaves off of driveways and roadways where they can easily wash into storm drains and contribute to higher nutrient flows during the fall season.
- Use a mulching mower. By mulching the leaves into the lawn, you avoid having to rake/blow and bag and you offer a way to manage autumn leaves while providing your client with free fertilizer. Mulched leaves put nutrients back into the ground and reduce the overall need for more soluble fertilizer products, which present greater problems for our local waterways.
- Alternatively, if your client has an existing compost pile, you can recommend that they consider allowing you to add leaves to the pile. Leaves provide a critically important element (carbon) to the composting process, making for a more soil enriching product to be used in the next growing season. Be sure compost piles are located away from streams, lakes, or storm drains as these decomposing materials and nutrients could easily leach to these water resources.

Targeted audience: Businesses/institutions/commercial facilities

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s): Mailing to 150 professional land care companies operating in Stormwater Committee member municipalities

Message dates: October 30

Message completed for: Appendix F requirements ✓ Appendix H requirements ✓

Was message different than what proposed in your NOI/SWMP? Yes No ✓

11. Importance of soil test, proper use of fertilizers, disposal of grass clippings - businesses

Message description and distribution method: Rather than continue with idea of hosting stand-alone workshop for land care companies in the region (which would likely draw only a few professionals), PVPC staff coordinated with UMass-Amherst Cooperative Extension to “piggyback” by presenting messaging at the "Virtual Spring Kickoff for Landscapers Education Program 2021” on March 26, 2021. The aim was to reach the businesses that are caring for lawns in the Connecticut River region and across Massachusetts. PVPC spoke about the condition of rivers and streams, the ongoing work to reduce stormwater pollutions, the water quality implications of lawn care nutrients, and the importance of better practices. Better practice messaging for landscapers focused on two practices that Cooperative Extension staff advised would be most resonant:

- Test your client’s soil before applying any fertilizers
- Mulch mow grass clippings into the lawn in order to help soil retain moisture and to recycle nutrients, which can help reduce need for future fertilizer applications

Slides from the presentation are shown below.

Targeted audience: Business/institutions/commercial facilities

Responsible department/parties: PVPC staff and Connecticut River Stormwater Committee members

Measurable goal(s): 80 lawn care professionals from across MA attended the session

Message dates: March 26

Message completed for: Appendix F requirements Appendix H Requirements

Was message different than what proposed in your NOI/SWMP? 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.

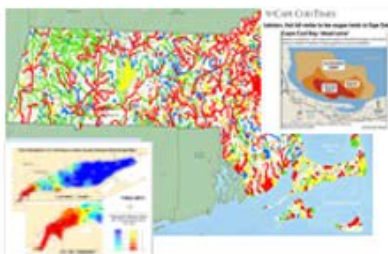
Land care, stormwater, & local rivers, streams, and lakes



FaBy Gambinni, Pioneer Valley Planning Commission


1

- Many waters "impaired"
- Phosphorus impacts in lakes – algal blooms
- Nitrogen in coastal waters – low DO, fish kills



2

- Cities and towns must reduce polluted flows based on federal and state stormwater permit
- Stormwater coalitions organized to help advance practices



3

Lawn care and water quality

- Lawn care can contribute to storm flows that are especially high in nutrients
- Fertilizers, improper disposal of grass clippings, and other yard waste can put N and P into these flows



4

- Important shifts required in client expectations
- Property owners in some parts are starting to ask questions of their land care professionals



5

Two steps

- Test your client's soil before applying anything
- Mulch mow grass clippings into the lawn
 - Helps soil retain moisture
 - Recycles nutrients, which can help reduce need for future applications



6



Contact: FaBy Gambinni, Pioneer Valley Planning Commission
fgambinni@pvpc.org | www.thinkbluetoconnecticutriver.org/

7

Slides above were part of presentation made at UMass Cooperative Extension "Virtual Spring Kickoff for Landscapers Education Program 2021."

12. Proper management of pet waste – businesses

See number 8 above. Also, Google analytics from the *Think Blue Connecticut River* website also 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.

13. Fowl Water messaging through state-wide campaign

Message description and distribution method: On behalf of the members of the Connecticut River Stormwater Committee, *Think Blue Massachusetts* ran an educational advertising campaign using the 30-second video entitled, “Fowl Water.” The “Fowl Water” advertisement helps viewers visualize how stormwater runoff carrying motor oil, pet waste, and trash pollutes local waterways. Each campaign entailed sponsored video on Facebook and Instagram and pre-roll advertisements on YouTube. See the video at: <http://bit.ly/tbm-fowl-water>

To measure the effectiveness of this campaign, Water Words that Work conducted an on-line panel survey of residents in areas where advertisements ran. Highlights from that survey include the following:

Post Campaign Survey Highlights

At the close of the advertising campaign, we surveyed Massachusetts residents in the areas where the campaign ran:

- 16% of residents surveyed recalled seeing the ads, down from 17% in 2020, but within the survey margin of error
- Those who recall the ad are more likely to recognize that stormwater goes directly to local waterways (50%) than those who do not recall the ad (36%).
- Those who recall the ad are more likely to describe stormwater has having “major” or “some” impact on waterways (53%) than those who do not recall the ad (27%).

The full survey is available at:

https://5f19efc0-6724-487e-8188-1ad9d05d4ac5.filesusr.com/ugd/e78125_f42fdf228ee24360a4c569be2bfcf8f7.pdf

Targeted audience: Residents and businesses/institutions/commercial facilities

Responsible department/parties: Think Blue Massachusetts and Water Words that Work

Measurable goal(s): Water Words that Work reports that within the Connecticut River Stormwater Committee region the campaign resulted in an estimated:

211,881 Facebook and Instagram impressions
471,252 YouTube ad impressions
83,101 Spanish language impressions

Message dates: May 17 to June 4, 2021

Was message different than what proposed in your NOI/SWMP? Yes No

If yes, describe why the change was made: This message is a welcome addition to our program for Year 3 and will be part of the region's SWMP update.

Attachment E:

Stormwater Permit Plan Review, Site Inspection, & Enforcement Log

Town of Southwick, MA
 Summary of Construction Site Stormwater Runoff Control
 From July 1, 2020 to June 30, 2021

Project Location	Project Description	Site Plans Reviewed (Y/N)	Inspected (Y/N)	Enforcement Action Taken (Y/N)	Notes
<i>2020 Calendar Year Permits through Planning Board</i>					
0/772/774 College Highway	Mixed-Used Development	Yes	No	No	Construction Has Not Started
7 & 9 Lakeview Street; 90 Point Grove Road	Stormwater Mgt. Permit for Residential Lots	Yes	Yes	No	In Construction
108, 110, 112 Sunnyside Road (Kudlic)	Stormwater Mgt. Permit for Residential Lots	Yes	No	No	Review only
771 College Highway	Storage Facility	Yes	No	No	Project Pulled
115 Fred Jackson Rd.	Estate Lot & Common Driveway	Yes	No	No	Construction Has Not Started
320 College Highway	Site Plan Review	Yes	No	No	Construction Has Not Started
686 College Highway	Carvana Vehicle Processing Facility	Yes	No	No	Project Pulled
217 College Highway	Daycare Facility	Yes	No	No	Construction Has Not Started
Hudson Drive, North of Slab Brook	Earth Excavation Renewal	Yes	No	No	

Note: Permits without stormwater components or a Stormwater Permit are not included in this list. Stormwater Permits apply to any construction projects exceeding 1 acre in disturbance

<i>Enforcement Action Outside Stormwater Permits</i>					
159 Berkshire Avenue	Baldarelli	n/a	Yes	Yes	Enforcement Still in Effect

<i>Status of Enforcement Actions from Prior Years</i>					
61/63 College Highway	Common Driveway; Stormwater Management Permit	Not this Permit Year	Yes	Yes	Enforcement Action Still in Effect

Total Actions		9	3	2	
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Attachment F:
Street Sweeping Log

Street Sweeping Log

2021

Ray Daignon

	Date	# of Sweepers	Sweeper Hrs	Total YDS	Operator	Roads Swept
1	4/5	2 x 8hrs	16	51		/
2	4/6	2 x 8hrs	16	72		
3	4/7	2 x 8hrs	16	69		
4	4/8	2 x 8hrs	16	81		
5	4/9	2 x 8 hrs	16	84		
6	4/13	2 x 8	16	60		
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Attachment G:

Stormwater Personnel Training Log

2016 Massachusetts Small MS4 General Permit: Year 3 Training Record

Town of Southwick, Massachusetts

Session: BayState Roads: A User's Guide to MS4 Permitting

Date of Training: July 8, 2020

Training By: UMass Transportation Center

Attendees:

Name	Department
Randal Brown, P.E., Director	Public Works
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: CSI Network Discussion - Municipal Inspections of Construction Activities

Date of Training: August 19, 2020

Training By: National Stormwater Center

Attendee:

Name	Department
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: CSI Network Discussion: The Past, Present & Future of Clean Water Act Regulations

Date of Training: October 10, 2020

Training By: National Stormwater Center

Attendee:

Name	Department
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: BayState Roads: Stormwater System Maintenance and Green Infrastructure
Retrofitting in Massachusetts

Date of Training: October 27, 2020

Training By: UMass Transportation Center

Attendees:

Name	Department
Randal Brown, P.E., Director	Public Works
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: CSI Network Discussion: Water Quality Standards & TMDL's
Date of Training: November 18, 2020
Training By: National Stormwater Center
Attendee:

Name	Department
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: CSI Network Discussion: Using Science to Solve Compliance Issues
Date of Training: January 13, 2021
Training By: National Stormwater Center
Attendee:

Name	Department
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: SNEP Network: Maintaining Green Stormwater Infrastructure
Date of Training: March 5, 2021
Training By: Southeast New England Program | Providence Stormwater Innovation Center
Attendees:

Name	Department
Randal Brown, P.E., Director	Public Works
Jonathan Goddard, Stormwater Coordinator	Public Works

Session: National Green Infrastructure Certification Program
Dates of Training: March 2, 8, 9, 15, 16, 22, and 23, 2021
Training By: Water Environment Federation
Attendees:

Name	Department
Randal Brown, P.E., Director	Public Works
Jonathan Goddard, Stormwater Coordinator	Public Works