

Neponset Stormwater Partnership Annual Progress Report July 1, 2020 through June 30, 2021

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Introduction

The Neponset Stormwater Partnership (NSP) is a regional stormwater collaborative which brings together communities in and around the Neponset River Watershed area. NSP members work together to reduce stormwater pollution and streamline compliance with the Small Municipal Separate Storm Sewer System (MS4) permit which is issued jointly by the U.S. Environmental Protection Agency (EPA) Region 1 and the Massachusetts Department of Environmental Protection (MassDEP).

This report covers activities completed by the NSP during the period July 1, 2020 to June 30, 2021, which coincides with the FY21 work plan for the NSP.

This report is generally organized by the six minimum control measures (MCMs) outlined by the MS4 permit, subject to the caveat that some activities do not fit neatly into the framework established by the minimum control measures.

Participating Communities and Organizations

The following communities and other organizations were active members of the NSP during the reporting period:

- Canton
- Dedham
- Foxborough
- Medfield
- Milton
- Norwood
- Quincy
- Randolph
- Sharon
- Stoughton
- Westwood
- Metropolitan Area Planning Council (MAPC)

In addition, Avon participated on a limited basis in the activities specifically noted below.

The Neponset River Watershed Association serves as the overall coordinator for the NSP and coordinates or leads the implementation of many of the NSP's priority tasks.

Unless otherwise noted, all participating communities were included in each of the tasks or activities described below.

Project Funding

Funding for the NSP during the reporting period was provided by matching contributions from the participating municipalities, grant funds provided by the MAPC, and other matching grants and donations assembled by NepRWA.

Note About Using the NSP Annual Report

The NSP Annual Report provides a summary of all the work undertaken by the NSP during the report period. Some of this work, particularly in the areas of Public Education and Public Participation, is directly applicable to our member communities' EPA annual reporting requirements.

In the Public Education and Participation sections of the NSP Annual Report, content has been formatted in a manner consistent with the format of the EPA annual report template. Because the NSP is a regional program, these sections are written from a "regional" perspective rather than "town-by-town" perspective. Where additional details of community-specific efforts are known, we have included these in summary form for those communities that prefer to report on a community-specific basis.

In past communication, EPA has endorsed the concept of a regional Education SWMP, and also a regional Education Annual Report. In other words, if a community is relying on the NSP to meet its Public Education requirements, they do not need to carefully justify community-specific results from the regional implementation activities, provided that the community was actively participating.

Therefore, if a community has incorporated the NSP Regional Outreach and Education SWMP into its own municipal SWMP by reference, they can satisfy the education reporting requirement by referencing the NSP Annual Report by including the URL in their own annual report.

If a community has not adopted the NSP Regional Outreach and Education SWMP by reference, it may pick and choose from among the NSP's completed education activities and add them directly to their own municipal EPA annual report.

Lastly, any number of other NSP activities may be indirectly or partially applicable to a community's MS4 reporting requirements. These activities include areas such as

- Staff training that occurs during NSP meetings and workshops
- Technical assistance on bylaws, green infrastructure, or IDDE tools
- Water quality data which may be relevant to IDDE
- Evaluation and construction of stormwater retrofit opportunities

Because these areas do not neatly match the applicable EPA reporting requirements for all NSP communities, they have not been formatted to correspond to the EPA annual report template. Rather, they are simply provided as brief narrative or bullets. However, NSP communities may still want to pick and choose activities in these sections that they would like to use to supplement their EPA annual report.

MCM1 Public Education

Numerous tasks were completed in the area of Public Education and Participation, including the continued development of a regional outreach program that produces educational pieces for use by all participating members.

Samples of outreach materials described below are either linked in the narrative (if available on the internet) or are included in the Appendix at the end of this document.

The NSP's public education work is strongly supported by the communities and individuals that have volunteered to serve on the NSP Public Education Sub-Committee, including Laura Smead of Canton, Julie Sullivan of Quincy, Erica DeDonato of Milton, and Kevin Davis of Sharon.

Public Education BMP 1: Maintain Educational Website

<u>Description:</u> Maintained a comprehensive educational website to serve

the Neponset Stormwater Partnership service area as a primary resource for key information for all four target

audiences.

<u>Target Audience:</u> Residents, Businesses, Industry and Developers

Measurable Goals: Achieve at least 500 unique site visits every year.

Results: This year, there were 4,386 site visitors and 8,257 page

views. This represents a 23% and 47% increase over last

year's metrics, respectively.

Date(s): Ongoing since May 1, 2018

(TMDL):

Applies to Appendix F

Yes (pet waste, fertilizers, leaves and grass clippings,

septic)

Applies to Appendix H Yes (pet waste, fertilizers, leaves and grass clippings,

(WQ Limited Waters): septic)

Example Materials: www.yourcleanwater.org

Public Education BMP 2: Operate Stormwater Hotline

Description: Operated a regional "stormwater hotline" to field questions

and problem reports regarding stormwater from across the

region. Responses were collected via a website form hosted at yourcleanwater.org, via email submissions to

stormwater@neponset.org, and phone calls to 781-575-0354 x 300. Responses included answers to questions, additional information or follow up investigation, and/or referral of inquiries/reports to the appropriate municipalities as appropriate. Anonymity of inquiries was maintained as requested.

<u>Target Audience:</u> Residents, Businesses, Industry, and Developers

Measurable Goals: Provide immediate answers to inquiries generated by

regionalized outreach activities.

Results: Seven contacts were made to the stormwater hotline this

year.

One call reported a flooding issue. The details of the report were forwarded to the proper municipal department for

further action.

Two calls related specific concerns about a local pollution sources. In both cases, NepRWA initially investigated the calls. One was determined to need no further followup, while the other issue was routed to the proper municipal department for investigation and correction.

Four calls were seeking further information in response to

outreach materials that were distributed.

Date(s): Ongoing since May 1, 2018

Applies to Appendix F

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

N/A

Example Materials: N/A

Public Education BMP 3: Distribute Pet Waste Information With Dog Licenses

<u>Description:</u> Educational "rack cards" regarding proper pet waste

disposal were printed and provided to town clerks' offices in

member towns to include with dog license renewal

requests, either in person or via mail. In towns where online

renewal is either available or the only renewal method offered, online graphics that link to the pet waste page of the NSP website were provided. In one town, a pet waste message was printed directly on the dog license receipts. The following distribution numbers were based on the number of licensed dogs per NSP town. The number of rack cards distributed correlated to the number of dogs licensed per town to ensure all dog owners received the message, although some towns had leftover cards from last vear.

Target Audience:

Residents

Measurable Goals:

Participation by 100% of Town Clerks in order to reach 80% of dog owners annually with pet waste management information. Over the 5-year permit period achieve a reduction in the number of pet waste bags found when cleaning catch basins in the member communities that track this information.

Results:

All Town Clerks participated in pet waste messaging. A total of 9,100 cards were printed and distributed to Town Clerks. Additionally, a graphic with a link to a "Pet Waste" focused webpage on the YourCleanWater.org website was included for online renewals in the Town of Sharon. Also, the Town of Randolph provided a pet waste message to all dog owners by printing it directly on the license receipt. These methods, along with some leftover cards from the previous year, are estimated to have combined to reach the entire population of dog owners in participating towns.

Date(s):

Materials were distributed to Town Clerks in December 2020 and disseminated to dog owners as licenses were issued.

Applies to Appendix F

(TMDL):

Yes

Yes

Applies to Appendix H (WQ Limited Waters):

Example Materials:

Appendix A-1

Public Education BMP 4: Summer Pet Waste Campaign

Description: Prepared a social media campaign consisting of two

Facebook messages and one Twitter message directed at the proper disposal of pet waste consisting of social media posts. The social media materials were posted to the Neponset River Watershed Association's Facebook

and Twitter Accounts and Neponset Stormwater
Partnership member communities were asked to
"share/retweet" it on their own Facebook and/or Twitter
accounts. The pet waste section of the NSP website

was also updated. Flyers, posters, and postcards were not created this year as their use would have been

limited due to COVID protocols.

<u>Town-Specific</u> Canton:

<u>Details:</u>

The social media message was shared on the Canton Planning Facebook account and with the Everything Canton, Canton Bulletin Board, and Canton Walk, Bike,

and Hike Committee Facebook groups.

Dedham: The information was shared/posted to the Sustainable

Dedham and Dedham Trails Facebook and Twitter Pages. The Town also created an Instagram post using

the images from the other posts and added the information to their "Stories" in Instagram and

Facebook. The graphics were also added to the Town

website and e-newsletter along with links to the

YourCleanWater.org webpage.

Foxboro: The social media posts were shared on the Foxborough

Conservation Commission Facebook page.

Medfield: The social media posts were shared on the Town's

Facebook and Twitter accounts.

Milton: The social media posts were shared on the Milton DPW

Facebook page and the Town of Milton Twitter page.

Norwood: The social media posts were shared on the Town-run

Facebook accounts.

Quincy: The social media posts were shared on the City's

Twitter account.

Randolph: The social media posts were shared on the Town of

Randolph, Turner Free Library, and The Hub @ Stetson

Hall Facebook pages.

Sharon: The social media posts were shared on the Town's

Facebook and Twitter pages.

The social media messages were shared on the Stoughton:

> Stoughton Public Works, Stoughton Town Manager, and Stoughton Recreation Facebook pages. Links to the pertinent YourCleanWater.org webpage was also added

to the Town Engineering/Stormwater information

webpage.

Westwood: The social media messages were shared on the Town

of Westwood's Facebook and Twitter pages.

Target Audience: Residents, Businesses, Industry

Measurable Goals: Participation by 100% of NSP communities and reach to

at least 1,000 people in the NSP region through social

media.

Results: All NSP communities participated by redistributing one

or more of the social media messages. A total of 35,638

people were reached through Facebook, with an additional 4,169 people reached through Twitter.

July 2 and July 6, 2020 Date(s):

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H (WQ Yes

Limited Waters):

Example Materials: Appendix A-2

Public Education BMP 5: Fall Leaf Waste Campaign

Description: Prepared a social media campaign directed at the

> proper disposal of leaf waste consisting of a social media post to Facebook and Twitter. The social media

messages were posted to the Neponset River Watershed Association's Facebook and Twitter Accounts and Neponset Stormwater Partnership member communities were asked to "share/retweet" it to their own Facebook and/or Twitter accounts. The leaf and yard waste section of the NSP website was updated with detailed local information on yard waste disposal options. Electronic copies of flyers with yard waste collection information specific to each Town were made available. Additionally, Facebook ads regarding yard waste were created and run in Towns who chose to participate.

<u>Town-Specific</u> Canton: <u>Details:</u>

Flyers were provided at the entryway to Town Hall and shared with the Canton Association of Business and Industry (about 90 members). The social mediate posts were shared on the Canton Planning Board, Everything Canton, and Canton Bulletin Board Facebook pages. The information was also shared with the Board of Selectman's office, Conservation Commission, and Library system so they could share it on their channels. It was also shared with the Canton Citizen, which ran an article on the content of the flyer

(<u>https://www.thecantoncitizen.com/2020/10/02/nsp-clean-water/</u>). Facebook ads were also used to reach 6,152 people.

Dedham:

A flyer was posted on the Town webpage and distributed via the school parent email listserv. The social media message was retweeted on the Engineering Department's Twitter page. Facebook ads were also used to reach 6,278 people.

Foxboro:

The social media message was shared on the Town DPW's Facebook page. Facebook ads were also used to reach 5,658 people.

Medfield:

The social media message was shared on the Town's Facebook and Twitter page. Facebook ads were also used to reach 3,135 people.

Milton:

The social media message was shared on the Town DPW's Facebook page and the Town's Twitter page. Facebook ads were also used to reach 5,728 people.

Norwood:

Distributed the flyer and shared the social media message on the Town's Facebook page. Facebook ads were also used to reach 9,520 people.

Quincy: Shared the social media message on the City's

Facebook and Twitter pages.

Randolph: Posted two separate (non-NSP) messages and graphics

> on Facebook. Also posted a non-NSP graphic on the Town website. These graphics used the Think Blue campaign's themes and shared yard waste pickup dates. Facebook ads were also used to reach 7.069

people.

Sharon: Social media message shared on Town Facebook and

Twitter pages.

Stoughton: The flyer was posted on the website. The social media

> messages were shared on the Facebook accounts for the Town DPW, the Recreation Department, and the Town Manager. Facebook ads were also used to reach

8,726 people.

Westwood: The flyer was posted to the Town's Facebook and

Twitter pages. Facebook ads were also used to reach

5,702 people.

Target Audience: Residents, Businesses, Industry

Measurable Goals: Participation by 100% of NSP communities and reach to

at least 1,000 people in the NSP region through social

media.

Results: All NSP communities participated by redistributing one

> or more of the campaign materials, or by using previously prepared town materials, with most communities participating in multiple distribution methods. The social media posts reached a total of 11,079 people through Facebook and 2,624 people through Twitter. Additionally, Facebook ads reached a total of 57,968 people throughout participating Towns.

Date(s): September 23, 2020 and October 8-18, 2020

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H (WQ Yes

Limited Waters):

Example Materials: Appendix A-3

Public Education BMP 6: Spring Fertilizer and Grass Clipping Campaign

<u>Description:</u> Prepared an outreach campaign regarding proper use

(or abstention from use) of fertilizer consisting of social media posts and an interactive "fertilizer calculator" on the NSP website. Social media posts were made on the Neponset River Watershed Association's Facebook and Twitter Accounts and Neponset Stormwater Partnership member communities were asked to "share/retweet" it to

their own Facebook and/or Twitter accounts. The

fertilizer and lawn care section of the NSP website was updated, along with the NSP's "fertilizer calculator" that allows a user to enter several pieces of information and returns a suggested fertilizer application rate based on guidance from the NEIWPCC Northeast Voluntary Turf Fertilizer Initiative. Additionally, Facebook ads regarding fertilizer and lawn maintenance were created and run in

Towns who chose to participate.

<u>Town-Specific</u> Canton:

Dedham:

Details:

The social media post was shared the Planning Department Facebook page, as well as Canton-focused Facebook groups. The information was also shared with the following groups for further distribution: the Library, Council on Aging, Conservation, Town Administrator, Neponset River Regional Chamber, Canton Association

of Business and Industry, and the Canton Citizen.

Facebook ads also reached 7,228 people.

The social media posts were shared on Town's DPW Facebook page and the Town, DPW, and Engineering

Twitter pages. Facebook ads also reached 7,926

people.

Foxboro: The social media post was shared on the Town

Facebook and Twitter pages. Facebook ads also

reached 5,201 people.

Medfield: The social media post was shared on the Town's

Facebook and Twitter account. Facebook ads also

reached 3,548 people.

Milton: The social media message was shared on the Milton

DPW Facebook page and the Town, DPW, and

Engineering Twitter pages. Facebook ads also reached

6,991 people.

Norwood: The social media message was shared on the Town

DPW's Facebook page and the Town's Twitter page.

Facebook ads also reached 11,146 people.

Quincy: The social media message did not appear to be shared

by any City accounts, but the message reached those in Quincy, as a Quincy-focused group also shared the

message.

Randolph: Facebook ads reached 9,426 people

Sharon: The social media message was shared on the Town's

Facebook and Twitter pages. Facebook ads also

reached 4,724 people.

Stoughton: The social media message was shared on the Town

Manager and Recreation Department's Facebook pages. The Town requested a flyer with fertilizer and lawn maintenance information, which they posted online and in a few public offices. Facebook ads also reached

9,871 people.

Westwood: Facebook ads reached 3,918 people.

Target Audience: Residents, Businesses, Industry

Measurable Goals: Participation by 100% of NSP communities and reach to

at least 1,000 people in the NSP region through social

media.

Results: NSP communities participated by redistributing one or

more of the campaign materials with most communities participating in multiple distribution methods. A total of 5,736 people were reached through Facebook, with an additional 2,886 people reached through Twitter.

Additionally, Facebook ads reached a total of 69,979

people throughout participating Towns.

<u>Date(s):</u> April 8-18, 2020

Applies to Appendix F Yes

(TMDL):

Applies to Appendix H (WQ Yes

Limited Waters):

Example Materials: Appendix A-4

Public Education BMP 7: School Outreach Program

<u>Description:</u> Due to COVID-19, all lessons had to take place on-line

over Zoom or Google Meet. Prepared new on-line

PowerPoint-based watershed education curriculum for 5th grade students. Curriculum covered drinking water and

stormwater infrastructure, local water resources,

wastewater systems, water conservation, and stormwater pollution prevention techniques. Curriculum was designed and adapted with input from teachers in participating schools and aligned with the MA 5th grade science

curriculum standards. The program was delivered at the individual classroom level over the course of one (Quincy) or two (Foxborough, Milton, Canton, Sharon, Stoughton, Dedham and Westwood), 60-minute on-line visits by a watershed educator. The educator also provided teachers with follow up materials to share with students and their families. In addition to the elementary program a limited number of high school level programs were conducted in Canton and Quincy, wherein the watershed educator met several times on-line with art or media classes to educate them about stormwater and engage them in creating original artwork or outreach materials of their own design that are then shared with the community. Due to COVID-19 limitations, students in both Canton and Quincy focused on digital posters that were shared with the public via social

media and websites.

Target Audience: Residents

Measurable Goals: Reach at least 80% of households with 5th grade children in

participating communities, and 100% positive feedback

from participating classroom teachers.

Results: During the 2020-2021 school year a total of 118

classrooms were visited once and 69 classrooms were

visited twice, representing 86% of total 5th grade

classrooms in the participating communities and an estimated 2,500 families. Feedback from teachers was exceedingly positive for the on-line presentations and materials.

<u>Date(s):</u> September 2020 through June 2021(school year)

Applies to Appendix F

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

N/A

Example Materials: Appendix A-5

Public Education BMP 8: Regional Education Mailing

Description: An educational mailing was prepared and mailed to all

addresses in participating communities. The mailing was an 11x17 trifold brochure that highlighted general stormwater pollution prevention tips. The mail piece referenced key information on fertilizer, lawn maintenance, methods to reduce stormwater runoff, and referred readers to

additional information available at yourcleanwater.org and the stormwater hotline. The mailing was distributed to all business and residential addresses in the participating communities (Avon, Canton, Dedham, Foxborough, Medfield, Milton, Norwood Randolph, Sharon, Stoughton

and Westwood) totaling just over 103,000 mailing

addresses in all.

<u>Target Audience:</u> Residents

Measurable Goals: Reach 100% of addresses in participating towns, including

those who do not use social media or follow town

government communication channels.

Results: 100% of addresses in the target area were reached,

including all businesses, residential addresses, and PO

Boxes (103,077 addresses total).

Date(s): June 28, 2021

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H Yes

(WQ Limited Waters):

Example Materials: Appendix A-6

Public Education BMP 9: Outreach to Septic System Owners

Description: Prepared an outreach campaign directed at all septic

system owners in member communities. Effective outreach was designed to be efficiently delivered to the target audience. The campaign was carried out in different ways in different towns, depending on the prevalence of septic systems within the town. In Canton, Foxborough, Medfield, and Stoughton, septic systems are relatively common, so a rack card was designed and sent to all addresses in the town as a bill stuffer. In Dedham, Milton, Norwood, Quincy, Randolph, and Westwood, septic systems are much less common, so a postcard was designed and sent to all properties that use a septic system, according to the records kept by each town's Board of Health. In Sharon, septic is also nearly universal, and an edition of the Water Department quarterly newsletter was prepared with a septic

theme and distributed to all water service customers. All outreach pieces (the rack card, the postcard, and the

newsletter) contained similar information regarding the care

and maintenance of septic systems.

Target Audience: Septic System Owners

Measurable Goals: Reach 100% of known septic systems in member

communities.

Results: 1,316 postcards were mailed directly to addresses where

septic systems are present. Over 19,300 rack cards were printed and included as bill stuffers and sent to all residents in towns where septic systems are common (the exact number is not known since the billing contractor for one town printed the rack cards internally). Lastly, a town-wide, septic-themed newsletter was sent to all residents of

Sharon. These methods reached 100% of the known septic

systems in each town.

Date(s): March 2021 (various specific dates depending on outreach

method, billing cycle, etc.)

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H

Yes

(WQ Limited Waters):

Example Materials: Appendix A-7

Public Education BMP 10: "Problem Area" Outreach

Description: Maintain a list of "problem areas" relying on the knowledge

of Town officials as well as communications via the stormwater hotline. Address these "problem areas" with methods designed to correct stormwater pollution problems. Most of the issues were determined to be transient in nature and needing something at the storm drain to warn potential polluters of the consequences of their actions. Thus, these issues were addressed through

storm drain marking.

<u>Target Audience:</u> Residents

Measurable Goals: Respond to identified "problem areas" with methods

designed to correct specific pollution-generating behaviors.

Results: Three "problem areas" were addressed through storm drain

marking this year: Blackman Road (Canton), Trayer Road (Canton), and Gulliver Street (Milton). Drain marking was completed by volunteers using pre-packed kits. Please see Public Education BMP 11 for more detailed information.

Date(s): Spring-Summer 2021

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H

(WQ Limited Waters):

Yes

<u>Example Materials:</u> Examples of storm drain markers are available in the

example materials for Public Education BMP 11 (Appendix

<u>A-8</u>).

Public Education BMP 11: Storm Drain Marking

<u>Description:</u> A program through which volunteers are able to mark storm

drains with educational messages was launched this year, after a successful pilot test last year. The program consists of providing volunteers with all materials and information they need to carry out the task. Aluminum medallions are attached to the curb or pavement adjacent to storm drains using construction adhesive. The medallions have one of 3 messages "No Dumping, Only Rain in the Drain," "Drains to Neponset," or "No Dumping, Drains to Ocean." Additional medallion variations such as "Drains to Charles" may be developed as the program ramps up. Volunteers are able to pick the areas they'd like to mark, but are encouraged to pick areas with high pedestrian traffic or areas with known issues that can be addressed by storm drain marking (such as the "problem areas" discussed in Public Education BMP 11). Records of which catch basins have been marked are

maintained by the NSP.

<u>Target Audience:</u> Residents, Businesses, and Institutions

Measurable Goals: Continually distribute drain marking kits to interested

volunteers.

Results:

Date(s): Spring-Summer 2021

Applies to Appendix F

(TMDL):

Yes

Applies to Appendix H (WQ Limited Waters):

Yes

Example Materials: Appendix A-8

Public Education BMP 12: Think Blue "Fowl Weather" Video

<u>Description:</u> Partnered with MA Statewide Municipal Stormwater

Coalition to secure MassDEP grant funding to distribute "Fowl Weather" advertising campaign, which helps viewers visualize how motor oil, pet waste, and trash become stormwater pollution. The campaign was operated on

Facebook, Instagram, and YouTube.

Target Audience: Residents

Measurable Goals: Reach a significant portion of the NSP service area

population with a stormwater awareness message in a

highly engaging format.

A total of 499,638 people in the NSP service area were Results:

reached via 123,472 Facebook/Instagram "impressions."

Via YouTube, there were 320,031 impressions. Additionally, there were 56,135 Spanish Language impressions. A survey found that 16% of respondents recalled seeing the campaign, which is slightly down from

2020 results, but within the survey margin of error.

Additionally, respondents who saw the ad were more likely

to recognize that stormwater directly enters local waterways (50%) than those who did not recall the ad (36%). Finally, those who recall the ad were more likely to describe stormwater has having "major" or "some" impact on waterways (53%) than those who do not recall the ad

(27%).

May 17 to June 4, 2021 Date(s):

Applies to Appendix F N/A

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

Appendix A-9 Example Materials:

Public Education BMP 13: Regional Water Quality Forum

Description: Organized a public presentation on data from the 2020

> Volunteer Water Quality Monitoring Program (Public Participation BMP 2). The presentation covered the results from the 2020 sampling season and how they fit into the broader context of long-term water quality trends in the

watershed. Also discussed were remaining challenges facing various waterways in the Watershed, and actions individuals can take to address those challenges. Due to COVID protocols, the event was held via Zoom as part of

NepRWA's "Watershed Wednesday" series of

presentations, which was publicized across the entire NSP

service area and drew attendees from numerous

communities. Additionally, a recording of the presentation was posted on YouTube. The event was broadcast on Canton Community TV and covered by the Dorchester

Reporter.

<u>Target Audience:</u> Residents

Measurable Goals: Deliver detailed site-specific water quality data to interested

residents and local officials in addition to general "how to"

information for broader audiences.

Results: There were 74 registrants for the event. Additionally, a

recording of the presentation was uploaded to YouTube, where it has gathered another 133 views to date. Canton Community TV broadcast a recording of the event at 7:00 AM, 1:00 PM, and 7:00 PM daily from 1/21/21 – 1/27/21.

<u>Date(s):</u> January 13, 2021

Applies to Appendix F

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

N/A

Example Materials: Recording of the presentation:

https://www.youtube.com/watch?v=xb4d18oGwzg

Dorchester Reporter Article:

https://www.dotnews.com/2021/neponset-water-report-

safe-swim-most-time

Public Education BMP 14: Regional Water Quality Data Reports and Press Releases

Description: Organized data from the 2020 Volunteer Water Quality

Monitoring Program (Public Participation BMP 2) into townspecific reports and press releases. These materials were provided to each town to aid in the dissemination of the results of the water quality monitoring program to residents

and/or the media.

Target Audience: Residents, Businesses, Institutions

Measurable Goals: Produce materials for each participating town to use in

disseminating the results of this year's water quality

monitoring program.

Results: A report and press release were each prepared for all 5

participating towns (Canton, Dedham, Foxborough, Milton,

and Westwood).

Date(s): Summer 2021

Applies to Appendix F

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

N/A

Example Materials: Appendix A-10

Full reports available upon request

Public Education BMP 15: Educational Outreach Evaluation

Description: Conduct a survey to determine the extent of the public's

knowledge regarding stormwater pollution prevention and the impact of the outreach campaigns thus far. The survey also served as an educational opportunity, as information on why a particular answer was correct was revealed after the user submitted their responses. These feedback pieces also contained links to the pertinent webpages on the YourCleanWater.org website. The survey was advertised

via social media channels and various municipal email listservs. The intent is to repeat this survey regularly and

monitor results over time.

<u>Target Audience:</u> Residents, Businesses, Institutions

Measurable Goals: Produce results to compare future surveys against. In the

results, determine the number of respondents who recall seeing previous NSP outreach materials, and quantify the correct responses to basic stormwater pollution prevention

questions.

Results: The survey has 184 respondents. Of those, 59 recalled

seeing NSP outreach materials on social media. The percentage of respondents who correctly answered the

stormwater knowledge questions varied on each inquiry,

but was generally about 85%-90%.

<u>Date(s):</u> January-March 2021

Applies to Appendix F

N/A

(TMDL):

Applies to Appendix H

N/A

(WQ Limited Waters):

Example Materials: Appendix A-11

Public Education BMP 16: Stormwater Education Presentations

Description: Delivered several stormwater-related presentations to

various groups of residents. At these events, residents received basic information on stormwater pollution and tips to prevent it around their own residences and places of business. At some presentations, residents were also educated on stormwater utility programs and how they can help to provide the funding needed for stormwater system management, upgrades and enhancements. Due to COVID restrictions, all presentations occurred online via Zoom.

<u>Target Audience:</u> Residents

Measurable Goals: Present pertinent stormwater-related information to

gathered groups as the opportunity arises.

Results: The following presentations occurred this year:

Stormwater Awareness and Pollution Prevention

- September 29, 2020, 7:00 PM (Resident event organized by Canton Library)

- November 18, 2020, 12:30 PM (NepRWA

Watershed Wednesday event.

- March 11, 2021, 7:00 PM (Resident event organized

by Together, Yes and Norwood Library and

simulcast on local cable)

Stormwater Funding and Utilities

- September 29, 2020, 7:00 PM (Resident event

organized by Canton Library)

March 11, 2021, 7:00 PM (Resident event organized by Together, Yes and Norwood Library and simulcast on local cable)

Date(s): Throughout the Permit Year

N/A

Applies to Appendix F

(TMDL):

Applies to Appendix H

(WQ Limited Waters):

N/A

N/A Example Materials:

Public Education BMP 17: Business Association Outreach

Description: Reached out to individual business associations to inquire if

> they would be able to share stormwater pollution prevention outreach aimed at the general business community with their membership. Provided an outreach piece to the associations that respond affirmatively. The NSP Outreach Committee reviewed and revised the prepared outreach

prior to distribution.

Target Audience: Businesses

Measurable Goals: Reach out to all known business associations and provide

outreach to all who agree to share it.

Seven business associations were contacted. Two agreed Results:

to share business-focused stormwater outreach pieces.

Outreach was created and provided to those two associations (Neponset River Regional Chamber and

Quincy Chamber of Commerce).

Date(s): Outreach shared on June 29, 2021

Applies to Appendix F

(TMDL):

N/A

Applies to Appendix H

(WQ Limited Waters):

N/A

Example Materials: Appendix A-12

Public Education BMP 18: Construction Outreach

<u>Description:</u> Prepared and provided the construction-focused

stormwater pollution prevention outreach to interested Conservation Departments. The NSP Outreach Committee

reviewed and revised the prepared outreach prior to

distribution.

Target Audience: Residents

Measurable Goals: Provide construction-focused stormwater pollution

prevention outreach to anyone who expresses interest.

Results: An outreach was developed and electronic copies were

shared with all Conservation Departments who expressed interest. The outreach piece remains available as needed.

<u>Date(s):</u> Outreach distributed on June 29, 2021

Applies to Appendix F N/

(TMDL):

N/A

N/A

Applies to Appendix H

(WQ Limited Waters):

Example Materials: Appendix A-13

MCM 2: Public Participation

General Public Participation Activities

 Provided a representative to participate in the meetings of the Quincy Stormwater Advisory Committee.

Public Participation BMP 1: River Clean Up Days

Organized volunteer-based river cleanup events with sites throughout the watershed on September 28, 2020, and April 17, 2021. At the fall event, approximately 300 volunteers worked at 12 locations to remove an estimated 10 tons of trash and debris from various waterways, parks, and wetlands. The spring event expanded even further to include approximately 400 volunteers working at 16 locations to remove an estimated 28 tons of trash and debris.

Public Participation BMP 2: Volunteer Water Quality Monitoring Program

Organized a volunteer-based water quality monitoring program with 41 sites located throughout the Neponset River Watershed. Approximately 60 volunteers are involved in the program and it is operated under the terms of a DEP / EPA approved QAPP. The results are used to more meaningfully engage members of the public in implementation of the MS4 program, to better inform municipal IDDE efforts, to track overall progress in restoring stream health and attaining designated uses throughout the watershed, and to provide local data that provides meaningful context for public outreach and education programs.

Public Participation BMP 3: Regional Water Quality Forum

Organized a public presentation on data from the 2020 Volunteer Water Quality Monitoring Program. The presentation covered the results from the 2020 sampling season and how they fit into the broader context of long-term water quality trends in the watershed. Also discussed were remaining challenges facing various waterways in the Watershed, and actions individuals can take to address those challenges. Due to COVID protocols, the event was held via Zoom as part of NepRWA's "Watershed Wednesday" series of presentations, which was publicized across the entire NSP service area and drew 74 registrants from numerous communities. Additionally, a recording of the presentation was posted on YouTube, where it has gathered another 133 views. A recording of the presentation was also broadcast by Canton Community TV at 7:00 AM, 1:00 PM, and 7:00 PM daily from 1/21/21 – 1/27/21. Lastly, the Dorchester Reporter also wrote an article using the information shared at the presentation.

MCM 3: Illicit Discharge Detection and Elimination

Illicit Discharge Detection and Elimination BMP 1: IDDE Training

Provided IDDE training to various staff in 2 towns. Staff from both Canton and Milton were given an IDDE "awareness" training that covered identifying and reporting illicit discharges as well as some general information on IDDE activities that were being conducted by parties not in the training sessions. Canton's training occurred on February 2, 2021 and was attended by the Town's Conservation Agent, while Milton's training occurred on March 25, 2021 and was attended by a group of staff assembled by the Town's Public Works Department. Both trainings were delivered via Zoom.

MCM 4: Construction Erosion and Sediment Control

Construction Erosion and Sediment Control BMP 1: Existing Bylaw and Regulation Review

Existing stormwater bylaws and regulations in all member communities were reviewed to assess compliance with current MS4 requirements as well as recommended best practices. Areas where updates were needed were identified and shared with the towns. In some cases, new draft bylaws and regulations were provided. While most updates were delayed due to COVID-related impacts, all but two towns have now completed them.

MCM 5: New Development and Redevelopment

New Development and Redevelopment BMP 1: Existing Bylaw and Regulation Review

Existing stormwater bylaws and regulations in all member communities were reviewed to assess compliance with current MS4 requirements as well as recommended best practices. Areas where updates were needed were identified and shared with the towns. In some cases, new draft bylaws and regulations were provided. While most updates were delayed due to COVID-related impacts, all but two towns have now completed them.

New Development and Redevelopment BMP 2: Zoning and Bylaw Analysis NSP and MAPC have previously completed analysis of zoning and other local bylaws in partial fulfillment of the Street Design and Parking Lot Report and Green Infrastructure Report requirements of the permit. This is viewed as an ongoing task, as the NSP also plans to update this information before the end of year four of the MS4 Permit.

New Development and Redevelopment BMP 3: Evaluation of Retrofit Tools NSP and MAPC have developed tools and conducted field evaluations of potential stormwater retrofit locations toward satisfaction of the Retrofit Property Inventory requirement, and the NSP aims to make sure this requirement is fully satisfied for all

communities before year four of the MS4 Permit. See below for a full description of the MAPC / NSP Retrofit Evaluation Tool completed this year.

MCM 6: Good Housekeeping and Pollution Prevention

There were no applicable NSP activities for this MCM during the permit year.

Activities Not Corresponding to an MCM

General Coordination and Training

The activities in this category do not fit neatly into the six MCMs and/or apply to multiple MCMs and so have been aggregated under this heading.

The NSP held four meetings this year, but due to COVID protocols, all meetings were held via Zoom. Meetings included training opportunities for staff of the participating communities through guest presentations, staff presentations, inter-municipal information sharing, and discussion. The major presentation topics during the reporting period included:

- Stormwater Best Management Practice Overview from UNH Stormwater Center
- Planning and Advocating for Implementation of a Stormwater Utility
- Overview and Lessons Learned from the Installation and Maintenance of Jellyfish Filters in the Town of Foxborough
- Overview and Lessons Learned from the Town of Canton's MVP Project

In addition to these meetings, various stormwater-related webinars and training opportunities were shared with NSP members via regular emails that compiled listings for such events in a uniform format.

The NSP also provided delegates to participate in the meetings of the MA Statewide Municipal Stormwater Coalition (Statewide Coalition) during the project period:

 Participants on behalf of the NSP included Ian Cooke, NepRWA Executive Director, Kerry Snyder, NepRWA Advocacy Director, and Patrick Hogan, NepRWA Water Resource Professional.

APPENDICES

Appendix A-1: Example Materials for Public Education BMP 3

Contents: Rack Card Included with Dog Licenses,

(Front)

Dog owners we need your help!

Dog waste that's left on the ground is a public health issue that you can help prevent.

When dog waste is not picked up by owners, rain water and snow melt washes the bacteria and parasites from the waste into storm drains, which then lead directly to local streams, ponds, and lakes.



Bacteria and parasites from dog waste cause water quality problems that affect drinking water resources, recreation, and wildlife.

Every time you walk your dog, please:

- · carry a bag to pick up pet waste,
- · dispose of waste in a trash can,
- · never toss anything down a storm drain!

Your Department of Public Works thanks you for helping to keep local waterways clean.



Let's keep it clean out there!

(Back)

Not only is dog waste gross to look at, it can cause significant health issues, including:

- Campylobacteriosis: A bacterial infection that causes diarrhea in humans.
- Giardiasis: A protozoan infection of the small intestine that can cause diarrhea, cramping, fatigue, and weight loss.
- Salmonellosis: Symptoms include fever, muscle aches, headache, vomiting & diarrhea.
- Toxocariasis: An animal to human infection that is caused by roundworms found in the intestines of dogs. The parasite can cause vision loss, rash, fever or cough, and is a particular threat to children exposed to parasite eggs in sand and soil.

An easy way to avoid these health issues is to just pick up after your dog. It's a simple thing to do and it makes a big difference for all of us!



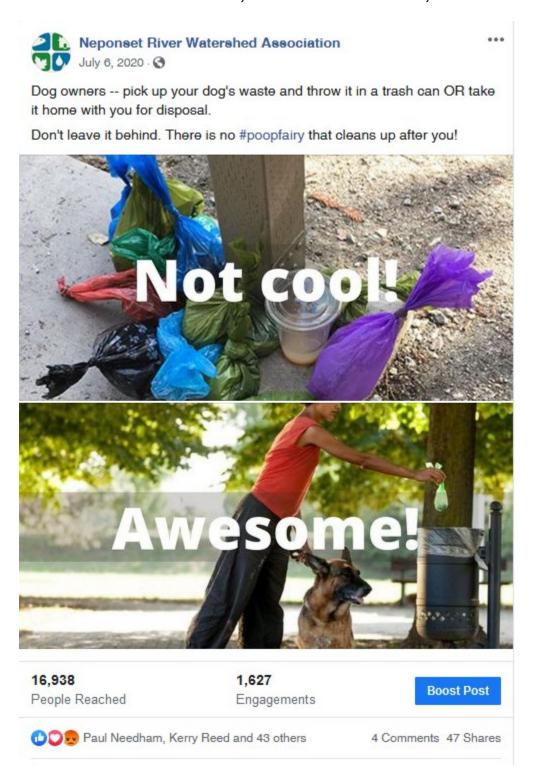
Learn how we're improving water quality in your town. YourCleanWater.org

Your town is part of the Neponset Stormwater Partnership, which aims to help communities reduce water pollution, and save money while doing so.

Please contact the Neponset River Watershed Association for more information. stormwater@neponset.org (781) 575-0354 x300

Appendix A-2: Example Materials for Public Education BMP 4

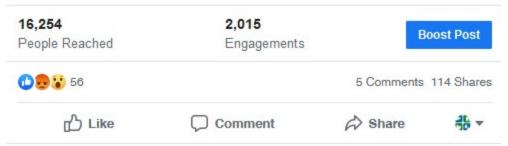
Contents: First Facebook Post, Second Facebook Post, Twitter Post





Dog owners - do your job! There is no #poopfairy that picks up after you. Throw your dog waste bags into trash cans or take it home with you to dispose of.







You want to go swimming but your beach is closed due to bacteria.

One of the reasons? Dog waste that gets left on the ground combined with heavy rainstorms.

The U.S. Environmental Protection Agency estimates that 2-3 days worth of dog droppings from a population of 100 dogs can create enough bacteria to close all watershed areas within 20 miles to swimming.... See More





Dog owners - it's time for you to be awesome.

(No trash can? No problem. Take it home with you for disposal.)

Be awesome. Use a trash can.



10:22 AM · Jul 6, 2020 · Twitter Web App

Appendix A-3: Example Materials for Public Education BMP 5

Contents: Facebook Ad, Facebook Post, Twitter Post, Educational Flyer Example



Rake your leaves away from the road, sidewalk, and driveway to reduce water pollution and prevent flooding.

Fallen leaves clog storm drains and are loaded with natural fertilizer, which can cause water pollution that harms people and animals.

Learn More: www.YourCleanWater.org/leaves



11.099

People Reached

301

Engagements

Boost Post



Neponset River @NepRWA · Sep 23, 2020

Rake your leaves away from the road, sidewalk, and driveway to reduce water pollution and prevent flooding.

Leaves clog storm drains and are loaded with natural fertilizer, which can cause water pollution that harms people and animals.

Learn More: YourCleanWater.org/leaves



Help Keep Canton's Water Clean This Fall

Leaves and grass clippings that are dumped or stored near waterways or paved areas add to water pollution.

Fallen leaves and grass clippings are loaded with phosphorus.

When streams, rivers, and ponds receive too much phosphorus, harmful algae and cyanobacteria blooms can occur. These blooms are unsightly and can be toxic to people, pets, and wildlife.



YARD WAS

Keep our local waterways clean and healthy with a few simple steps.

- Dispose of yard waste at the Canton Yard Waste Recycling Facility (see reverse side for guidelines).
- Consider composting yard waste.
- · Keep paved areas and storm drains clear of leaves.
- Keep bagged, piled and mulched leaves on natural soil, a few feet back from paved areas.
- · Ensure that your lawn service is properly disposing of yard waste.
- Reduce excessive lawn chemical use and always follow manufacturer's directions.

Learn more at www.YourCleanWater.org



The Neponset Stormwater Partnership (NSP) is a program managed by the Neponset River Watershed Association on behalf of eleven member communities. NSP aims to increase the effectiveness of municipal stormwater management programs through regional cooperation and resource sharing.

Properly Dispose of Yard Waste in Canton

It is illegal to dump or store yard waste within 30 feet of a pond. stream, or wetland in Canton.

Yard waste is not allowed in trash bins for curbside collection.

The Canton Yard Waste Recycling Facility is located at 99 Pine Street.

2020 regular season hours: April 1, 2020-Dec. 14, 2020 Mon-Sat. 7:30am-4pm

Winter hours:

Dec. 16, 2020-April 1, 2021 Wed.-Sat. 7:30am-4pm

- Residents are required to obtain and display a Yard Waste Recycling sticker on the passenger side front windshield of participating vehicles.
- · Residents may purchase an annual yard waste sticker at the Yard Waste Recycling Center on Pine St. or at the Public Works Department Office, located at 801 Washington St. on the . ALL BAGS must be EMPTIED. Once lower level of the building.
- · The fee for a Yard Waste sticker is \$10. Proof of residency and a license plate number of the participating vehicle is required each year for a permit.
- · No commercial vehicles are allowed.

Yard waste includes: Leaves, grass, dead flowers or plants, hedge clippings, wood chips, and tree trimmings or prunings 4 inches in diameter or less.

- No poison ivy, bamboo, oak, sumac, diseased, infected, invasive plants, roots, or stumps will be accepted.
- emptied, biodegradable bags may be placed at the designated area.

Canton Public Works Office 801 Washington St. Mon., Wed., Thur.: 7:30am-3:30pm

Tues.: 7:30am-5pm Fri.: 7:30am-1pm 781-821-5023

Working Together to Prevent Stormwater Pollution

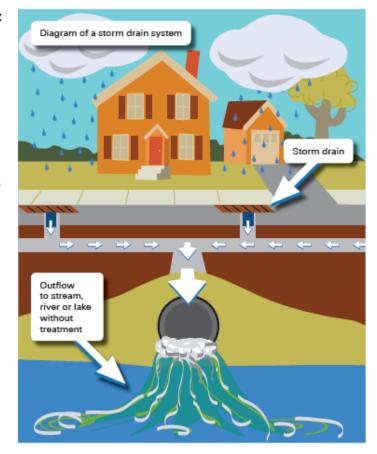
When rain hits pavement and concrete, it washes pollutants like pet waste, bacteria, oil, litter, fertilizer, and grass clippings into storm drains, which lead directly to local streams and ponds.

Water that flows into storm drains, or "stormwater," is NOT treated-and the pollutants affect drinking water supplies, recreation, and wildlife.

Canton is working towards cleaner waterways by participating in the Neponset Stormwater Partnership (NSP), which offers resources to help eliminate water pollution that comes from paved surfaces.

Call the NSP Stormwater Hotline 781-575-0354 x300 or the Canton DPW 781-821-5023 with stormwater questions, or to report dumping.

For more information on stormwater prevention, go to YourCleanWater.org



Appendix A-4: Example Materials for Public Education BMP 6

Contents: Facebook Ad, Facebook Post, Twitter Post, Flyer





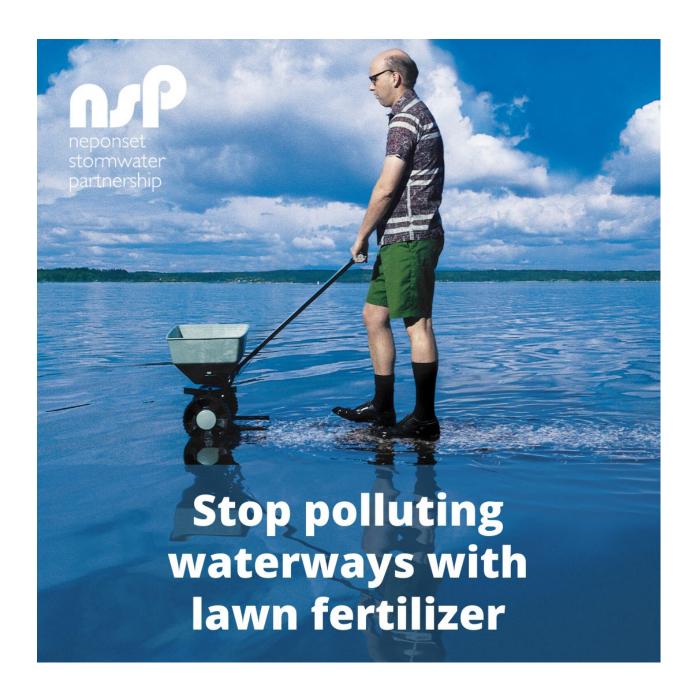
Neponset River @NepRWA · Apr 23, 2020

'P' or Phosphorus (on the Periodic Table of Elements) is very harmful to our waterways!

In MA it's such a big problem that it's illegal to add any phosphorus fertilizer to your lawn without a soil test that says it's needed.

For more lawn care tips visit yourcleanwater.org/lawn









Fertilizers—nitrogen and phosphorus—are good for plants but not for water quality. In ponds, streams and rivers, fertilizers are pollutants that harm fish and wildlife, can cause smelly algae blooms, and can even affect drinking water.

Be a Lawn Hero: Protect Your Local Waterways!

- Recycle grass clippings with a mulching mower. Clippings are a free, natural fertilizer—and all that most lawns need.
 - Sweep or blow grass clippings and fertilizers off of pavement, and away from storm drains and wetlands.

Learn More About Soil Testing

Of those who fertilize, a mere 10-20% get a soil test to understand their exact lawn needs. (CWP 1999).

Save hundreds on wasted fertilizer with an inexpensive soil test from the UMass Soil Test Lab. It gives you scientific fertilizer recommendations for your unique lawn.

For step-by-step instructions, visit **YourCleanWater.org/lawn**

Questions? Email stormwater@neponset.org or call 781-575-0354 x304.

• Never fertilize before a heavy rainstorm (light rain is ok).

• Don't apply fertilizer with phosphorous to an existing lawn. It's illegal in MA unless a soil test says you need it.

Choose fertilizers with 75-100%
 "slow-release" or "water
 insoluble" nitrogen.

Lawn fertilizers (and other pollutants such as pesticides, oil, gasoline, antifreeze and dog waste) mix with rain and irrigation runoff, wash into storm drains on the street, and empty into local waterways, with no filtration or treatment.



Appendix A-5: Example Materials for Public Education BMP 7

Follow up materials for teachers



2173 Washington Street, Canton, MA 02021 | 781-575-0354 | outreach@neponset.org

Thank you for participating in our Stormwater Education Program! Please feel free to share these follow up materials with your students -- and let us know if you have any questions or need more information.

Suggested Follow-up Projects

- 1. Science
 - a. Create a water filter
 - b. Create a watershed in a box
 - c. Build a rain garden
- 2. Writing
 - a. Have students write letters to the select board or mayor with suggestions on how to reduce stormwater in their community.
 - b. Write about stormwater. Use this handout as a prompt.
- 3. Art
- a. Create posters for your school that educate people on the prevention of stormwater pollution. (see examples of high school art projects)

<u>Videos</u>

- 1. Watersheds: https://youtu.be/2pwW2rlGla8
- 2. Stormwater Runoff: https://vimeo.com/51603152
- 3. A Tour of the Neponset River Watershed: https://youtu.be/6QvwTzB8KyQ

Additional Resources

1. Website - Project WET - Explore Watersheds! - an interactive way to learn about watersheds

Thanks again for participating in our Stormwater Education Program!

Nancy, Andres & Declan

Appendix A-6: Example Materials for Public Education BMP 8

Town wide mailing

(Outside)



(Inside)



Contaminated runoff pollutes the Neponset, **Charles, and Taunton** Rivers—and our oceans.

You can help solve the problem.

Reduce Fertilizer Use

Fertilizers (nitrogen and phosphorus) are good for plants but bad for water pollution.

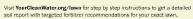
When fertilizer runoff gets into ponds, streams, and rivers, it causes toxic aquatic habitat and fish kills.

Take steps to protect waterways:

- Never fertilize before a rainstorm.
 Rain will carry the fertilizer away, wasting your money and polluting waterways.
- Leave grass clippings on the lawn with a mulching mower. Clippings are free natural fertilizer.
- Keep clippings, leaves and yard waste off of the pavement and away from storm drains and wetlands.
- Use slow release fertilizers instead of fast release fertilizers.
- Test your soil to determine the exact needs of your lawn and avoid fertilizing.
- Check to see if your business or lawn service complies with the MA turf fertilizer law.

Get Your Lawn Tested

Half of all lawn owners fertilize their lawn, but only 10–20% get regular soil tests; (Center for Watershed Protection, 1999). An inexpensive soil test can reduce unnecessary fertilizer use and save you money on lawn care fees.



Pick Up After Your Dog

When dog poop is left on the ground, rain and snow wash it into storm drains that empty directly into local streams, ponds, beaches, and drinking water sources.

Not only is dog waste gross to step in, it can also cause significant health issues, including Giardiasis, Salmonellosis, and Toxocariasis.

Every time you walk your dog, please:

- Carry a bag or scooper to pick up pet waste,
- · Dispose of the bag or waste in a
- Never toss anything down a storm drain!
- In many communities, dog owners can be fined for failing to scoop the poop.



Don't Litter

Trash that blows, washes, or is dumped into wetlands, waterways, and storm drains ends up in our rivers and flows to the ocean—and runoft is the main source of plastic pollution in our oceans.

Always remember...

- Storm drains are not trash cans!
 Never throw or pour anything in a storm drain. It's illegall
 Utter left on the street will wash into the nearest storm drain.
- Yard waste is trash, too! Never dump it in or near a storm drain, stream, or wetland.
- Keep dumpsters and trash cans closed and ensure container drainage ports are plugged at all times. Open dumpsters and cans fill with rain, which leaks out as highly polluted "dumpster juice" and attracts rats.

Do Your Part!

Your local waterways and groundwater are an important source of drinking water, recreation, and wildlife habitats.

Follow the steps in this brochure to reduce pollutants at your home or business and to protect local waterways.

Visit YourCleanWater.org to learn



Report Water Pollution



Appendix A-7: Example Materials for Public Education BMP 9

Contents: Rack card used as a bill stuffer (front and back), Post card mailed directly to residents (front and back), and Town of Sharon newsletter

Do Your Part, Be Septic Smart!

Maintain Your Septic System to Avoid Expensive Repairs!

Neglected septic systems are expensive to repair and pollute ponds, waterways and even drinking water.

Properly maintained systems will provide years of low cost sewage service.



Pump It Out Regularly!

A septic system doesn't make solid waste magically disappear. Solids are captured in the septic tank and must be regularly removed to keep the leachfield from clogging. A \$300 pump-out every-other year is a lot smarter than \$30,000 for a new leachfield!

- Have a septic hauler inspect and pump your tank every two or three years
- · Some towns mandate a two-year schedule

Remove the Garbage Disposal

Garbage disposal waste breaks down slower than other septic system waste and is a leading cause of septic system failures. Compost food scraps instead for a healthier system. If you must use a garbage disposal, have your tank pumped annually.

Give it a Healthy Diet

Harsh chemicals can kill the beneficial bacteria that make your system work. Chemicals also pass through your septic system and pollute waterways and drinking water.

Limit harsh cleaning chemicals and antibacterial products

- Spot-clean with bleach instead of full strength bleach products
- Clear clogged drains with a plunger, a snake or boiling water
- Dispose of paint, motor oil, unused medications at your town's Hazardous Waste Collection Day

Avoid Costly Clogs

Your system is designed to handle waste and toilet paper, not:

- · Cooking fats, oils, or grease
- Tampons or sanitary napkins
- Paper towels and "flushable" wipes (which are not actually flushable)
- Disposable diapers, cat litter, cigarette butts, etc.

Give Your System a Rest

Upgrade to water-efficient toilets, showerheads, faucet aerators, and clothes washers to reduce water use, give your septic system a rest—and lower your water bills.

Many towns offer rebates for water efficient appliances. Check your town website or neponset.org/rebates for more details.

Learn how to spot a failing septic system and more at YourCleanWater.org/septic or give us a call at 781-575-0354 x300

This message is from your city or town, in partnership with the nonprofit Neponset River Watershed Association. Learn more at neponset.org

> neponset stormwater





Groundwater flows to water bodies or drinking sources

Neponset River Watershed Association in partnership with your City or Town 2173 Washington Street Canton, MA 02021



Non-Profit Org. U.S. Postage PAID Boston, MA Permit No. 54080

Current Resident
<<7 Acorn Lane>>
<<Dedham>>, <<MA>> <<02026>>

Maintain Your Septic System to Avoid Expensive Repairs!

Neglected septic systems are expensive to repair and pollute ponds, waterways and even drinking water.

Properly maintained systems will provide years of low cost sewage service.



Pump It Out Regularly!

A septic system doesn't make solid waste magically disappear. Solids are captured in the septic tank and must be regularly removed to keep the leachfield from clogging. A \$300 pump-out every-other year is a lot smarter than \$30,000 for a new leachfield!

- Have a septic hauler inspect and pump your tank every two or three years
- Some towns mandate a two-year schedule

Remove the Garbage Disposal

Garbage disposal waste breaks down slower than other septic system waste and is a leading cause of septic system failures. Compost food scraps instead for a healthier system. If you must use a garbage disposal, have your tank pumped annually.

Give it a Healthy Diet

Harsh chemicals can kill the beneficial bacteria that make your system work. Chemicals also pass through your septic system and pollute waterways and drinking water.

- Limit harsh cleaning chemicals and antibacterial products
- Spot-clean with bleach instead of full strength bleach products
- Clear clogged drains with a plunger, a snake or boiling water
- Dispose of paint, motor oil, unused medications at your town's Hazardous Waste Collection Day

Avoid Costly Clogs

Your system is designed to handle waste and toilet paper, not:

- · Cooking fats, oils, or grease
- . Tampons or sanitary napkins
- Paper towels and "flushable" wipes (which are not actually flushable)

 Disposable diapers, cat litter, cigarette butts, etc.

Protect Your Investment

Know where your tank and leachfield are located. Don't park, build, dig, or plant trees on them. Get your system's design plans at your town's Board of Health.

Give Your System a Rest

Upgrade to water-efficient toilets, showerheads, faucet aerators, and clothes washers to reduce water use, give your septic system a rest—and lower water bills.

Many towns offer rebates for water efficient appliances.
Check your town website or neponset.org/rebates for more details.

Learn how to spot a failing septic system and more at YourCleanWater.org/septic or call us at 781-575-0354 x 300

This message is from your city or town, in partnership with the nonprofit Neponset River Watershed Association. More at neponset.org





SHARON'S WATER CONSERVATION NEWSLETTER

Spring 2021

Message from the Sharon Superintendent of Public Works

Although some Town functions have been curtailed due to Covid-19, essential operations related to drinking water supplies have continued with no service interruptions.

Sharon residents can be assured that their drinking water is safe and can be consumed and used as normal.

However, some construction projects originally planned for 2020 were delayed, which means the upcoming construction season will be busy for the Water Department.

Planned projects starting this spring include:

- Completion of the water main replacement project in the Heights
- Phase 2 of water main replacement in the South Pleasant Street neighborhood
- Completion of the MWRA emergency connection pump station and bypass main on Tiot and Edge Hill

- Replacement of the Massapoag Avenue Storage tank
- · Replacement of water meters starting this fall

About Water Rates

Determining water prices and rate structures is a multi-faceted task that must simultaneously support several underlying goals.

In the past, most of our revenue was collected on a volumetric basis (charge-per-unit-sold). However, most of our costs are fixed, i.e., the cost of many basic infrastructure needs are constant regardless of demand. And protecting the affordability of water for basic needs (e.g. drinking, cooking, and sanitation) remains a key social function of water utilities, even as more discretionary uses are targeted for conservation.

That said, our revenue projections continue to be strong, and because of the mandatory water restrictions that are implemented regardless of drought conditions, they are much less variable compared to towns without the restrictions that Sharon residents are accustomed to and accept as normal.

With that in mind, our plans for this upcoming construction season are full. We apologize for any inconveniences experienced by residents still working from home but trying to get back to some kind of post-COVID normal.

We will try to keep residents informed via postings on the Department web page of the progress of our projects as the year progresses.

As always, please give us a call at the Water Department if you have any questions about your drinking water or related construction projects.





Eric Hooper Sharon Superintendent of Public Works 781-784-1525

Septic System Maintenance is a Homeowner's Responsibility

Regular maintenance of a septic system is critical in order to avoid expensive repairs and to keep Sharon's groundwater, streams, and ponds healthy.

Systems Must be Inspected and Pumped

- Conventional septic systems need an inspection by a professional at least every 3 years.
- Alternative septic systems, like mound systems, should be inspected annually.
- Septic tanks should be pumped when recommended by an inspector (generally every 3-5 years).

The number of occupants in your home, the amount of water you use, and the size of your septic tank will determine exactly how often you need to pump.

If you have any questions, contact Kevin Davis, Health Agent for Engineering, 784-1525 x2317

If you don't know what type of septic system you have, check with the Sharon Board of Health.

How to Live with a Septic System

Limit Your Chemical Use

Beneficial bacteria are important for a healthy septic system. Anything that goes down the drain that kills bacteria can harm your septic system.

- Limit your use of harsh chemicals and antibacterial products such as bleach, ammonia and drain cleaners. Spot-clean with bleach instead of cleaning with full strength bleach products.
- Clear clogged drains with a plunger, boiling water, or a drain snake instead of chemicals.
- Never put paint, motor oil, pesticides or other household hazardous wastes down the drain. Bring them to the Town's Hazardous Waste Collection Day.

Treasure Your Toilet

There are some things that just shouldn't be flushed, whether you have a septic tank or sewer system.

Make sure that you never flush these items, which are often the cause of major clogs and costly repairs:

· Tampons and sanitary napkins

- Disposable diapers
- Wipes (there is no such thing as a flushable wipe)
- Paper towels
- Cat litter
- · Cigarette butts

Avoid Garbage Disposals

Septic systems rely on bacteria to break down solids. Garbage disposal waste breaks down a lot slower than other matter that goes down the drain and can overload and harm a septic tank.

For that reason, using garbage disposals with septic systems is discouraged. The better solution? Compost your food scraps.

Finally, never pour fats, oil or grease down a drain, whether you have a septic system or not. These products create clogs which can be very disruptive and expensive to repair.

Conserve Water

Water efficient toilets, showerheads, faucets, clothes washers and dishwashers limit the amount of water that enters a septic system and helps with overall performance.

How a Septic System Works

Septic systems are underground wastewater treatment structures that use a combination of

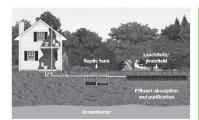
nature and proven technology to treat wastewater from household plumbing produced by bathrooms, kitchen drains, and laundry.

A typical septic system consists of a septic tank and a drainfield or leachfield.



The septic tank separates oils, grease, and solids from liquids (wastewater). Solids settle to the bottom of the tank where they are "digested" by bacteria. (This is the stuff that gets pumped out of the tank.)

Wastewater exits the tank into the leachfield, where it travels through perforated pipes and percolates through the soil. This process removes bacteria, viruses, and nutrients from the wastewater, before it discharges to groundwater.



Protect Your Leachfield

Never place anything heavy on top the leach-field, such as a patio, swimming pool, shed—or a parked car. Heavy items can compact the soil and crush the underground pipes.

Failure symptoms: Mind the signs!

A foul odor is not always the first sign of a malfunctioning septic system. Call a septic professional if you notice any of the following:

- Wastewater backing up into household drains.
- Bright green, spongy grass on the leachfield, especially during dry weather.
- Pooling water or muddy soil around your septic system or in your basement.
- A strong odor around the septic tank and leachfield.

Malfunctioning septic systems can discharge bacteria, viruses, and chemicals. When these pollutants are released, they eventually enter streams, rivers, lakes, and more—harming local ecosystems by killing native plants, fish, and shellfish.

Outdoor Water Use Restrictions May 1—Oct. 1, 2021

Lawn sprinklers, either underground or hose fed, must adhere to the following schedule:

Odd numbered homes:

Mon. & Thurs.—6pm to 8pm only

Even numbered homes:

Tues. & Fri.—6pm to 8pm only

Exemptions to this policy may be granted for newly installed lawns for up to 14 days.

Residents may use one hand held hose, fitted with a spray nozzle, without restriction.

Violators will be cited and subject to a surcharge on their next water bill.

Violations will carry forward for 3 years.

- · 1st offense Warning
- 2nd offense \$50.00
- 3rd offense \$100.00
- 4th offense/subsequent offenses \$300.00

To report water violations or request an exemption call the Sharon Water Dept. 781-784-1525 x2315

Plan a Water Smart Landscape this Spring

- Reduce lawn areas with trees, shrubs, perennials, ground cover, pervious patios.
- · Use only native, drought tolerant plants.
- Place organic mulch around trees and plants to reduce evaporation.
- Don't over water your lawn. Just one inch of water per week from rain or irrigation is enough to keep a lawn green.



Is your water use under 55 Gallons Per Capita Daily (GPCD)?

NO. OF HOUSEHOLD OCCUPANTS

	1	2	3	4	5	6	7	8
2,000	22	11	7	5	4	4	3	3
3,000	33	16	11	8	7	5	5	4
4,000	44	22	15	11	9	7	6	5
5,000	55	27	18	14	11	9	8	7
6,000	66	33	22	16	13	11	9	8
7,000	77	38	26	19	15	13	11	10
8,000	88	44	29	22	18	15	13	11
9,000	99	49	33	25	20	16	14	12
10,000	110	55	37	27	22	18	16	14
11,000	121	60	40	30	24	20	17	1:
12,000	132	66	44	33	26	22	18	10
13,000	142	71	47	36	28	24	20	18
14,000	152	77	51	38	31	26	22	19
15,000	164	82	55	41	33	27	23	2
16,000	175	88	58	44	35	29	25	2
17,000	186	93	62	47	37	31	27	23
18,000	197	99	66	49	39	33	28	2:
19,000	208	104	69	52	42	35	30	26
20,000	219	110	73	55	44	37	31	2
21,000	230	115	77	58	46	38	33	25
22,000	241	121	80	60	48	40	34	30
23,000	252	126	84	63	50	42	36	32
24,000	263	132	88	66	53	44	38	33
25,000	274	137	91	68	55	46	39	3-
26,000	285	142	95	71	57	47	41	34
27,000	296	148	99	74	59	49	42	31
28,000	307	153	102	77	61	51	44	38
29,000	318	159	106	79	64	53	45	40
30,000	329	164	110	82	66	55	47	41
31,000	340	170	113	85	68	57	49	42
32,000	351	175	117	88	70	58	50	44
33,000	362	181	121	90	72	60	52	4:
34,000	373	186	124	93	75	62	53	41
35,000	384	192	128	96	77	64	55	4
36,000	395	197	132	99	79	66	56	49
38,000	418	209	139	104	84	70	60	52
40,000	438	219	146	110	88	73	63	55
42,000	462	231	154	115	92	77	66	58
44,000	484	242	161	121	97	81	69	60
46,000	505	253	168	126	101	84	72	63
48,000	527	264	176	132	105	88	75	66
50,000	548	274	183	137	110	91	78	68

Compare your water bill to this chart to see how your usage compares to the Sharon average of 55 gallons per person per day.

Residential Rebate Program

Sharon residents may receive **up to \$200** for a High Efficiency Toilet of 1.28gpf or less and **\$200** for a Clothes Washer with an EnergyStar Water Factor of 4.0 or less.

FREE showerheads, faucet aerators and rain sensors are also available at the Water Dept.

For updated terms and conditions, please visit townofsharon.net/water-division

Sharon Water Department 217R S. Main St., Sharon, MA 02067 781-784-1525 x2315

Hours: Mon-Wed. 8am-5pm; Thurs. 8am-8pm; Fri. 8am-12:30pm



Appendix A-8: Example Materials for Public Education BMP 11

Contents: Photos of Installed Storm Drain Markers

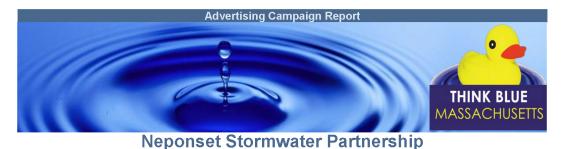






Appendix A-9: Example Materials for Public Education BMP 12

Contents: Advertising report from the MA Statewide Municipal Stormwater Coalition detailing performance in NSP communities



Fiscal Year 2021 Educational Advertisement Campaign Report

On behalf of the members of the Neponset Stormwater Partnership, Think Blue Massachusetts ran an educational advertising campaign from May 17th to June 4th, 2021. The "Fowl Water" advertisement helps viewers visualize stormwater pollution from motor oil, pet waste, and trash become stormwater pollution.

We selected Facebook and Instagram sponsored video and YouTube pre-roll advertisements because these channels offer superior "bang for the buck" to cable and broadcast television. They provide granular reporting that helps demonstrate what was accomplished.

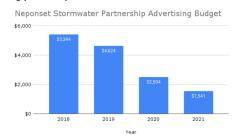
This effort helps coalition members meet their requirements to "document in each annual report the messages for each audience; the method of distribution; the measures/methods used to assess the effectiveness of the messages, and the method/measures used to assess the overall effectiveness of the education program."



View the ad at http://bit.ly/tbm-fowl-water

Advertising Budget

Our advertising budget for the campaign worked out to just less than 1 cent per resident. Campaign budgets have been falling year over year:



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%).

Full survey results are available at www.thinkbluemassachusetts.org



FY 2021 Campaign Performance

Facebook and Google provided us with aggregate information for the region served by the stormwater coalition. We have allocated the impressions among each city on a proportional basis, using U.S. Census estimates of the population of each municipality.

Your municipality can use these numbers as your measurable goal for MCM1 in your Year 3 annual report.

Town	Facebook/Instagram Impressions	YouTube Ad Impressions	Spanish Language Impressions	Total
Canton	8,327	20,766	3,764	32,857
Dedham	9,796	24,429	4,427	38,652
Foxborough	6,447	16,078	2,914	25,439
Medfield	4,961	12,371	2,242	19,574
Milton	10,429	26,007	4,713	41,149
Quincy	35,981	98,774	16,509	151,264
Randolph	12,234	33,584	5,613	51,431
Sharon	6,802	16,963	3,074	26,839
Stoughton	11,018	27,476	4,980	43,474
Norwood	11,276	28,119	5,096	44,491
Westwood	6,201	15,464	2,803	24,468
	123,472	320,031	56,135	499,638



Appendix A-10: Example Materials for Public Education BMP 14

Contents: Press Releases for Monitoring Data



For immediate Release 8/13/2021

Contact:
Jennifer Rogers, River Restoration Director
Neponset River Watershed Association
Canton, MA 02021
781-575-0354 x 302
rogers@neponset.org

Study Finds Mother Brook Clean for First Time in a Decade

Mother Brook met state standards for bacterial pollution for the first time in a decade according to water testing results published by the Neponset River Watershed Association. The so called "fishable-swimmable" water quality standards were met following the discovery and elimination of illegal discharges at the former Dedham Transfer Station which was privately operated.

The results are part of an ongoing, volunteer-based water testing program conducted by the Association in partnership with the Dedham Engineering Department. In 2018, Association staff who were investigating the source of high *E. coli* bacteria levels in the brook discovered that the private operators of the former transfer station were washing runoff from solid waste brought to the site into a storm drain that led directly to the Brook.

The Dedham Engineering and Public Works Departments conducted follow up sampling to confirm the source of the problem, and eventually the private transfer station operation which was located on town owned land was shut down, eliminating the discharges.

"This is a big victory for Mother Brook," said Ian Cooke, the Executive Director for the Association. Cooke added that "this was a long-standing hotspot for *E. coli* pollution, which can make people and pets sick if they come in contact with the water, and this data shows that cleanup efforts have been successful."

Appendix A-11: Example Materials for Public Education BMP 15

Contents: Stormwater Knowledge Survey (4 pages), Survey Results (4 pages)



Take our Stormwater Quiz! How much do you really know about the effects of stormwater runoff in our communities? The Neponset Stormwater Partnership would like to know!

Over the past few years, we've mailed out information about stormwater, posted on social media, and visited with school kids throughout the Neponset Watershed.

We suspect that most 5th graders can answer the questions on our stormwater quiz. Take the quiz and see how you do: https://forms.gle/1cLxvcECgmXN2wao8





Neponset River @NepRWA - Jan 11

Neponset Neighbors - take the quiz to let us know how we can protect & clean up our waterways!

PLS RT @UMassBoston @QPConservancy @DiscoverQuincy @NewsaroundDot @mydorchester @MattapanFoodFit @HydeParkMS @MiltonTimes @NorwoodTranscri @TheWalpoleTimes @mattapanviv @marialyonsdot



Neponset River @NepRWA · Jan 11

Take our Stormwater Quiz! How much do you know about the effects of stormwater runoff in our communities?

Take the quiz & see how you do! ow.ly/kccL50D2lcR

PLS RT @mass_rivers @GreaterBostonTU @MAStormH2O @NepGreenway @DotNews @townofmiltonma @MiltonTimes @CantonCitizen



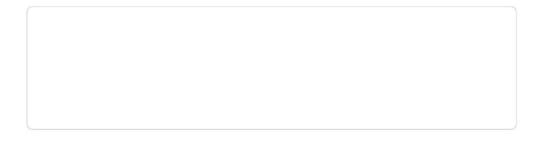
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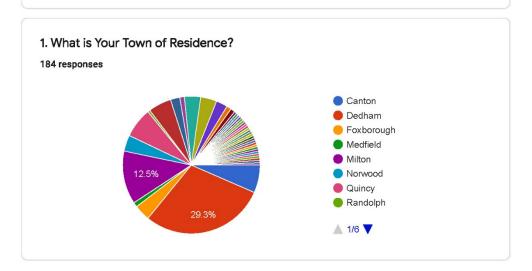
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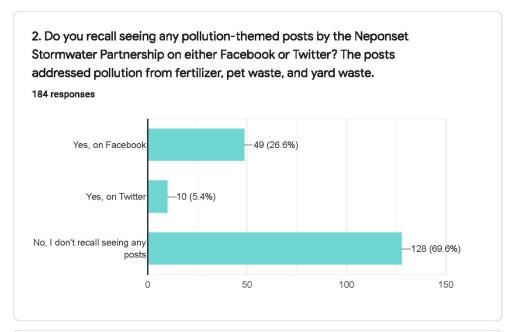
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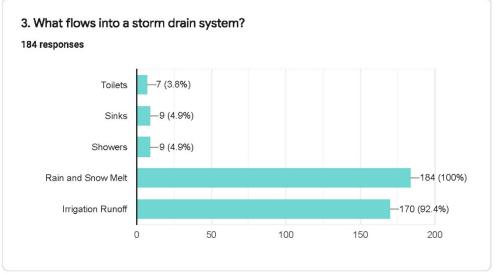


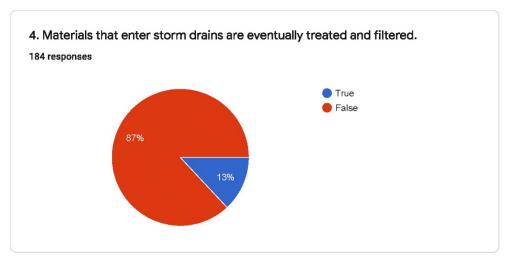
Stormwater Knowledge Survey

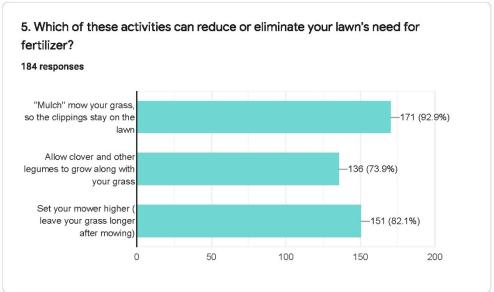
184 responses

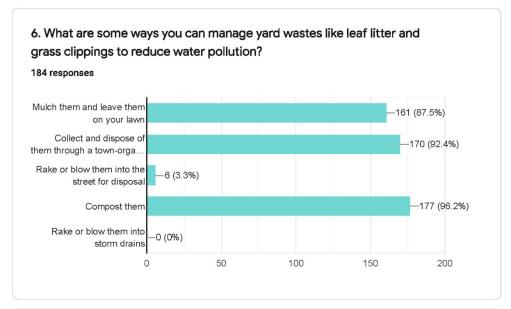


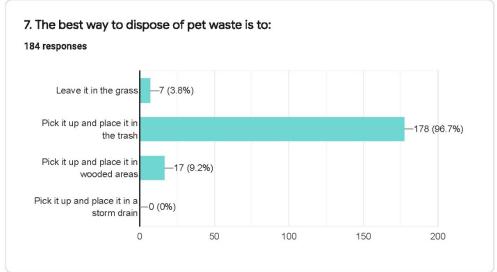


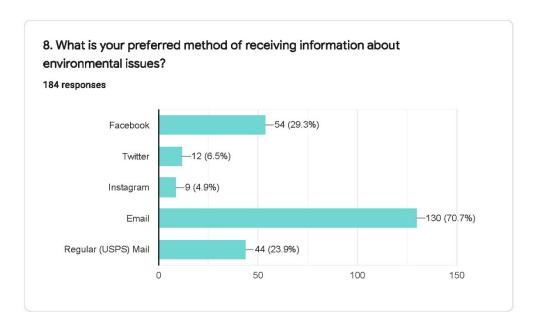












9. Are you aware of any stormwater issues in your neighborhood that could be addressed with direct outreach? Please be specific about location and issue. We will work with the corresponding Town on any response.

60 responses

No

no

n/a

I fear there are but I am not aware of any.

At the bottom of Dale street in Dedham there's ponding when it rains

Lots of garbage from Norfolk court house

Not aware

Milton- Recent storm water town tax was originally approved by voters as a federal requirement for town. More recent social media discussions suggest this information is not factual. Please address any change in the status of the federal program to Milton residents. Thank you.

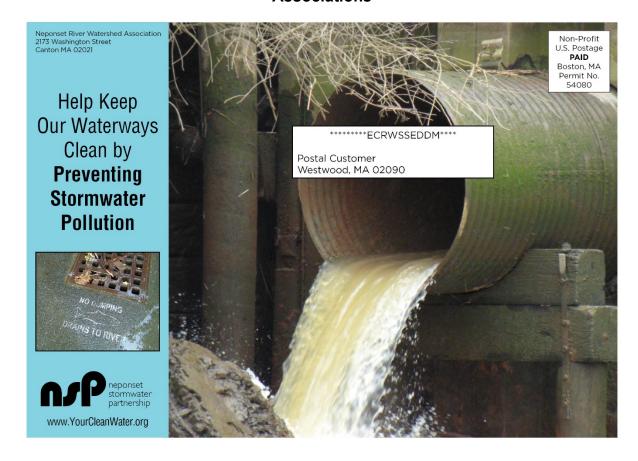
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Google Forms

6 of 9

Appendix A-12: Example Materials for Public Education BMP 17

Contents: Stormwater Pollution Prevention Outreach Provided to Business Associations



Stormwater pollution is the bacteria, chemicals, metals, nutrients and other contaminants that wash over land and pavement, then down storm drains and into our waterways—affecting the cleanliness and health of the water that we rely on for drinking and recreation.



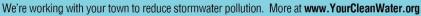
SMALL BUSINESS OWNERS

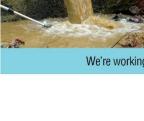
Any material that is dumped or washed down a storm drain can lead to the pollution of local streams and ponds.

Take simple steps to reduce stormwater pollution:

- Keep dumpster areas swept clean of litter, debris and sediments—and keep all lids and drain plugs in place. Schedule regular pick-ups.
- Sweep parking lot, walkways and patios on a regular basis. Do not use a hose to wash down pavement.
- Keep storm drains clear of debris and landscaping materials.
- Avoid excessive salting in the winter and sweep up spills.
- Pour washwater down a sanitary sewer (sink or toilet), never down a storm drain.
- If you must use chemicals, choose organic or non-toxic products to reduce the risk of damage from spills.
- Water lawns and gardens only. Don't allow irrigation to spray onto pavement.







(Outside)

An important message from your DPW.

Stamp goes here Neponset Stormwater Partnership 2173 Washington St. Canton, MA 02021



The Department of Public Works appreciates your cooperation in keeping our local waterways clean.

Learn how we are working to improve water quality in our town and what you can do to help. www.nepwater.org

The Neponset Stormwater Partnership aims to reduce the cost and increase the effectiveness of municipal stormwater management programs through regional cooperation and resource sharing.

Partners include the towns of Canton, Dedham, Foxborough, Medfield, Milton, Quincy, Sharon, Stoughton, and Westwood, along with the Metropolitan Area Planning Council (MAPC), and the Neponset River Watershed Association.

For more information, contact NepRWA Executive Director, lan Cooke cooke @neponset.org (781) 575-0354 x305



(Inside)

Business Owners: Take these simple steps to reduce stormwater runoff and help keep waterways clean in your community.

Dumpsters	 Keep dumpster areas free from litter, debris, and sediments. Schedule regular waste pick-ups. Keep dumpsters and waste bins covered. Anything in an uncovered dumpster or trash bin is vulnerable to the weather, and can wash into nearby storm drains during wet weather. Never wash dumpsters with a hose. If cleaning is needed, contact the leasing company. Check dumpsters regularly for leaks and replace if necessary. 			
Cleaning Outdoor Areas	 Dry sweep paved areas on a regular basis, including parking lots, patios, dumpster areas. Do NOT use a hose to wash down pavement. Dispose of debris in waste containers only. Do not sweep trash, yardwaste, sand, salt or ice melt chemicals into the gutter or stormdrain. Avoid over-salting in the winter, and sweep up any excess or spills. 			
General Cleaning	 Don't pour wash water or chemicals down a storm drain. Dispose of wash water down a sanitary sewer. (sink or toilet). Be sure to store all chemicals in appropriate containers that don't leak. Any excess chemical spills, especially outdoors, should be swept up immediately. Use cleaning products that are non-toxic to vegetation and wildlife. 			
Landscaping	 Limit the use of lawn chemicals and always follow directions. Test your grass before adding fertilizer. Why pay for services and materials that you may not need? Have your soil tested at the UMass Extension: http://extension.umass.edu/landscape/ Use organic fertilizer whenever possible. Organic or slow-release nitrogen fertilizer causes less harm to water. Also make sure to use fertilizer with no or low phosphorus—phosphorus causes algae growth. 			
Irrigation	 Make sure that sprinkler heads are pointed at the lawn and not the pavement - adjust and fix heads as necessary. Upgrade to a moisture sensor to ensure irrigating only when needed, and avoid using old-fashioned irrigation timers. Avoid irrigating when it's windy to avoid water loss, evaporation, and runoff. Observe town water restrictions. 			
Hard- scapes	 Keep all asphalt and concrete to a minimum and whenever possible, use bricks, pavers, or stone to create pathways and patios. Use sand (not concrete) between bricks, to allow water to percolate through the seams, rather than runoff into stormdrains. 			
Chemical Storage	 All chemical cleaners, road salt, fertilizers, pesticides, and gas and oil for machinery, should be stored in appropriate containers that don't leak. Any excess chemical spills should be swept up immediately. 			
Stormwater runoff is the #1 cause of water pollution in the Neponset River Watershed. nepons stormwater runoff is the #1 cause of water pollution in the Neponset River Watershed.				

Stormwater runoff is the #1 cause of water pollution in the Neponset River Watershed. Do your part to help protect our water resources. Learn more at **YourCleanWater.org**

Appendix A-13: Example Materials for Public Education BMP 18

Contents: Stormwater Pollution Prevention Outreach Provided to Conservation Commissions

Stormwater Runoff from Construction Can Be a Big Problem

There are many construction activities that contribute to soil erosion and water pollution.

Rain that falls on construction sites with disturbed soils can wash off into wetlands, streams, or onto paved surfaces that drain to waterways.

Protect Your Business, Your Clients and Your Reputation

In order to prevent serious environmental issues and the consequences that follow, it's essential to install and maintain construction site stormwater Best Management Practices (BMPs) properly.

The installation of properly situated stormwater BMPs means that you will avoid fines and work stoppages, protect the waterways your community depends on—and earn a well-deserved reputation.



Be a Responsible Contractor

Review the Best Management Practice tips inside this brochure and be sure to ask your local Conservation Commission or engineering department for advice on local rules and technical assistance.

Get Your Permit

All construction sites in MA that disturb an acre or more of earth must apply for a "Construction General Permit" from the US EPA. Local rules vary from community to community, but many communities in our area require a town stormwater permit when you disturb as little as 2,500 square feet of earth.

Get information about the EPA Construction General Permit and application process at YourCleanWater.org

Don't Get Sued!

Cities and towns actively monitor for violations and can take enforcement action, shutdown projects, and levy fines.

In many cases, third party lawyers and environmental groups can also sue contractors who don't comply with construction stormwater permits. When they do, contractors pay the other side's legal costs, plus penalties, plus the cost to correct problems.



Content provided by the Neponset River Watershed Association on behalf of the Neponset Stormwater Partnership. Learn more at neponset.org

Construction

Stormwater Pollution Prevention Guide

Maintain your BMPs!



of water pollution. Be sure to follow best practices and local bylaws to reduce your impact on streams and ponds.

Stormwater and Construction Industry BMPs

Protect Natural Features



- Minimize clearing.
 Minimize the amount of exposed soil.
 Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
 Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

Silt Fencina



- Install silt fence properly! Make sure the bottom 6" of fabric is buried in the ground, not just tucked under the haybale.
 Inspect and maintain silf fences after each rainstorm.
 Securely attach the material to the stakes.
 Don't place silf fences in the middle of a waterway or use them as a check dam.
 Make sure stormwater is not flowing around the silf fence.

Dirt Stockpiles



Cover or hydroseed all dirt stockpiles immediately.

Construction Entrances



- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
 Properly size entrance BMPs for all anticipated vehicles.
 Make sure that the construction entrance does not become

Site Stabilization



egetate, mulch, hydroseed, install erosion control blan-ets, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Vegetative Buffers



- Protect or install vegetative buffers along waterbodies to slow
- and filter stormwater runoff.

 Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Construction Phasing



- · Sequence construction activities so that the soil is not
- exposed for long periods of time. Schedule or limit grading to small areas. Install key sediment control practices before site grading
- Install kely studies to be begins.
 Schedule site stabilization, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Slopes



- Rough grade or terrace slopes. Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

Storm Drain Inlet Protection



- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
 Make sure the rock size is appropriate (usually 1 to 2)

- inches in diameter).

 If you use inlet filters or silt sacks, maintain them regularly.