

Year 4 Annual Report

Massachusetts Small MS4 General Permit

Reporting Period: July 1, 2021-June 30, 2022

****Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form****

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Town of Medfield

EPA NPDES Permit Number: MAR041131

Primary MS4 Program Manager Contact Information

Name: Maurice Goulet

Title: Public Works Superintendent

Street Address Line 1: 55 North Meadows Road

Street Address Line 2: NA

City: Medfield

State: MA

Zip Code: 02052

Email: mgoulet@medfield.net

Phone Number: (508) 906-3002

Stormwater Management Program (SWMP) Information

SWMP Location (web address): <https://www.town.medfield.net/1793/Storm-Water-Information>

Date SWMP was Last Updated: June 30, 2022

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

Part II: Self-Assessment

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

Impairment(s)

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

TMDL(s)

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

Clear Impairments and TMDLs

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

Year 4 Requirements

- Developed a report assessing current street design and parking lot guidelines and other local
- ☒ requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

- ☒ No updates were recommended
☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

Neponset Stormwater Partnership (NSP) Regulatory Review

- Developed a report assessing local regulations to determine the feasibility of making green
- ☒ infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

- ☒ No updates were recommended
☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

NSP Regulatory Review

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

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

The Town of Medfield has been working with the NSP on a 604B Grant to identify ten (10) permittee-owned properties that could be modified or retrofitted with BMPs. Three (3) sites have been conceptually designed.

Annual Requirements

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

<https://www.town.medfield.net/1793/Storm-Water-Information>
- ☒ Updated system map due in year 2 as necessary
- ☒ Provided training to employees involved in IDDE program within the reporting period
- ☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- ☒ All curbed roadways were swept at least once within the reporting period
- ☒ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- ☒ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- ☒ Updated inventory of all permittee owned facilities as necessary
- ☒ O&M programs for all permittee owned facilities have been completed and updated as necessary
- ☒ Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- ☒ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- ☒ Inspected all permittee owned treatment structures (excluding catch basins)

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

In PY3, the Town of Medfield worked with the NSP to develop a Nutrient Source Identification Report dated June 14, 2021. The report incorporated the dry weather analytical testing results from PY1, PY2 and PY3, and remains unchanged from the PY4 testing results.

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)Annual Requirements*Public Education and Outreach**

- ☒ Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time

- ☒ Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
- * Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

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

The Town of Medfield has been working with the NSP on Public Education and Outreach.

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

Annual Requirements

*Public Education and Outreach**

- ☒ Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- ☒ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter
- * Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Nitrogen Source Identification Report

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

<https://www.town.medfield.net/1793/Storm-Water-Information>

Potential structural BMPs

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

- ☒ estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.
- ☐ The BMP information is attached to the email submission
 - ☒ The BMP information can be found at the following website:

<https://www.town.medfield.net/1793/Storm-Water-Information>

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

In PY3, the Town of Medfield worked with the NSP to develop a Nutrient Source Identification Report (NSIR) dated June 14, 2021. The report included investigation of nitrogen town-wide, including the Neponset River (NSIR, Table 12). Under a 604B Grant, the NRWA has also assisted Town with its inventory of public properties and has identified several sites for BMPs.

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

Annual Requirements

*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Phosphorus Source Identification Report

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

<https://www.town.medfield.net/1793/Storm-Water-Information>

Potential structural BMPs

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

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

<https://www.town.medfield.net/1793/Storm-Water-Information>

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

In PY3, the Town of Medfield worked with the NSP to develop a Nutrient Source Identification Report (NSIR) dated June 14, 2021. The report included investigation of phosphorous town-wide, including the Charles River watershed (NSIR, Tables 10 and 11).

All public facilities have been inventoried in the Town's GIS and provided to the NSP as part of the nutrient removal work. The Town of Medfield has also been working with the NSP on a 604B Grant to identify ten (10) town-owned properties that could be modified or retrofitted with BMPs. In PY4, three (3) sites were conceptually designed: South Street/Wilson Street; West Street/Bridge Street and the Wheelock School. The seven other sites include the Medfield High School, Medfield Middle School, Metacomet Park, Medfield Highway Garage, North Street/Harding Street, Medfield Wastewater Treatment Facility and the Memorial School.

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
 - ☐ The street sweeping schedule is attached to the email submission
 - ☒ The street sweeping schedule can be found at the following website:

<https://www.town.medfield.net/1793/Storm-Water-Information>

- ☒ Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

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

The Town of Medfield uses PeopleGIS to track catch basin sumps that are more than 50% full. The Town developed a Catch Basin Optimization Schedule, dated September 26, 2019.

Charles River Watershed Phosphorus TMDL

- ☒ Defined the scope of the Phosphorus Control Plan (PCP). *Please select one of the following:*
 - ☐ The PCP scope is the entire area within our jurisdiction within the Charles River Watershed
 - ☒ The PCP scope is the urbanized area portion of our jurisdiction within the Charles River Watershed

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

The Town has worked with the CRWA to review our PY3 Funding Source Assessment.

In accordance with the PHOSPHORUS CONTROL PLAN (PCP), DRAFT TEMPLATE, CHARLES RIVER WATERSHED ASSOCIATION, by Kleinfelder Consulting, in PY5 Medfield has the option to implement its PCP either within the entirety of the community that falls within the Charles River watershed, or just the MS4-regulated area of our community within the Charles River watershed.

- ☐ Estimated the current impervious area of permittee owned property, determined the Land Use information for permittee owned property, calculated the phosphorus removal in pounds per year for any structural BMP owned by the permittee in accordance with Appendix F Attachment 3, and recorded the date of last maintenance activity for all structural BMPs for which phosphorus removal is calculated

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

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

Part III: Receiving Waters/Impaired Waters/TMDL

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

☒ Yes

☐ No

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

Sections 1.2 and 5.3 of the Town's SWMP (June 24, 2019) indicated that there were 426 outfalls in Medfield. Based on the Permit Year 1 (PY1), Permit Year 2 (PY2) and Permit Year 3 (PY3) investigations, the Town has determined that 28 more outfalls are classified as "culverts" and 4 of these have been abandoned. Therefore, for the revised total of 494 locations, there are 361 outfalls (17 private) and 133 "culverts" (21 of which are private). The local GIS and the SWMP were updated accordingly, including the number of outfalls by receiving water, and is posted to the local website (<https://www.town.medfield.net/1793/Storm-Water-Information>). The data remained unchanged in PY4.

A review of the updated Section 303d waterways indicates that there have been no changes to the relative impairments or TMDLs.

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed **during this reporting period:**

*Below, report on the educational messages completed **during this reporting period**. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.*

BMP: Maintain Educational Website

Message Description and Distribution Method:

The Town assisted the NSP with maintaining a comprehensive educational website to serve the NSP service area as a primary resource for key information for all four target audiences.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Achieve at least unique 500 site visits every year. In PY4, there were 4,359 site visitors and 8,523 unique page views. The Site will continue in PY5.

Message Date(s):

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

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

If yes, describe why the change was made:

BMP: 2: Operate Stormwater Hotline

Message Description and Distribution Method:

The Town assisted the NSP in operating 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. In PY4, a call was made after a rainstorm left a puddle with a blue/green sheen at a Medfield apartment complex. The Medfield Conservation Commission was notified and investigated.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Provide immediate answers to inquiries generated by regionalized outreach activities. Five contacts were made to the stormwater hotline this year.

Message Date(s): Ongoing since May 1, 2018

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

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

If yes, describe why the change was made:

BMP: 3: Distribute Pet Waste Information With Dog Licenses

Message Description and Distribution Method:

Educational “rack cards” regarding proper pet waste disposal were printed and provided to the Medfield Town Clerks’ office to include with dog license renewal requests, either in person or via mail. Since online renewal is available, online graphics that link to the pet waste page of the NSP website were provided. Posters, which were also used last year, were determined to be ineffective since many of the dog license renewals are completed by mail.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

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.

Message Date(s): Materials were distributed to the Medfield Town Clerk in December 2021 and disseminated to dog owners as licenses were issued.

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

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

If yes, describe why the change was made:

BMP: 4: Summer Pet Waste Campaign

Message Description and Distribution Method:

Worked with the NSP in preparing a social media campaign directed at the proper disposal of pet waste consisting of social media posts, flyers/posters, and informational postcards. The social media materials were posted to the Neponset River Watershed Association’s Facebook and Twitter Accounts and NSP 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 updated and electronic copies of the campaign flyer/poster and informational

postcard was provided for towns to print and use during public events or post on their websites. The social media post was shared on the Town of Medfield's Twitter account (5,381 contacts) and posters were printed and placed at Town Hall and the Town library.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Participation by 100% of NSP communities and to reach at least 5,381 Medfield residents through social media. The social media posts were shared on the Town's Facebook and Twitter accounts.

Message Date(s): July 14 and July 26, 2021

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

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

If yes, describe why the change was made:

BMP: 5: Fall Leaf Waste Campaign

Message Description and Distribution Method:

Worked with the NSP to prepare a social media campaign directed at the proper disposal of leaf waste consisting of two social media posts each to Facebook and Twitter and an informational flyer/poster. 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. An electronic copy of the leaf campaign flyer/poster was provided for towns to use during public events or to post on their websites. The information was posted on the Town's website as a "Public Works News Flash," which linked to information from the NSP website.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The social media message was shared on the Town's Facebook and Twitter page. The Facebook/Instagram social media campaign reached 4,822 Medfield residents.

Message Date(s): October 17, 2021 and October 29, 2021

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

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

If yes, describe why the change was made:

BMP: 6: Spring Fertilizer and Grass Clipping Campaign

Message Description and Distribution Method:

Worked with the NSP on 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 posted.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

The social media post was shared on the Town’s Facebook and Twitter account. The Facebook/Instagram social media campaign reached 9,600 Medfield residents.

Message Date(s): March 28 – April 13, 2022

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

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

If yes, describe why the change was made:

BMP: 7: School Outreach Program

Message Description and Distribution Method:

Due to COVID-19, most of the fall 2021 lessons took place on-line over Zoom or Google Meet. The NSP prepared on-line PowerPoint-based program presentation that covered drinking water and stormwater infrastructure, local water resources, wastewater systems, water conservation, and stormwater pollution prevention techniques. As in previous years, the curriculum aligned with the MA 5th grade science curriculum standards. By March 2022, the NSP was presenting the program in-person.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reach 100% of addresses in participating towns, including those who do not use social media or follow town government communication channels. In Medfield, the PY4 program was delivered at the individual classroom level over the course of two 45-60-minute visits by a watershed educator. The educator also provided teachers with follow up materials to share with students and their families.

Message Date(s): September 2021 through June 2022 (school year)

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

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

If yes, describe why the change was made:

BMP: 8: Outreach to Septic System Owners

Message Description and Distribution Method:

Worked with the NSP on 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 Medfield septic systems are relatively common, so a rack card was designed and sent to all addresses in the town as a bill stuffer. All outreach pieces (the rack card, the postcard, and the newsletter) contained similar information regarding the care and maintenance of septic systems.

Targeted Audience: Septic System Owners

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reach 100% of known septic systems in member communities.

Message Date(s): September 20 - 24, 2021

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

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

If yes, describe why the change was made:

BMP: 9: “Problem Area” Outreach

Message Description and Distribution Method:

Working with the NSP, 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.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Respond to identified “problem areas” with methods designed to correct specific pollution-generating

behaviors. No "problem areas" were identified in Medfield in PY4.

Message Date(s): Spring 2022

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

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

If yes, describe why the change was made:

BMP: 10: Storm Drain Marking

Message Description and Distribution Method:

A program through which volunteers are able to mark storm drains with educational messages was launched this year with the NSP, 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 10). Records of which catch basins have been marked are maintained by the NSP.

Targeted Audience: Residents, Businesses, and Institutions

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Continually distribute drain marking kits to interested volunteers.

Message Date(s): Summer 2021 and Spring-Summer 2022

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

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

If yes, describe why the change was made:

BMP: 11: Think Blue "Fowl Weather" Video

Message Description and Distribution Method:

The Town and NSP 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.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

In PY4, a total of 428,822 people in the NSP service area were reached via 160,943 English Facebook/Instagram “impressions” and 21,891 Spanish Facebook/Instagram “impressions.” Via YouTube, there were 217,863 English impressions and 28,125 Spanish impressions.

A survey found that 15% of respondents recalled seeing the campaign, which is slightly down from 2021 results, but within the survey margin of error. Respondents who saw the ad were more likely to recognize that stormwater directly enters local waterways (56%) than those who did not recall the ad (49%). Those who recall the ad were more likely to describe stormwater has having “major” or “some” impact on waterways (49%) than those who do not recall the ad (31%).

Additionally, when asked if stormwater affects people, those who recognized the ad reported “water pollution affects me and my family” (62%) than those who did not recall the ad (47%). Last, those who reported seeing the ad reported “water pollution affects others in my community” (59%) than those who did not recall the ad (54%).

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

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

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

If yes, describe why the change was made:

BMP: 12: Educational Outreach Evaluation

Message Description and Distribution Method:

The NSP conducted a survey that was included in the general mailer to over 103K residents 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 also advertised via social media channels and various municipal email listservs. The intent is to repeat this survey regularly and monitor results over time.

Targeted Audience: Residents, Businesses, Institutions

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Produce results to compare future surveys against. In the results, determine the number of respondents who recall seeing previous outreach materials, and quantify the correct responses to basic stormwater pollution prevention questions. The survey had 289 respondents. Of those, 86 recalled seeing NSP outreach materials on

social media. Additionally, five questions were asked with a score of 10 points each (50 points in total). Out of 289 respondents, 113 people answered all five correctly, 86 people answered four correctly, 30 people answered three correctly, 20 people answered two questions correctly, 10 people answered one question correctly, and the remaining 30 either answered incorrectly or didn't finish the survey.

Message Date(s): Summer 2022

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

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

If yes, describe why the change was made:

BMP: 13: Stormwater Education Presentations

Message Description and Distribution Method:

The NSP 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.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Present pertinent stormwater-related information to gathered groups as the opportunity arises.

Message Date(s): Throughout the Permit Year

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

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

If yes, describe why the change was made:

BMP: 14: Construction Outreach

Message Description and Distribution Method:

The NSP prepared and provided the construction-focused stormwater pollution prevention outreach to the Medfield Building Department to distribute with permits involving earth work related activities. In addition, the NSP mailed 160 brochures to individual companies who have participated in land disturbing activities within the watershed. Last, developed an e-brochure for towns to display on their websites for those applying for permits online.

Targeted Audience: Residents and Businesses

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Provide construction-focused stormwater pollution prevention outreach to all companies who had engaged in land-disturbing activities in participating towns over the last year.

Message Date(s): Outreach distributed Spring 2021/2022

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

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

If yes, describe why the change was made:

BMP: 15: Regional Education Mailing

Message Description and Distribution Method:

An educational mailing was prepared by the NSP 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 Medfield totaling about 14,000 mailing addresses.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reach 100% of addresses in participating towns, including those who do not use social media or follow town government communication channels.

Message Date(s): June 28, 2022

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

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

If yes, describe why the change was made:

BMP:16: Regional Water Quality Forum

Message Description and Distribution Method:

The NSP organized a presentation that covered the results from the 2021 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. Additionally, a recording of the presentation was posted on YouTube.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Deliver detailed site-specific water quality data to interested residents and local officials in addition to general “state of the watershed” information for broader audiences.

<https://www.youtube.com/watch?v=953ZerSmnnQ>

Message Date(s): February 1, 2022

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

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

If yes, describe why the change was made:

The NSP organized a public presentation on data from the 2021 Volunteer Water Quality Monitoring Program (Public Participation BMP 2)

BMP: 17: Industrial Outreach

Message Description and Distribution Method:

The NSP prepared and provided stormwater best management practices to over 1000 industrial facilities in participating towns

Targeted Audience: Industrial facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Provide industrial land use-focused stormwater pollution prevention outreach to all industrial properties in the Town of Medfield based on the town's GIS.

Message Date(s): Outreach distributed in Spring 2021/2022

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

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

If yes, describe why the change was made:

Extend specific messaging to industrial entities.

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period:**

Opportunity 1: Document Review

A copy of the original stormwater documents are made available at the Medfield Public Library repository for public review. The amendments are posted on the web site. In PY4, there were also several public meetings regarding the revised Stormwater Management and Land Use regulations. Questions and comments by the public were limited and coordinated with Town Counsel before approval at Town Meeting.

Opportunity 2: Household Hazardous Waste Day

In PY4, one Household Hazardous Waste Collection Days was held at the Medfield Town Garage located at 55 Meadows Street. The event was held on November 31, 2021. A total of 249 vehicles were recorded.

Opportunity 3: Earth Week Cleanup

During Earth Week 2022 (April 18-24, 2022), on April 23, 2022 many volunteers came out to collect litter on roadsides, parking lots, the grounds of public buildings, churches, schools, parks and river fronts etc.

The chemical treatment of Vine Lake, Bakers Pond, Danielson Pond, Flynn's Pond and/or Turbidity Pond are now done under an ongoing as needed contract with Solutions Inc. They monitor the ponds that are managed by the town and offer volunteer opportunities. No chemical treatment was needed in PY4.

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

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

The activities of the NSP are also made known to Medfield residents through Facebook, Twitter, etc. In addition to the Earth Week Cleanup the NSP Public Participation opportunities included a River Clean Up Day on September 25, 2021; Volunteer Water Quality Monitoring Program Activities; and the Regional Water Quality Forum that has been posted on YouTube.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer

*Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period.***

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

Changes made in PY3 resulted in the Town now tracking 361 outfalls (17 private) and 133 "culverts" (21 private), for a total of 494 locations. The local GIS has been updated and the SWMP has been updated, including the number of outfalls by receiving water.

Screening of Outfalls/Interconnections

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

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

<https://www.town.medfield.net/1793/Storm-Water-Information>

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

Number of outfalls screened:

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

Percent of outfalls screened:

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

The 5.8% includes 6 OF's and 5 DMHs in PY4 that exhibited flow during dry weather conditions in PY2 and PY3. The testing in PY4 was under wet conditions. All other outfall locations (100%) have been inspected and were observed to be dry under dry conditions.

Catchment Investigations

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

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

<https://www.town.medfield.net/1793/Storm-Water-Information>

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

The total catchments investigated also include those in which partial work has been done. The dry weather testing results have been provided to Woodard Curran, and IDDE activities are being planned with their I/I and SSES investigations.

IDDE Progress

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

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

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

Employee Training

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

Representatives from the Town of Medfield attend the quarterly workshops hosted by the NSP. The workshops provide for community data sharing and training on a number of MS4 related topics posted to the NSP web-site: <https://yourcleanwater.org/member-resources/nsp-tools/>

The Medfield Planning Board has scheduled a "Land Use Boards Meeting: Stormwater Training" for September 29, 2022.

MCM4: Construction Site Stormwater Runoff Control

*Below, report on the construction site plan reviews, inspections, and enforcement actions completed **during this reporting period**.*

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

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

The Site Plan Reviews were conducted by the Medfield Planning Board and the Medfield Zoning Board of Appeals. The PY4 projects included: 49 Elm Street, the Kingsbury Club Solar Parking Canopies (application withdrawn) and 6 Spruce Way.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**Ordinance or Regulatory Mechanism**

Date update was completed (due in year 3):

As-built Drawings

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

Number of as-built drawings received:

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

Prior to PY3, as-built drawings were required by the local Conservation Commission. In PY3, the Town amended its Stormwater Management regulation to require the submittal of as-builts.

All projects subject to the Stormwater Management and Land Disturbance Ordinance are required to submit a Stormwater Management Plan, Erosion and Sediment Control Plan, and Operations & Maintenance Plan as part of their permit application. Upon project completion, a final report, including as-built construction plans, are required to be sent to the Department of Public Works to ensure Stormwater Management BMPs have been constructed in accordance with City standards and meet design and performance criteria.

Retrofit Properties Inventory

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

The Town of Medfield has been working with the NSP on a 604B Grant to identify ten (10) permittee-owned properties that could be modified or retrofitted with BMPs. Three (3) sites have been conceptually designed.

The sites that have been designed include (1) West Street and Bridge Street; (2) South Street and Wilson; and (3) the Wheelock School. The seven other sites include the Medfield High School, Medfield Middle School, Metacomet Park, Medfield Highway Garage, North Street/Harding Street, Medfield Wastewater Treatment Facility and the Memorial School.

MCM6: Good Housekeeping

Catch Basin Cleaning

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

Number of catch basins inspected: 2,331

Number of catch basins cleaned: 2,300

Total volume or mass of material removed from all catch basins: 1,100 tons

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

Total number of catch basins: 2,331

If applicable:

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

The sump volume is tracked in the Town's GIS system (PeopleGIS) and the structure is scheduled for more frequent inspections and cleanings as needed.

The Town contracts with McPhail Associates and W.L. French to remove and dispose of all catch basin cleanings, street sweepings and dispose of within the guidance of State and EPA's reuse and disposal policy.

Street Sweeping

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

☐ Number of miles cleaned: 154

☐ Volume of material removed: 135 cubic yards

☐ Weight of material removed: [Select Units]

Stormwater Pollution Prevention Plan (SWPPP)

*Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period**.*

Number of site inspections completed:

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

Recommendations centered around good housekeeping measures.

Additional Information**Monitoring or Study Results**

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- ☐ Not applicable
- ☐ The results from additional reports or studies are attached to the email submission
- ☒ The results from additional reports or studies can be found at the following website(s):

<https://www.town.medfield.net/1793/Storm-Water-Information>

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

The Town has retained the services of Woodard Curran for its Sewer System Evaluation Survey (SSES) activities and they also assist the Town with its IDDE investigations. This is in addition to the sewer and drain investigation conducted by the Town internally.

Additional Information

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

COVID-19 Impacts

Optional: If any of the above year 4 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 5 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted

with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 5 below:

Additional planned activities for PY5 are discussed throughout this annual report.

Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

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

Name:

Maurice Goulet

Title:

Public Works Superintendent

Signature:

Date:

09/28/22

[Signatory may be a duly authorized representative]

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA: stormwater.reports@epa.govMassDEP: Stormwater.DEP@mass.gov

Paper Signature:

If you did not sign electronically above, you can print the signature page by clicking the button below.

[Print Signature Page](#)

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.

[Lock Form](#)