

**Year 2 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2019-June 30, 2020**

*\*\*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, 2019 and June 30, 2020 unless otherwise requested.*

**Part I: Contact Information**

Name of Municipality or Organization:

EPA NPDES Permit Number:

**Primary MS4 Program Manager Contact Information**

Name:

Title:

Street Address Line 1:

Street Address Line 2:

City:

State:

Zip Code:

Email:

Phone Number:

**Stormwater Management Program (SWMP) Information**

SWMP Location (web address):

Date SWMP was Last Updated:

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

## Part II: Self-Assessment

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

**Impairment(s)**

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

**TMDL(s)**

*In State:*       Assabet River Phosphorus       Bacteria and Pathogen       Cape Cod Nitrogen  
 Charles River Watershed Phosphorus       Lake and Pond Phosphorus

*Out of State:*       Bacteria/Pathogens       Metals       Nitrogen       Phosphorus

Clear Impairments and TMDLs

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

### Year 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 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:

The local ConComm has established procedures to submit as-built drawings that conform to the local GIS (NAV83 feet horizontal datum and NAVD88 vertical datum). The requirement is being made part of Orders of Condition and the ConComm is working with the other departments for conformity.

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

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

The IDDE Training was provided by the Neponset Stormwater Partnership (NSP) on January 23, 2020.

**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 NSP assisted the Town with pet waste public education (NSP BMP3) and septic system notice (NSP BMP10). This included social media posts to the Town's Twitter account and posters were printed and placed

at Town Hall and the Town library. In addition, educational “rack cards” regarding proper pet waste disposal and septic system maintenance were printed and provided to the town clerks’ office. The dog waste racks were included with dog license renewal requests, either in person or via mail, and the septic system racks were sent to all residents as a bill stuffer. When online renewals were available or the only renewal method offered, online graphics that link to 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. The number of dog waste rack cards distributed correlated to the number of dogs licensed to ensure all dog owners received the message.

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

### Annual Requirements

#### *Public Education and Outreach\**

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

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

#### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

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

#### *Potential structural BMPs*

- Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was
- estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

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

<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 PY2 the Town submitted a 604B grant application with the NSP to find public parcels for BMP retrofit projects. The grant awards are being made in October 2020, and if successful, the work will be part of PY3. Inventoried sites will be prioritized and three sites will be selected for Conceptual BMP design.

## **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)

#### *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:

All public facilities were investigated and existing BMPs have been inventoried. In PY2 the Town submitted a 604B grant application with the NSP to fund public parcels for BMP retrofit projects. The grant awards are being made in October 2020, and if successful, the work will be part of PY3. Inventoried sites will be prioritized and three sites will be selected for Conceptual BMP Design.

### **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
- 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 has developed a Catch Basin Optimization Schedule, dated September 26, 2019.

### **Charles River Watershed Phosphorus TMDL**

- Completed Legal Analysis

*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 is required to comply with two watershed standards: the Neponset River and the Charles River. In PY2, the Town of Medfield completed work with the Neponset Stormwater Partnership (Kerry Snyder) to identify regulatory changes that are needed to meet the Neponset River watershed standards. The NSP is currently assisting the Town in communications with the Charles River (Heather Miller and Julie Wood) to ensure that the CRWA phosphorous TMDL requirements supplement the NSP proposed changes to the local regulations at the CY2021 Spring Town Meeting. The coordination has been delayed a few months due to the COVID-19 virus.

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

A copy of the stormwater management documents have been submitted to the library public conservatory for public review. There have been no comments by the public.

### 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:

Section 5.3 of the Town's SWMP (June 24, 2019) indicated that there were 426 outfalls in Medfield. Based on the PY1 and PY2 investigation, the Town has determined that 37 locations are actually "culverts" that are simple conveyance points (i.e. across driveway aprons). Therefore, the Town is now tracking 389 outfalls and 109 "culverts", for a total of 498 locations. The local GIS has been updated and the SWMP has been updated, including the number of outfalls by receiving water. The SWMP Amendment and is posted to the local website (<https://www.town.medfield.net/1793/Storm-Water-Information>).

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: 1: 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. This year, there were 3,562 site visitors and 5,614 unique page views.

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](http://yourcleanwater.org), via email submissions to [stormwater@neponset.org](mailto: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.

Targeted Audience:

Responsible Department/Parties:

## Measurable Goal(s):

Provide immediate answers to inquiries generated by regionalized outreach activities. Eight 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: Town Clerks Office

## Measurable Goal(s):

To reach 80% of dog owners annually with pet waste management information. A total of 1,063 cards were printed and distributed to Town Clerks. These cards, along with some leftover cards from the previous year, combined for a total of 1,273 cards for an estimated population of 1,463 dogs (estimated 87% reached).

Message Date(s): Materials were distributed to Town Clerks in December 2019 and disseminated to dog owners over the next several months.

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 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 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 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):

Reach atleast 90 people from the Town of Medfield. A total of 818 people were reached through Facebook, with an additional 406 people reached through Twitter.

Message Date(s): August 15-21, 2019

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):

Reach atleast 90 people from the Town of Medfield. The four social media posts (two on Facebook and two on Twitter) reached a total of 1,492 people through Facebook and 580 people through Twitter.

Message Date(s): October 10, 2019 and October 24, 2019

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 to prepare 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, and a new webpage was created to host a “fertilizer calculator” that allows a user to enter several pieces of information and returns a suggested fertilizer application rate based on guidance from the NEIWPCCC Northeast Voluntary Turf Fertilizer Initiative. No physical materials (flyers, posters, etc.) were produced for this campaign as most Town Halls and municipal events were closed/cancelled due to COVID. The social media post was shared on the Town’s Twitter account.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: DPW Operations

## Measurable Goal(s):

Reach atleast 90 people from the Town of Medfield. A total of 427 people were reached through Facebook, with an additional 285 people reached through Twitter.

Message Date(s): April 23, 2020

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

If yes, describe why the change was made:

**BMP: 7: Paid Facebook Advertising**

## Message Description and Distribution Method:

The Town worked with the NSP on a Facebook advertising campaign mimicking one of the regular social media outreach campaigns was piloted tested. Facebook ads regarding proper fertilizer use were designed for every participating community. These ads were nearly identical to the educational posts designed as part of the Spring outreach activity (Public Education BMP 6). The ads were set up to be shown to pertinent groups in each town. For example, this ad targeted homeowners that were at least 25 years old. Results of the pilot test’s reach were then compared to the reach of the previous social media post on the same topic to determine if Facebook ads are a viable option for future outreach.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

## Measurable Goal(s):

Conduct a pilot test of Facebook advertising and compare the reach results to the analogous social media outreach post. The ad ran for 12 days reached approximately 5,616 people in Medfield, compared to the original social media post that reached 426 people. The ad also generated 112 clicks through to the NSP’s

fertilizer and yard waste management page. It was determined that Facebook ads were a useful tool for outreach and may be used in conjunction with the regular outreach campaigns in the future. However, it may be more effective to distribute the available ad budget for each town across several campaigns (leaves, dog waste, fertilizer) rather than concentrating them on a single campaign. This will be an area for further experimentation in the future.

Message Date(s): June 19 – June 30, 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: 8: School Outreach Program**

Message Description and Distribution Method:

Worked with the NSP to prepare a hands-on watershed education curriculum for 4th or 5th grade students. Curriculum covered drinking water and stormwater infrastructure, local water resources, wastewater systems, water conservation, and stormwater pollution prevention techniques, and incorporated slides, videos, models, and hands-on activities. Curriculum was designed and adapted with input from teachers in participating schools and aligned with the MA 5th grade science curriculum standards. Due to the spring 2020 COVID restrictions, schools were shut down and the scheduled Medfield school visits during this period could not occur. In lieu of these visits, the educator created digital materials for teachers to use in their virtual classrooms.

Targeted Audience: Residents

Responsible Department/Parties: Schools

Measurable Goal(s):

Reach at least 80% of households with 4th or 5th grade children in participating communities, and 100% positive feedback from participating classroom teachers. Online materials were viewed over 130 times for use in virtual learning situations. Feedback from teachers has been positive on both the in-class presentation and the online materials.

Message Date(s): September 2019 through June 2020 (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: 9: Regional Education Mailing**

Message Description and Distribution Method:

The Town worked with the NSP on 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, pet waste, yard waste, and litter and referred readers to additional information available at [yourcleanwater.org](http://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, Randolph, Sharon, Stoughton and Westwood) totaling approximately 2,400 mailing addresses in the Town of Medfield.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reach 100% of addresses.

Message Date(s): June 5, 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

### **BMP: 10: Outreach to Septic System Owners**

Message Description and Distribution Method:

Worked with the NSP to prepare 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: Residents, Businesses, Industry (Septic System Owners)

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reach 100% of addresses. Approximately 2,400 bill stuffers were sent.

Message Date(s): March 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: 11: “Problem Area” Outreach**

## Message Description and Distribution Method:

Worked with the NSP to prepared specific, targeted outreach campaign designed to correct known stormwater pollution issues in particular areas. The list of “problem areas” was compiled from the knowledge of Town officials as well as communications via the stormwater hotline. The best method to address many issues was determined to be storm drain marking, which is described in the Public Education BMP 12.

Targeted Audience: Residents, Businesses, Industry

Responsible Department/Parties: DPW Operations

## Measurable Goal(s):

Address identified problem areas should they arise. In PY2, there were no problem areas that were identified.

Message Date(s): September 19, 2019

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: Storm Drain Marking**

## Message Description and Distribution Method:

Worked with the NSP on a program through which volunteers are able to mark storm drains with educational messages was piloted this year, with a full launch planned for the following year. The program will consist of providing volunteers with all materials and information they need to carry out the task. Aluminum medallions will be 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” for Medfield may be developed as the program ramps up. Volunteers will be able to pick the areas they’d like to mark, but will be encouraged to pick areas with high pedestrian traffic or areas with known issues that can be addressed by storm drain marking (such as a high prevalence of improper pet waste disposal). Records of which catch basins have been marked will be maintained by the NSP.

Targeted Audience: Residents, Businesses, Industry, Developers

Responsible Department/Parties: DPW Operations

## Measurable Goal(s):

Conduct a pilot project for the storm drain marking activity. The pilot test was completed on June 24, 2020. Tweaks were made to the program and associated instructions based on feedback. These changes will be finalized, and the program will be opened to the public in the next permit year.

Message Date(s): Pilot test completed on June 24, 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: 13: Think Blue “Fowl Weather” Video**

Message Description and Distribution Method:

Worked with the NSP, who 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):

Reach a significant portion of the Medfield service area population with a stormwater awareness message in a highly engaging format. A total of 504,123 people in the NSP service area were reached via 260,039 Facebook/Instagram “impressions.” Via YouTube, there were 10,000 local impressions. A survey found that 17% of respondents recalled seeing the campaign in past years, which is continuing an upward trend from 8% and 15% in 2018 and 2019, respectively.

Message Date(s): May 16 to June 5, 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: 14: Quarterly DPW Flyers**

Message Description and Distribution Method:

The Town of Medfield develops quarterly flyers to update the local community on a variety of DPW issues, including water quality and resource protection, solid waste and earthen waste recycling, wastewater management, and snow operations.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Prepare Quarterly Flyers. The flyers were produced in hard copy to be placed at the local Highway Garage and at Town Hall, and were published on the Town's web site.

Message Date(s): July 2019, October 2019, January 2020, April 2020

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

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 stormwater documents has been submitted to the Medfield Public Library Conservatory for public review. There have been no comments by the public

### Opportunity 2: Household Hazardous Waste Day

The PY2 DPW Household Hazardous Waste Day was scheduled for April 4, 2020 and was postponed to August 29, 2020 due to COVID-19 virus. The regional Event serviced a total of 303 cars from the towns of Medfield, Dover, and Holliston. The Event offered Waste Oil collection that collected 660 gallons of waste oil.

### Opportunity 3: Earth Week Cleanup

During Earth Week 2019 (April 15 – 22, 2019) many volunteers came out to collect over 300 bags of litter on roadsides, parking lots, the grounds of public buildings, churches, schools, parks and river fronts etc. Similar PY2 events were scheduled for the 2020 Earth Week events (April 18 – 25, 2020) but they were postponed due to COVID-19

### Opportunity 4: Arbor Day

The Town celebrated Arbor Day on April 26, 2019 by planting trees at The Center in Medfield on Ice House Road. In PY2, the volunteers continued to maintain the trees. The Town intended to continue with similar Arbor Day events on April 24, 2020, however they were they postponed due to COVID-19.

### Opportunity 4: River Cleanup Day

The Town of Medfield worked with the NSP to organize a volunteer-based river cleanup event, similar to the work in Milton, Quincy, and Canton on September 21, 2019. Volunteers would work with the NSP and DPW to remove trash and debris from various waterways, parks, and wetlands. The cleanup day was planned for the spring 2020, but it was cancelled due to the COVID pandemic.

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 chemical treatment of Vine Lake, Bakers Pond, Danielson Pond, Flynn's Pond and/or Turbidity Pond are now done under contract with Solutions Inc. They monitor the ponds that are managed by the town and offer volunteer opportunities.

### **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**

Below, check all that apply.

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments
- Initial catchment delineations

*Optional:* Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

Section 5.3 of the Town's SWMP (June 24, 2019) indicated that there were 426 outfalls in Medfield. Based on the PY1 and PY2 investigation, the Town has determined that 37 locations are actually "culverts" that are simple conveyance points (i.e. across driveway aprons). Therefore, the Town is now tracking 389 outfalls and 109 "culverts", for a total of 498 locations. The local GIS has been updated and the SWMP Amendment has been updated, including the number of outfalls by receiving water, and is posted to the local website (<https://www.town.medfield.net/1793/Storm-Water-Information>).

#### **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.

- 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:

**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.*

- 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:*

To date, the Town has taken a top to bottom approach to the subcatchment investigations and has located many "culverts" and a high percentage of outfalls with no flow.

**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.*

- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

N/A

*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:

There have not been any illicit discharges found by the Town to this date. The Town inspects its CBs and MHs regularly, and also uses an in-house camera to investigate pipes where there may be and illegal connection or structurally deficient pipe contributing to a I/I issues. Six drain manholes were sampled for IDDE purposes in PY2 (DMH-266, DMH-267, DMH-273, DMH-274, DMH-927, and DMH-938). As a result, the area around DMH-266 was CCTV'd by the Town and structural joint issues were detected. The Town is working with Woodard Curran, their I/I consultant, to rectify the I/I issue.

### **Employee Training**

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

The IDDE Training was provided by the Neponset Stormwater Partnership (NSP) on January 23, 2020.

### **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 Review was for Medfield Meadows (24 Unit Apartment located at 41 Dale Street, Medfield).

Site Inspections were conducted at Medfield Meadows, Chapel Hill and the Kingsbury Club Addition.

The enforcement action was issued for the 40 Unit Chapel Hill Landing project on Stonebridge Way, Medfield.

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

**Ordinance or Regulatory Mechanism**

*Below, select the option that describes your ordinance or regulatory mechanism progress.*

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

**As-built Drawings**

Describe the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

The Town Conservation Commission requires the submission of as-built drawings and is working with the Planning Board to standardize the submittals on Mass State Plane Coordinates (NAV83 feet) and NAVD88 vertical datum. The standards will be incorporated into the new regulations in spring 2021.

**Street Design and Parking Lots Report**

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

The town is reviewing its current regulations with the NSP and CRWA and will be making rules changes in April 2021. For the one private site plan road constructed in PY2, the Town required that they upgrade their surface drainage to use 8 new dry well catch basins.

**Green Infrastructure Report**

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

**Retrofit Properties Inventory**

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

In PY2 the Town has submitted a 604B grant application with the NSP to find public parcels for BMP retrofit projects. The grant awards will be made in October 2020. If successful, in PY3 the inventoried sites will be prioritized and three sites will be selected for Conceptual BMP design.

**MCM6: Good Housekeeping**

**Catch Basin Cleaning**

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

Number of catch basins inspected:

Number of catch basins cleaned:

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

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

Total number of catch basins:

*If applicable:*

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

For the CBs that are more than 50% full and can not be cleaned by clam shell, the town has a vacuum truck clean the CB and a full re-inspection is made more regularly. The data is tracked in PeopleGIS. Sixty (60) such basins were inspected by the Town in PY2.

**Street Sweeping**

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

Number of miles cleaned:

Volume of material removed:

Weight of material removed:

**O&M Procedures and Inventory of Permittee-Owned Properties**

*Below, check all that apply.*

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

**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:

In June 2020, SWPPPs were prepared for the Medfield Highway Garage and the Medfield Transfer Station. Site Inspections were also completed as part of the SWPPPs and no corrective actions were deemed necessary. The Site Inspections are amended to each SWPPP.

## **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):

Woodard and Curran is in the planning stage of a town wide I/I study that will develop a comprehensive I/I plan to supplement the IDDE Plan. Their proposed scope of work has been amended to the IDDE Plan.

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:

Woodard Curran has been retained to assist with the Town's Infiltration and Inflow (I/I) activities, including additional flow monitoring of the nine sewer meters installed throughout the Town. Woodard Curran will also be assisting with future IDDE investigations and the PY2 sampling results have been provided to them for further analysis and investigation.

The Town of Medfield conducts surface water and groundwater monitoring at the former Medfield Landfill, in accordance with the Massachusetts Solid Waste Regulations (310 CMR 19.0000). The monitoring is conducted on a semi-annual basis.

### **Additional Information**

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

The DPW performed a large-scale rehabilitation/maintenance project at the Wastewater Treatment Plant between July and September 2019. The Parkson DynaSand Filtration System needed to be repaired with approximately 300 tons of specific quality grade sand replaced. With the completion of this needed operation, the Wastewater Treatment facility showed tremendous improvement in their regulatory compliance measures for water quality discharge to the Charles River.

### **COVID-19 Impacts**

*Optional:* If any of the above year 2 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:

The COVID-19 virus impacted the regulatory review that is ongoing between the Town, NSP and the CRWA. The coordination will result in bylaw changes that will now be implemented at the Spring 2021 Town Meeting.

The COVID-19 virus had its most significant impact on the volunteer days that were scheduled in spring 2020. The Town has been able to reschedule its Household Hazardous Waste Day in August 2020, however the NRWA River Cleanup Day, the Earth Day and the Arbor Day events have not been rescheduled.

### **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 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

### **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 uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- 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

Provide any additional details on activities planned for permit year 3 below:

- Continue to work with the NSP and CRWA on public education and regulatory changes.
- If successful with the Section 604B grant, prioritize the inventoried public parcels and conceptually design three locations for BMP retrofits.
- Work with Woodard and Curran to dovetail the ongoing IDDE work with their I/I investigations.

- Develop a phosphorous control plan to meet CRWA TMDL requirements.

## Part V: Certification of Small MS4 Annual Report 2020

### 40 CFR 144.32(d) Certification

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

Name:  Title:

Signature:  Date:

*[Signatory may be a duly authorized representative]*

*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.gov](mailto:stormwater.reports@epa.gov)

MassDEP: [laura.schifman@mass.gov](mailto:laura.schifman@mass.gov)

### Paper Signature:

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

*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.*