

**Year 5 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2022-June 30, 2023**

*\*\*Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are to publicly accessible sites\*\**

*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, 2022 and June 30, 2023 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 (publicly available 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.

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 publicly available website:

- Updated system map due in year 2 as necessary
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities

- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

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

### **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
  - This is not applicable because there are no septic systems present

*\* 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:

### **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)

*Structural BMPs*

- Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the
- Phosphorus Source Identification Report, including: *(select the items of the evaluation that have been completed below)*
- Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date
  - Estimated cost of redevelopment or retrofit BMPs
  - Engineering and regulatory feasibility of redevelopment or retrofit BMPs
- Completed a listing of planned structural BMPs and a plan and schedule for implementation
- The BMP list and implementation schedule is attached to the email submission
  - The BMP list and implementation schedule can be found at the following publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

- 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.
- No BMPs were installed
  - The above referenced BMP information is attached to the email submission
  - The above referenced BMP information can be found at the following publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

Total estimated phosphorus removed in **lbs/year** from the installed BMPs: 142.7

*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 Dedham currently utilizes their existing stormwater regulations to require the construction of stormwater BMPs as part of private development even beyond current MS4 permit required land disturbance thresholds to promote water quality. In addition, the Town has been proactive in incorporating stormwater BMPs as part of capital improvements on municipal property. Constructed structural BMPs have resulted in the phosphorus reductions outlined in Table 1-6, which are further detailed in Appendix D, of the Town's Phosphorus Control Plan developed for land area within the Charles River Watershed during Permit Year 5. The Town of Dedham will be re-calculating the phosphorus load within the portion of the Town within the Charles River Watershed based on land use changes occurring since 2005 once updated impervious area data is available, and updating the Phosphorus Control Plan accordingly. The phosphorus reductions are presented as a high-level summary, and calculations were performed consistent with the requirements in Attachment 3 to Appendix F of the 2016 MS4 Permit. These BMPs are being maintained to function as designed. Phosphorus reduction credit is provided for structural BMPs constructed as part of redevelopment projects on private

property as well as BMPs that the Town has installed as part of roadway or site improvements. The Town has developed nutrient tracking worksheets for private properties that have installed stormwater BMPs, which track the overall removal of phosphorus and nitrogen for each BMP. These sheets help track phosphorus removal associated with private BMPs that are identified in the Charles River Phosphorus Control Plan, and provide an inventory of BMPs that should be inspected and maintained by the private entity. Existing structural and semi-structural BMPs have contributed to an annual phosphorus load reduction of 142.7 lbs/year.

Going forward, Dedham will be incorporating BMP retrofits as part of roadway improvements under their annual road program. BMPs are currently being designed for construction in the spring of 2024. All streets within the current road reconstruction program plan are within the Charles River Watershed to focus on implementation of the Town's Phosphorus Control Plan, but in the future, streets in the Mother Brook Watershed will be considered and prioritized, if possible, for BMP retrofit as part of the road program. The Town is currently working separately on the design of a BMP Retrofit at 34 Milton Road which is located within a high phosphorus loading catchment within the Mother Brook Watershed. This BMP retrofit project is identified in Phases 1 and 2 of the Town's Phosphorous Source Identification Reports for Mother Brook, and will serve as the Town's demonstration project with construction occurring in Spring of 2024. This project is also highlighted in the Town's BMP Retrofit Inventory Report.

## **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 publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

- 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 has been collecting data during annual catch basin cleaning that will be utilized to develop a Catch Basin Cleaning Optimization Plan. This plan will be developed and implemented once sufficient data has been collected. The plan will include provisions to prioritize areas that discharge to water bodies impaired for solids, oil, grease, or metals. The Town also employs a tablet-based catch basin cleaning inspection form to more easily identify catch basins that are filling up more frequently. Most of the Town-owned catch basins were cleaned in 2023. Using this new data point for each catch basin, the Catch Basin Cleaning Optimization Plan will be developed in Permit Year 6.

## **Charles River Watershed Phosphorus TMDL**

- Completed the written Phase 1 Phosphorus Control Plan (PCP), including: *(select the items in the Phase 1 PCP that have been completed)*
  - Planned nonstructural controls
  - Planned structural controls

- O&M program for structural controls
- Implementation schedule
- Cost of implementation

The Phase 1 PCP: (*select one of the following options*)

- is attached to the email submission
- can be found at the following publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

*Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.*

Baseline phosphorus export reduction required from PCP Area, as identified in Appendix F (**lbs/year**) [A]:

890.7

- Documented the nonstructural control measures implemented during **this reporting period** and their phosphorus reduction

total phosphorus reduction from all nonstructural controls this reporting period (**lbs/year**) [B]:

21.9

- No nonstructural control measures were implemented
- The above referenced nonstructural control measures information is attached to the email submission
- The above referenced nonstructural control measures information can be found at the following publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

- Documented the structural control measures implemented during **this reporting period and all previous years**, including location, phosphorus reduction in mass/year, and date of last completed maintenance and inspection for each control

total phosphorus reduction from all structural controls installed this reporting period and all previous years (**lbs/year**) [C]:

142.7

- No structural control measures were implemented
- The structural control measures information is attached to the email submission
- The structural control measures information can be found at the following publicly available website:

<https://www.dedham-ma.gov/departments/engineering/municipal-stormwater-ms4>

Phosphorus load increase due to development incurred since 2005 in **lbs/year** [D]: 0

Current phosphorus export rate from the PCP Area in **lbs/year** [=A-(B+C)+D from above]:

726.1

I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance

with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.

All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31 pertaining to proper use of fertilizers on turf grasses

*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:

Phosphorus load increases as a result of development occurring since 2005 have not been calculated. Dedham plans to perform additional baseline phosphorus load calculations in Permit Year 6, which will incorporate updated impervious area data that was developed by the Charles River Watershed Association through an MS4 Grant. The data was supposed to be finalized by June 30, 2023 and distributed to Charles River watershed communities to update their phosphorus load increases due to development since 2005. However, the data was delayed and was not distributed to communities until September 15th. The baseline phosphorus load included in the PCP will be updated as needed during Permit Year 6.

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***NON-TRADITIONAL AND TRANSPORTATION MS4s ONLY- municipalities please skip this section:***

Describe the planned phosphorus reduction activities on site and coordination progress with the applicable municipality:

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

### Part III: Receiving Waters/Impaired Waters/TMDL

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

- Yes  
 No

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

The list of outfalls/interconnections and their receiving waters was updated during Permit Year 3 upon completion of dry weather outfall screening and sampling. The Town updated this list again in Permit Year 4 to reflect minor changes in their drainage system. The Final Massachusetts Integrated List of Waters for the Clean Water Act 2018/2020 Reporting Cycle and the Final Massachusetts Integrated Lists of Waters for the Clean Water Act 2022 Reporting Cycle both included minor changes to some of the Town's impaired waters. However, the specific impairments/changes have not changed sampling requirements for any of the Town outfalls or interconnections. The updated list of receiving waters and outfalls is included in Section 1 of the Town's SWMP.

## 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: Dog Waste Flyers**

Message Description and Distribution Method:

The Town distributed a flyer entitled "There's no such thing as the poop fairy" with dog license issuances and renewals during Permit Year 5. These flyers were distributed both in-person and via email. These flyers were also maintained on the Town website throughout the permit year.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The Town distributed 1,300 dog waste flyers with dog license issuances and renewals during the reporting period.

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: Leaf Littering Message**

Message Description and Distribution Method:

The Town posted and maintained information provided by the Neponset River Watershed Partnership regarding proper disposal of leaf litter and use of slow release/phosphorus free fertilizers to the home page of its website throughout the permit year. As part of the full campaign, the Town also shared the information to the "Dedham DPW" Facebook and "Town of Dedham Engineering Dept" Twitter page in April 2023.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

By posting the informational slide to the home page of the Town's website, Dedham ensured that it would be

accessible to as many residents as possible.

Message Date(s): Permit Year 5

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Septic System Messaging**

Message Description and Distribution Method:

The Town posted and maintained a SepticSmart flyer developed by the EPA and SepticSmart homeowners' guide to its website throughout the permit year. The flyer was posted in both English and Spanish. The flyer was tagged by the DPW Facebook page and Engineering Division Twitter account in September 2022.

Targeted Audience: Residents

Responsible Department/Parties: Health Department, Engineering Department

Measurable Goal(s):

By posting the septic system flyer to the home page of the Town's website, Dedham ensured that it would be accessible to as many residents as possible.

Message Date(s): Permit Year 5

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP:Regional Outreach Mailer**

Message Description and Distribution Method:

The Neponset River Watershed Association mailed out an informational flyer to all residents in Dedham. The flyer covered rain barrels, dog waste management, fertilizer use, and other topics related to stormwater management.

Targeted Audience: Residents

Responsible Department/Parties: Neponset Stormwater Partnership

Measurable Goal(s):

The flyer was mailed to all residents Dedham.

Message Date(s): May 2023

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: Yard Waste Flyer**

Message Description and Distribution Method:

The Town posted and maintained information provided by the Neponset River Watershed Partnership regarding best management practices for yard waste to the home page of its website throughout the permit year. As part of the full campaign, the Town also shared the information to the "Dedham DPW" Facebook and "Town of Dedham Engineering Dept" Twitter page in October 2022.

Targeted Audience: Residents

Responsible Department/Parties: Engineering Department, School Department

Measurable Goal(s):

By maintaining the yard waste flyer on the Town's website, Dedham ensured that it would be accessible to as many residents as possible.

Message Date(s): Permit Year 5

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Outreach Message**

Message Description and Distribution Method:

The Town posted and maintained information provided by the Neponset River Watershed Partnership regarding pet waste management to its website throughout the permit year. Facebook Ads were used to send the information during July of 2022.

Targeted Audience: Residents

Responsible Department/Parties: Engineering Department

Measurable Goal(s):

By maintaining the flyer on the Town's website as well as making social media posts, Dedham ensured that it

would be accessible to as many residents as possible.

Message Date(s): Permit Year 5

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Outreach Message**

Message Description and Distribution Method:

The Neponset River Watershed Association mailed out an informational flyer to all businesses, institutions, and commercial facilities in Dedham. The flyer covered rain barrels, dog waste management, fertilizer use, and other topics related to stormwater management.

Targeted Audience: Businesses, Institutions, and Commercial Facilities

Responsible Department/Parties: Engineering Department

Measurable Goal(s):

By maintaining the flyer on the Town's website as well as making social media posts, Dedham ensured that it would be accessible to as many businesses as possible.

Message Date(s): May 2023

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: Outreach Message**

Message Description and Distribution Method:

Two public education flyers were created targeting developers. One flyer focused on reducing stormwater runoff during construction, and a second flyer focused specifically on sediment and erosion control for developers. Both flyers were distributed to developers by the Conservation Department, Planning Department, Building Department and Engineering Department when they submit for applications and permits.

Targeted Audience: Developers (Construction)

Responsible Department/Parties: Conservation Dept, Planning Dept, Building Dept, and Engineering Dept

Measurable Goal(s):

The Town distributed a total of approximately 120 flyers to developers.

- Building – 25 brochures
- Engineering – 25 brochures
- Major Stormwater Permits – 20 brochures
- Planning – included as part of all application materials ~ 50 brochures

Message Date(s): Permit Year 5

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Outreach Message**

Message Description and Distribution Method:

A stormwater prevention guide flyer, which focused on stormwater management related to industrial facilities, was mailed to industrial facilities within the Town.

Targeted Audience: Industrial Facilities

Responsible Department/Parties: Engineering Department

Measurable Goal(s):

The flyer was mailed to 90 industrial facilities.

Message Date(s): May 2023

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: Educational Presentation**

Message Description and Distribution Method:

The Town provided two visits to 5th grade classrooms across Dedham Public Schools with one visit covering stormwater-related topics and the other focusing on water conservation.

Targeted Audience: Residents

Responsible Department/Parties: Engineering Department

## Measurable Goal(s):

Three (3) classrooms were visited at Avery Middle School on March 21st and 22nd, three (3) classrooms at Greenlodge Middle School were visited on March 1st and March 8th, three (3) classrooms at Riverdale Middle School were visited on May 18th and 19th, and three (3) classrooms at Oakdale Middle School were visited on May 25th and May 30th.

Message Date(s): March-May 2023

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:**

The Town posted the updated SWMP, dated June 2023, to its website at the end of Permit Year 5. The SWMP was made available for public comment. In addition, Annual Reports for Permit Year 1, 2, 3, and 4 were also made available on the Town's website throughout Permit Year 5.

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 Board of Health held its annual Household Hazardous Waste Collection Day on November 5, 2022, providing the opportunity for residents to properly dispose of hazardous materials such as paints, pesticides, vehicle fluids, batteries, flammable materials, and other substances that may have otherwise been discharged into the MS4. The DPW staff additionally collect and properly dispose of hazardous materials year-round as needed.

In addition to providing bi-weekly curbside recycling pickup, the Town held a cardboard recycling collection event on every third Saturday from January to June in 2023. The Town also held a "Just 1 Bag" community clean-up event from April 16-30 at various parks and open spaces around Dedham. About 300 bags of debris were collected. On May 6, 2023, the Rotary Club of Dedham held a recycling cleanup event as well.

Rain barrels were made available for purchase to residents from the Dedham-Westwood Water District and composting bins were made available for purchase through the Conservation Department.

Dedham continued to participate in the Neponset River Watershed Association which ran an educational advertising campaign through ThinkBlue Massachusetts from May to June, 2023. Facebook and Instagram sponsored videos and Youtube pre-roll ads were used to help viewers visualize how trash, pet waste, and motor oil become stormwater pollution. This video was also distributed in Spanish. Although metric related to ad impressions were not received, Dedham residents received ads on Facebook, Instagram and Youtube. The ad campaign was followed by a survey of residents in all targeted communities - those who remembered seeing the ad were more likely to know that stormwater pollution ends up in local waterways and more likely to consider polluted runoff a serious environmental threat.

The Town continued its Citizens Water Monitoring Network, an initiative organized through the Neponset River Watershed Association, during the reporting period. Resident volunteers collected quarterly samples at the Mother Brook at Washington Street station, testing for E.coli, total phosphorus, pH, dissolved oxygen, temperature, ortho-phosphate, total nitrogen, and ammonia.

During Permit Year 5, the Town also moved forward with the adoption of a Stormwater Utility Fee Program. The Director of Engineering presented to the Select Board on the Stormwater Utility Fee Program on July 13, 2022, and November 17, 2022. The Town of Dedham also held two additional public meetings to discuss the Stormwater Utility Fee Program during Permit Year 5. On January 26, 2023, the Stormwater Utility Fee Program, including potential fee structures and rates, was introduced to the public at a hybrid meeting and then a separate public hearing was held on April 26, 2023. The budget for the Stormwater Utility Fee Program was passed at the Annual Spring Town Meeting held on May 15, 2023. The Town will begin the collection of stormwater fees during Permit Year 6.

During Permit Year 5 the Town was also the recipient of a Municipal Vulnerability Preparedness (MVP) Action Grant from the Executive Office of Energy and Environmental Affairs (EEA) as part of a Regional Project which focused on the development of a watershed-wide flood model for the Neponset River. The project also included development of a higher resolution flood model for the subwatershed that includes Dedham's Manor Neighborhood, as well as modeling of potential flood mitigation strategies. Two public meetings were held specifically with residents of Dedham's Manor Neighborhood on April 12, 2023, and on May 25, 2023, where information was presented on the use of green infrastructure practices to mitigate flooding, while also providing water quality benefits. Additional funding to continue this project was awarded to the Town in August of 2023. The next phase of the project emphasizes continued public engagement with the residents of the Manor Neighborhood.

As part of the development of the Wigwam Pond Watershed Based Plan, community meetings were held on December 9, 2022 and April 9, 2023.

### **MCM3: Illicit Discharge Detection and Elimination (IDDE)**

#### **Sanitary Sewer Overflows (SSOs)**

*Check off the box below if the statement is true.*

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

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

Number of SSOs identified:

Number of SSOs removed:

### **MS4 System Mapping**

*Optional:* Provide additional status information regarding your map:

The MS4 map will continue to be updated as necessary as there are updates to existing drainage infrastructure and as new drainage infrastructure is constructed. Updates to the Town's MS4 system mapping were completed to include these changes. The most recent version of the MS4 map is included with the SWMP and is also available at the following location: <https://gis-dedham.hub.arcgis.com/>

### **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 above referenced outfall screening data is attached to the email submission
- The above referenced outfall screening data can be found at the following publicly available website:

*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:

Wet weather outfall screening was completed for a total of 40 outfalls during Permit Years 3 and 4. The Town has also already resumed wet weather sampling during Permit Year 6. The Town previously completed dry weather screening for all their outfalls in Permit Year 3, as reflected in the 100% noted above.

### **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 publicly available website:

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

The Town investigated 103 catchments during Permit Year 5, however there were only 22 new catchments where both catchment investigations and wet weather outfall sampling have been completed. Per the permit, the Town is only reporting that catchment investigations are complete in catchments where outfalls/interconnections have been screened during dry weather, where key junction manholes in these catchments have been screened, and where wet weather sampling has been completed, and where all results indicated no likely sewer input based on field observations and sampling. Catchment investigation data attached to this report includes all the investigations completed during the reporting period. There are 179 outfalls in Dedham that have at least one SVF, therefore wet weather sampling must be conducted at each of these outfalls for catchment investigations to be considered complete.

### **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 publicly available 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:

The Town's Catchment Prioritization Matrix has not been updated since last year, as updates were not warranted this year. It was attached to the e-mail with the Annual Report submission during Permit Year 4.

### **Employee Training**

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

Employee training was conducted in June 2023 of the reporting period.

### 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 number of site plan reviews, inspections, and enforcement actions taken is for all projects where there was at least one acre or more of disturbance.

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

#### Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

Website of ordinance or regulatory mechanism:

#### 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:

The number of as-builts received is for all projects, even those where there was less than an acre of disturbance. Thirteen of the as-built drawings received were related to stormwater permits, and three were related to wetland-only permits.

#### Street Design and Parking Lots Report

Below, describe any changes made or planned to be made to local regulations and guidelines based on the report completed in Year 4:

During Permit Year 4, the Town developed their Street Design and Parking Lot Report, which assessed current street design and parking lot guidelines and other local requirements that affect the creation of impervious cover. Regulatory mechanisms were reviewed to determine if changes to existing design standards could be made to support low impact design options and, where appropriate, proposed recommendations to incorporate policies and standards to minimize impervious cover in parking areas and street designs.

The report was appended to the Town's SWMP during Permit Year 4. A meeting with the Planning Board was held on January 25, 2023 to introduce the recommended updates, and with the Conservation Commission on February 2, 2023. The Town continues to work with their consultant to develop updated regulatory language for future adoption, with bylaw updates anticipated to be presented at Town Meeting in Spring of 2024.

### **Green Infrastructure Report**

Below, describe progress towards making green infrastructure practices allowable based on the report completed in Year 4:

During Permit Year 4, the Town developed a Green Infrastructure Report, which assessed existing local regulatory mechanisms to determine the feasibility of making the following practices allowable when appropriate site conditions exist:

- Green roofs
- Infiltration practices such as rain gardens, curb extensions, planter gardens, porous and pervious pavements, and nature-based stormwater management practices
- Water harvesting devices such as rain barrels and cisterns, and the use of stormwater for non-potable uses
- Open space preservation or cluster development practices

The report was appended to the Town's SWMP during Permit Year 4. A meeting with the Planning Board was held on January 25, 2023 to introduce the recommended updates, and with the Conservation Commission on February 2, 2023. The Town continues to work with their consultant to develop updated regulatory language for future adoption, with bylaw updates anticipated to be presented at Town Meeting in Spring of 2024.

### **Retrofit Properties Inventory**

Below, list remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (must maintain a minimum of 5 sites in inventory until less than 5 sites remain):

- 1) Avery Elementary School
- 2) Dedham High School
- 3) 34 Milton Street
- 4) Dedham Public Works
- 5) 37 Brookside Avenue

Below, list all properties that have been modified or retrofitted with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.d of the permit. Non-MS4 owned properties that have been modified or retrofitted with BMPs to mitigate impervious area may also be listed, but must be indicated as non-MS4.

None of the locations from the BMP retrofit inventory report have been modified or retrofitted with BMPs to mitigate impervious area to date. However, design of a retrofit at 34 Milton Street is ongoing, with construction planned for Spring of 2024.

## 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:

### **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:

### **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:

Quarterly SWPPP inspections at the DPW Facility during FY23 were performed by the Town, one of which occurred during wet weather. Design & permitting were completed for structural improvements, including three (3) subsurface in-line hydrodynamic separators to remove trash and debris, sediment, floatables and other larger pollutants and a double catch basin and a plunge pool at the rear of the site to provide erosion control and keep the existing vegetation intact in an effort to slow down the rate of runoff to Mother Brook and allow stormwater to infiltrate and/or naturally be filtered by the existing vegetation. Additionally, a feasibility study for a designated vehicle wash station was completed by Weston & Sampson.

### **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 publicly available website(s):

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

The Neponset River Watershed Association has been collecting water quality data in Dedham and throughout the Neponset River watershed since 1996. Samples are collected by volunteers through the Community Water Monitoring Network and by the Neponset River Watershed Association staff. The data is used to track the health of the Neponset River and its tributaries, and to locate pollution sources for follow-up sampling. There is one permanent monitoring station in Dedham located on Mother Brook. The station is tested for E.coli, total phosphorus, pH, dissolved oxygen, and temperature once per month between May and October. Recommendations related to phosphorus and E.coli levels were identified in the 2022 Water Quality Report, which is attached to the e-mail submission with this Annual Report. The Town will utilize this data, when warranted, during future MS4 compliance initiatives.

#### **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. If any of the above year 5 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 6 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 6 below:

## Part V: Certification of Small MS4 Annual Report 2023

### 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]*