

# Year 6 Annual Report

## Massachusetts Small MS4 General Permit

### Reporting Period: July 1, 2023-June 30, 2024

***\*\*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, 2023 and June 30, 2024 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>

|                                                                                |                                                                        |                                                           |                                                            |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| <b>Impairment(s)</b>                                                           |                                                                        |                                                           |                                                            |
| <input type="checkbox"/> Bacteria/Pathogens                                    | <input type="checkbox"/> Chloride                                      | <input type="checkbox"/> Nitrogen                         | <input type="checkbox"/> Phosphorus                        |
| <input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals |                                                                        |                                                           |                                                            |
| <b>TMDL(s)</b>                                                                 |                                                                        |                                                           |                                                            |
| <i>In State:</i>                                                               | <input type="checkbox"/> Assabet River Phosphorus                      | <input checked="" type="checkbox"/> Bacteria and Pathogen | <input type="checkbox"/> Cape Cod Nitrogen                 |
|                                                                                | <input checked="" type="checkbox"/> Charles River Watershed Phosphorus | <input type="checkbox"/> Lake and Pond Phosphorus         |                                                            |
| <i>Out of State:</i>                                                           | <input type="checkbox"/> Bacteria/Pathogens                            | <input type="checkbox"/> Metals                           | <input type="checkbox"/> Nitrogen                          |
|                                                                                |                                                                        |                                                           | <input type="checkbox"/> Phosphorus                        |
|                                                                                |                                                                        |                                                           | <input type="button" value="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:  

<https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>
- ☒ Updated system map due in year 10 with information from completed catchment investigations
- ☒ 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:

### **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://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

- 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:

### Charles River Watershed Phosphorus TMDL

*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 rate from PCP Area, as identified in Appendix F (lbs/year) [A]:                                     | 2,147 |
| Total phosphorus reduction from all nonstructural controls implemented <b>this reporting period</b> (lbs/year) [B]:            | 20    |
| Total phosphorus reduction from all structural controls installed this reporting period and all previous years (lbs/year) [C]: | 27    |
| 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]: | 3,857 |
|---------------------------------------------------------------------------------------|-------|

- 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
- ☒ Implemented all nonstructural control measures **during this reporting period** and documented the measures and their phosphorus reduction. The nonstructural control measure information:
- ☐ is attached to the email submission
  - ☒ can be found at the following publicly available website:

<https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

- ☐ 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. The structural control measure information:
- ☐ is not applicable; no structural control measures were implemented



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

The Phase 1 PCP: (select one of the following options. If you submitted your PCP last year and have an updated website, please include the website below)

- ☐ was submitted in the Year 5 Annual Report
- ☐ is attached to the email submission
- ☒ can be found at the following publicly available website:

<https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

*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 documentation of each structural control measure remains an ongoing effort and is anticipated to be complete within this calendar year. Specifically regarding the phosphorus reduction in mass/year calculations. The final document will be added to our website following final review and approval.

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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:

## 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: Arbor Day Events**

Message Description and Distribution Method:

Needham hosts events to promote the planting, care, and appreciation of trees. It aims to raise awareness about the environmental, social, and economic benefits trees provide, such as improving air quality, conserving energy, enhancing wildlife habitats, and beautifying communities. Arbor Day encourages individuals, schools, and organizations to participate in tree-planting activities to foster a healthier environment.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

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

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

If yes, describe why the change was made:

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#### **BMP: Septic System Care**

Message Description and Distribution Method:

Distributed to all new applicants for septic system in town. Describes the proper care and maintenance of a septic system.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Department and on website. (18)

Message Date(s): 7/1/2023-6/30/2024

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:

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**BMP: Leaf Collection and Disposal**

Message Description and Distribution Method:

Proper disposal and care of leaves and brush during fall clean-up and throughout the season.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Website posts what is accepted at the RTS at <http://www.needhamma.gov/3104/What-We-Take>. Residents are also welcome to dispose of Leaf Collection every Sunday in November.

Facebook (3,246); Instagram (215)

Message Date(s): 11/2/2023, 11/5/2023, 11/12/2023, 11/19/2023, 11/24/2023, 11/26/2023

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:

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**BMP: Paint Surplus Days**

Message Description and Distribution Method:

Needham offers residents Paint Recycle and Reuse events to safely dispose of paint. Improper disposal can pollute waterways, harm aquatic life, and contaminate soil and water with heavy metals. Paint waste can take up to 700 years to decompose in landfills, and traditional paints often contain harmful additives like lead.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook(3,087); Instagram (293)



Message Date(s): 7/14/2023, 7/15/2023, 8/15/2023, 8/19/2023, 9/16/2023, 10/19/2023, 10/21/2023, 4/18/2024, 4/20/2024, 5/13/2024, 5/18/2024, 6/12/2024, 6/15/2024

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:

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### **BMP: Household Hazardous Waste Day**

Message Description and Distribution Method:

Needham's Household Hazardous Waste event offers residents a safe way to dispose of hazardous materials, preventing exposure to toxic chemicals and protecting both residents and sanitation workers. Proper disposal helps prevent soil, water, and air contamination, safeguarding ecosystems. These events also educate the community on responsible disposal, keeping harmful substances out of landfills and wastewater systems.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (2,192); Instagram (79)

Message Date(s): 10/23/2023, 10/27/2023, 11/1/2023, 11/4/2023

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:

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### **BMP: Clear-a-Basin**

Message Description and Distribution Method:

Communication regarding the importance of keeping catch basins clear of debris.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (13,820); Instagram (340); Other (317)

Message Date(s): 7/10/2023, 8/8/2023, 8/10/2023, 8/18/2023, 10/27/2023, 10/30/2023, 11/6/2023, 11/17/2023, 11/21/2023, 12/1/2023, 1/8/2024, 1/9/2024, 1/12/2024, 3/6/2024, 3/22/2024

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:

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**BMP: Clear-a-Basin**

Message Description and Distribution Method:

Communication regarding the importance of keeping catch basins clear of debris.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (13,820); Instagram (340); Other (317)

Message Date(s): 7/10/2023, 8/8/2023, 8/10/2023, 8/18/2023, 10/27/2023, 10/30/2023, 11/6/2023, 11/17/2023, 11/21/2023, 12/1/2023, 1/8/2024, 1/9/2024, 1/12/2024, 3/6/2024, 3/22/2024

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:

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**BMP: Clear-a-Basin**

Message Description and Distribution Method:

Communication regarding the importance of keeping catch basins clear of debris.

Targeted Audience: Developers (construction)

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (13,820); Instagram (340); Other (317)

Message Date(s): 7/10/2023, 8/8/2023, 8/10/2023, 8/18/2023, 10/27/2023, 10/30/2023, 11/6/2023, 11/17/2023, 11/21/2023, 12/1/2023, 1/8/2024, 1/9/2024, 1/12/2024, 3/6/2024, 3/22/2024

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:

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### **BMP: Clear-a-Basin**

Message Description and Distribution Method:

Communication regarding the importance of keeping catch basins clear of debris.

Targeted Audience: Industrial facilities

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (13,820); Instagram (340); Other (317)

Message Date(s): 7/10/2023, 8/8/2023, 8/10/2023, 8/18/2023, 10/27/2023, 10/30/2023, 11/6/2023, 11/17/2023, 11/21/2023, 12/1/2023, 1/8/2024, 1/9/2024, 1/12/2024, 3/6/2024, 3/22/2024

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:

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### **BMP: Street Sweeping and Town-wide Cleanup**

Message Description and Distribution Method:

Street sweeping and Town-wide Cleanup Days play a vital role in stormwater management by removing debris, litter, and pollutants such as oil, sediment, and heavy metals from roadways before they can wash into storm drains. By preventing these materials from entering stormwater systems, street sweeping reduces the risk of waterway pollution, improves water quality, and helps maintain the efficiency of drainage infrastructure, reducing the likelihood of flooding. It also prevents clogging in storm drains, ensuring better overall stormwater flow and protection of local ecosystems.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Facebook (913)

Message Date(s): 9/25/2023, 3/25/2024, 4/7/2024, 4/26/2024

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:**

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:**

Public participation opportunities for this reporting period included:

RTS Paint Collection

RTS Household Hazardous Waste Day

RTS Leaf Collection

Arbor Day Tree distribution (Park and Recreation) and UTube videos on how to plant a tree (Parks & Forestry)

Needham Garden Club Stormwater Presentation

Needham Harvest Fair informational table and watershed demonstration

DPW Public Forum presentation on DPW activities

## 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**

Percent of Phase II map complete:

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

Town MS4 assets are available in GIS and to the public upon request from our Engineering Division. Maps are updated during the document review process each year and are included in our SWMP, SWPPP, IDDE, O&M and Phosphorus Plans.

### **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:

Needham has taken the approach to delineate the Town into sixteen (16) subwatersheds for comprehensive analysis of one (1) per year, at minimum. This resulted in the identification of 2 new outfalls and subsequent screening activities.

### **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:



<https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

Catchment investigations are conducted as part of the current CCTV inspection program to identify illicit connections. The CCTV inspection program is an ongoing program to inspect 10% of the Town's drainage system every year. The program has proven to be successful in identifying illicit connections and in the future will use composite sampling results to target inspection efforts. Needham has supplemented our in-house capabilities as needed to maintain the inspection commitment. While Needham has historically addressed issues found in catchment areas as they arise, we are in the process of documenting and performing detailed investigations. 29 catchments can be considered complete based on their size ( $\leq 3$  CBs) and water quality indicators out of 182 catchments associated with MS4 outfalls (about 16% 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:

Illicit discharges identified and were removed prior to this permit effective date.

### **Employee Training**

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

Employee training is available via recorded video training for employees with NPDES responsibilities in Needham to take. Managers and supervisors are tasked with ensuring the proper training of their staff members. Employee training of NPDES activities, such as inspections and BMP maintenance, occurs in the field by supervisors and/or as they have designated. Training is recorded in the attached logbook for reference. An in-person training for DPW staff with CCTV responsibilities were also provided a field training by BETA Engineering.

### **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: 190

Number of inspections completed: 186

Number of enforcement actions taken: 1

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

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

#### **Ordinance or Regulatory Mechanism**

Date update was completed (due in year 3): September 19, 2018

Website of ordinance or regulatory mechanism: <https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

**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:

Needham's Stormwater By-law states:

**7.7.3.7 As-Built Drawing**

Except as provided for in Section 7. 7 .3 .4, as-built drawings stamped by a Massachusetts Registered Professional Engineer showing all stormwater management systems shall accompany the as-built Plot Plan at the completion of a project. (213)

Additionally, Planning Board and Zoning Board decisions require an as-built to be submitted.

**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:

The Highway Division provides maintenance and repair services to all Town-owned surface infrastructure, including 260 lane miles of roadway, 160 miles of sidewalk, 246 miles of berm grass/curbing, and several municipal parking lots. The Division oversees all roadway-related construction projects, including curb, sidewalk, and traffic signal installations, as well as street paving.

As surface infrastructure projects are developed, the Highway Division seeks opportunities for impervious pavement reduction and installation or upgrade of stormwater BMPs.

Street design and parking lot specific regulation recommendations under consideration include:

- Allow smaller road width based on traffic flow
- Allow narrower right of way width based on road type
- Require bioretention at cul-de-sac islands
- Allow country drainage and or opening in curbing to all roadside swales/bioretention
- Allow and encourage permeable sidewalks or slope sidewalks to drain to lots
- Provide provisions to reduce parking spaces numbers based on need and/or allow portions of required parking areas to remain lawn area and not be constructed until needed.
- Allow a smaller standard space (9'x18')
- Develop site design checklist to review project site constraints and require inclusion of LID techniques or infiltration

**Green Infrastructure Report**

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

The Assessment of Current Regulations (March 2023) was undertaken with the objective of identifying opportunities to revise municipal regulations to better support LID and green infrastructure options. The review utilized the tool developed by Mass Audubon: Bylaw Review for LID & Climate Smart, Nature-Based Solutions.

Regulations reviewed:

- ☐ Zoning By-laws of the Town of Needham (June 2020)
- ☐ Subdivision Regulations and Procedural Rules of the Planning Board (1993)
- ☐ Article 7 Stormwater (2018)

Needham has taken the resulting recommendations under advisement.

### **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):

Walker Gordon Field  
 Conservation Land on the east side of Charles River Street south of Walker Lane  
 RTS  
 DPW  
 Reservoir B Sewage Pumping Station  
 Defazio Park  
 Chestnut/Lincoln St Parking Lot  
 Claxton Fields  
 Cricket Fields  
 Daley Building  
 Eaton Square Parking Lot  
 Memorial Park  
 Ridge Hill Garage  
 St. Mary Street Water Pumping Station

Needham has developed the Watershed Management Plan to position the Town for the ultimate goal of Total Watershed Management. This plan is intended as a guidance tool in capital improvement planning. A major component of this plan is the delineation of the Town into sixteen (16) subwatersheds. The multi-year subwatershed evaluation plan prioritizes subwatershed areas and provides an opportunity to assess the varied soil types and land uses throughout the town to more effectively evaluate and tailor the resulting BMP recommendations and watershed management techniques. Recommended modifications or installations are evaluated for viability and inclusion during departmental project and the budget planning process. Subsequently, the approved projects are developed into standalone projects, or as a part of a larger capital project as practicable.

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 and the type of BMP(s) implemented. 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.

Walker Pond Improvements have been underway the past three constructions seasons and have included BMPs such as reduced pavement, a filter strip, town sewer access, additional drainage units, water quality treatments and control structure replacement and upgrade. The field adjacent to the pond is also being retrofitted with additional drainage and infiltration improvements that are anticipated to be completed by the end of this calendar year.  
 Claxton Field has received funding and approval for remediation activities that will incorporate some additional mitigation BMPs. That work is anticipated to be reported on the 2025 NPDES Annual Reporting documentation.

## 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: 1,492

Number of catch basins cleaned: 1,492

Total volume or mass of material removed from all catch basins: 151.49 cubic yards

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

Total number of catch basins: 4,311

*If applicable:*

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

Needham has a three-line defense approach for maintaining its MS4 infrastructure to prevent the discharge of pollutants from the MS4 system. If a catch basin is reported to have been >50% full during two consecutive events, the basin will be flagged for review by the Water and Sewer Division for additional investigation as to the root cause of the excessive volume of material. Appropriate mitigation efforts will be made to augment the basin, area or drain as applicable to reduce the level of material present at the next scheduled inspection/cleaning event. As a second line of defense, the drain is inspected with CCTV and flushed of any excessive sediment. Needham also has a brook and culvert program designed to catch large amounts of sediment that may have been missed through catch basin cleaning and drain flushing efforts. Should such mitigation efforts result in no significant change in volume of material, the catch basin will be flagged for additional inspections/cleanings on a more frequent basis to be determined by the Water and Sewer Division.

### 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:

[Select Units]

☒ Weight of material removed:

288.2

tons

### 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: 7



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

Per findings on inspection reports, in conjunction with regular maintenance, identified areas cleaned or repaired as needed.

## **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):

<https://needhamma.gov/4799/Municipal-Separate-Storm-Sewer-System-MS>

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:

Needham has taken the approach to delineate the Town into sixteen (16) subwatersheds for comprehensive analysis of one (1) per year, at minimum, with the following goals:

- ☐ Stormwater System data collection and assessment
- ☐ Creation/Improvement of Town stormwater regulations and bylaws
- ☐ Outfall sampling and monitoring
- ☐ Improve receiving water quality
- ☐ Inventory of Town BMPs/LIDs
- ☐ Identify opportunities to implement infiltration/BMPs/LIDs
- ☐ Public Education
- ☐ Operation and Maintenance of MS4 infrastructure

### **Additional Information**

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.

Needham has continued to face staffing challenges and the impacts of severe weather events have required the diversion of resources to respond to emergency issues. The town remains committed to the NPDES program and is actively pursuing projects to help us reach our goals in stormwater management. Needham has engaged contractors as needed and continues to comply with requirements while also looking at tools and strategies for continued improvement. The success of the completed categories of the pilot improvement project has provided further confidence in our subwatershed approach and we look forward to sharing the progress on subsequent analysis, design and construction activities as we move towards Total Watershed Management within our community.

## Year 7

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

Yes, I agree ☒

- Complete investigations of catchments associated with Problem Outfalls
- Complete investigations of catchments where any information gathered on the outfall/interconnection identifies sewer input

### **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 7 below:

## Part V: Certification of Small MS4 Annual Report 2024

### **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:

Carys Lustig

Title:

DPW Director

Signature:



Digitally signed by Carys Lustig  
Date: 2024.09.26 16:05:38 -04'00'

Date:

9/26/2024

*[Signatory may be a duly authorized  
representative]*