

**Year 4 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2021-June 30, 2022**

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

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

**Part I: Contact Information**

Name of Municipality or Organization:

EPA NPDES Permit Number:

**Primary MS4 Program Manager Contact Information**

Name:  Title:

Street Address Line 1:

Street Address Line 2:

City:  State:  Zip Code:

Email:  Phone Number:

**Stormwater Management Program (SWMP) Information**

SWMP Location (web address):

Date SWMP was Last Updated:

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

## Part II: Self-Assessment

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

**Impairment(s)**

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

**TMDL(s)**

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

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

Clear Impairments and TMDLs

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

**Year 4 Requirements**

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

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

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

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

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

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

Annual Requirements

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

Implementation of maintenance procedures for stormwater facilities managed by the Dept. of Public Works was accomplished this reporting period. We are working with our School and Public Buildings Departments to obtain O&M plans and develop a maintenance schedule and budget for other City-owned facilities.

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

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

- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

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

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

**Chloride**

- Completed the Salt Reduction Plan due in Year 3, updated if necessary
  - The Salt Reduction Plan is attached to the email submission
  - The Salt Reduction Plan can be found at the following website:

<https://www.newtonma.gov/home/showpublisheddocument/63218/637769812266600000>

Annual Requirements

*Public Education and Outreach*

- Included an annual message in November/ December to private road salt applicators and commercial
- industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

*Please fill out the following information on salt usage over Year 4 of the permit. Be sure to include units for amount of salt:*

Type(s) of salt applied:

Amount of salt applied:

*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 website:

<http://apps.newtonma.gov/dpw/streetsweeping/schedule.htm>

- 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:

We prepared a Catch Basin Optimization Plan and record catch basin cleaning and maintenance details in PeopleGIS since September 2019. As we collect and assess this data, we will soon be able to determine the location of catch basins with sumps more than 50% full for 2 consecutive cleaning events. Due to the number of catch basins in our City, it will take 4 years to reach all 2x's under the new tracking system.

**Charles River Watershed Phosphorus TMDL**

Defined the scope of the Phosphorus Control Plan (PCP). *Please select one of the following:*

- The PCP scope is the entire area within our jurisdiction within the Charles River Watershed
- The PCP scope is the urbanized area portion of our jurisdiction within the Charles River Watershed

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

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

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

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

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

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

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

- Yes  
 No

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

We reviewed the Massachusetts Year 2016 Integrated List of Waters (Final listing of the Condition of Massachusetts Waters pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act) published in December 2019 and updated our Stormwater Management Plan (SWMP) to reflect changes since the last report.

Crystal Lake is currently listed as impaired for harmful algal blooms; previously no uses were assessed and no impairments noted.

## 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: Proper Pet Waste Disposal**

Message Description and Distribution Method:

A reminder to pick up and properly dispose of dog waste was published via social media.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

@NewtonDPW has 867 followers. Pet waste bags dumped into our catch basins have significantly declined over the last several years.

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: Septic System Maintenance Reminder**

Message Description and Distribution Method:

A letter and magnet with maintenance tips was mailed to every property listed by our Health Department to have a private septic system. The letter was timed for mailing during EPA's Septic Smart week. Magnets were provided courtesy of EPA.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

This public education letter was mailed to 205 number of households. The reminder is not only beneficial to this small segment of our residents, the responses received help us to refine our septic system list.

Message Date(s): Sept. 23, 2021

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Pollution Prevention from Construction Sites**

Message Description and Distribution Method:

Reminder to use absorbents to prevent construction-related spills from entering our storm drains was posted on our Twitter account.

Targeted Audience: Developers (construction)

Responsible Department/Parties: DPW Construction

Measurable Goal(s):

No significant spills into our storm drains were reported in the fall.

Message Date(s): Sept. 15, 2021

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Fall leaf collection and nutrients**

Message Description and Distribution Method:

A message on the importance of raking, bagging and/or composting leaves for nutrient reduction / water quality and flood mitigation was published in Newton's Green Cart Chronicle fall 2021 newsletter.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Environment Department

Measurable Goal(s):

Newton's Green Cart Chronicle is received by 4,658 contacts. Distribution is via email.

Message Date(s): Nov. 4, 2021



Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

**BMP: Winter Snow and Ice Control Flyer**

Message Description and Distribution Method:

Tri-fold brochure explains different types of de-icers, benefits and best practices to reduce excessive use was posted on our DPW web page and provided at our customer service area.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Information on the responsible use of deicers was provided to residents and local businesses.

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: Proper pet waste disposal campaign**

Message Description and Distribution Method:

Working with the City Clerk's office, information is posted on Dog Licensing web page. The message headline is: Properly Dispose of Pet Waste - it's the Law! A link with a map to pet waste stations was included. A flyer is also provided for walk-in registration.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Over 5,000 dog licenses are issued annually. The owners are made aware of the pet waste disposal law at the time of licensing.

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: Green Lawns and environment**

Message Description and Distribution Method:

Information on the Massachusetts fertilizer law (banning phosphorus containing fertilizers for most residential applications), how to shop for the phosphorus-free fertilizers and the associated environmental benefits was disseminated in one of the Mayor's Update.

Targeted Audience: Residents

Responsible Department/Parties: Mayor's Office and DPW

Measurable Goal(s):

The Mayor's Update is an email based newsletter sent to approximately 35,000 subscribers.

Message Date(s): April 28, 2022

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

Change was made to reach a wider audience.

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:**

On September 1, 2021, after several heavy rain events the Mayor included information in her weekly email update about our Climate Change Vulnerability Assessment and Action Plan and Stormwater Infrastructure Improvement Plan with a link to our stormwater web page. This web page notes how to submit comments on the SWMP, none were received 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:**

Newton has a 311 system and dedicated customer service division. We did not receive any reports of illegal dumping into storm drains during this reporting period.

In FY22, Newton ran 18 household hazardous waste collection events. An estimated 20 tons of household chemicals were collected, including flammable paints, solvents, pesticides, and fertilizers.

On October 17, 2021 at the City's Harvest Fair we hosted multiple tables, including recycling/ composting and stormwater pollution prevention.

Newton's Energy coach and Green Newton organized our first Earth Day festival on April 24, 2022, which was very well attended and included: sustainability & environmental vendors and showcased electric vehicles. Our watershed / stormwater pollution model was one of the children's activities.

We hosted a community rain barrel sale on May 17, 2022.

### **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:*

#### **Screening of Outfalls/Interconnections**

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

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

*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:*

Newton completed the required dry weather outfall screening last year. We continue to monitor outfalls on an as needed basis to support for our IDDE program.

### **Catchment Investigations**

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

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

*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:*

We began IDDE catchment investigations in 2018 and have made steady progress since then, despite impediments caused by the Covid-19 pandemic. With Covid-19 restrictions lifting, we were able to resume building inspections and dye testing to isolate problems. This year we completed investigations in the Laundry Brook watershed (77), Hyde Brook watershed (81) and smaller catchment areas: 32 and 90. We also commenced investigations in the South Meadow Brook watershed (11).

### **IDDE Progress**

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

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

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed:  gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

**Employee Training**

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

IDDE Training on Dec. 15, 2021. Four Phosphorus Control Planning workshops in the spring 2022.

**MCM4: Construction Site Stormwater Runoff Control**

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

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

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

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

### Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

### As-built Drawings

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

Number of as-built drawings received:

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

### Retrofit Properties Inventory

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

1. Zervas Elementary School, Beethoven Rd - complete
2. Angier Elementary School, Beacon Street - complete
3. Cabot School - complete
4. Franklin Elementary School, Derby Street
5. Newton Main Library, Homer Street, Newton Centre – under construction
6. Crafts Street DPW Yard

## 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:  [Select Units]
- 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:

Parking lot / DPW yard sweeping is often needed after a SWPPP inspection, particularly in the spring. Several catch basins needed to be cleaned, as well.

## **Additional Information**

### **Monitoring or Study Results**

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

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

<https://www.newtonma.gov/government/public-works/water-sewer-division/stormwater-resources>

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 Crystal Lake Management Plan and follow-up nutrient management reports are provided on the City's stormwater webpage.

### **Additional Information**

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

### **COVID-19 Impacts**

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

### **Activities Planned for Next Reporting Period**

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

Yes, I agree

#### **Annual Requirements**

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in



- connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

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

## Part V: Certification of Small MS4 Annual Report 2021

### 40 CFR 144.32(d) Certification

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

Name:  Title:

Signature:  Date:

*[Signatory may be a duly authorized representative]*

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

### Annual Report Submission

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

EPA: [stormwater.reports@epa.gov](mailto:stormwater.reports@epa.gov)

MassDEP: [Stormwater.DEP@mass.gov](mailto:Stormwater.DEP@mass.gov)

### Paper Signature:

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

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