

**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><u>Impairment(s)</u></b>			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<b><u>TMDL(s)</u></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://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/filesfrom628/Cambridge\\_IDDE\\_Program\\_Year6\\_Compiled.pdf](https://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/filesfrom628/Cambridge_IDDE_Program_Year6_Compiled.pdf)  
(see Appendix C)

- 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:

NA

### **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:

NA

### **Chloride**

#### 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

The following type(s) of salt were applied **during this reporting period (year 6)**:

- Sodium chloride
- Calcium chloride

- Potassium chloride
- Magnesium chloride
- Brine solution

Total amount of salt applied **during this reporting period (year 6) including units:**

11,500 gallons brine; 1,200 tons sodium chloride

*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 was listed as a new impairment for Alewife Brook (MA71-20) in the Final 2018/2020 Massachusetts Integrated List of Waters, which was finalized in November 2021. To address this new impairment, Cambridge will develop a Salt Reduction Plan which will include measures to track salt application. Following Appendix H requirements, because Cambridge does not have a Salt Reduction Plan already in place, the Salt Reduction Plan will be completed within 3 years of becoming aware of the chloride impairment (i.e., by November 2024) and fully implemented within 5 years of becoming aware of the chloride impairment (i.e., by November 2026).

## 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*

- Installed a structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries. The type of BMP installed is (*e.g. biofiltration*):

Infiltration trenches, dry wells, and porous pavement were installed in 2021 (Permit Year 3) at Glacken Field, which is within the Mystic River Watershed. In Year 6, the City developed proposed signage that will be installed in Permit Year 7 to promote the demonstration project and support public education around green infrastructure.

- 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:

- For sites within the Charles River watershed, see Phosphorus Control Plan Year 6 Performance Evaluation Appendix A available online at: <https://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports>
- For sites within the Mystic River watershed, see PSIR Year 6 Appendix C available online at: <https://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports>

Total estimated phosphorus removed in **lbs/year** from the installed BMPs: 408.8

*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:

"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": The total estimated phosphorus removed from the installed BMPs reported above (408.8 lbs/year) is Citywide within separated areas. For BMPs within the Charles River watershed, City-owned BMPs total 296.6 lbs/year and privately-owned BMPs total 109.6 lb/year. For BMPs within the Mystic River watershed, City-owned BMPs total 2.6 lbs/year. Phosphorus reduction from privately owned BMPs within the Mystic River watershed is not tracked at this time.

## **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.cambridgema.gov/services/streetcleaning>

- 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:

"Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full": The City finalized the development of a Catch Basin Optimization strategy during Permit Year 2. Implementation of this Catch Basin Optimization strategy will begin with the completion of data collection for all existing catch basins within the MS4 area. The City began tracking catch basin sediment depth during inspections at the end of Permit Year 1, and through Permit Year 6 has completed an initial inspection of 2,894 out of 3,241 catch basins within the MS4. Our catch basin optimization and prioritization program will be implemented for the cleaning of sumps greater than 50% full once all existing catch basins have had an initial cleaning and inspection.

## **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]:	1,129
Total phosphorus reduction from all nonstructural controls implemented <b>this reporting period (lbs/year) [B]:</b>	8.5
Total phosphorus reduction from all structural controls installed this reporting period and all previous years (lbs/year) [C]:	406.2
Phosphorus load increase due to development incurred since 2005 in lbs/year [D]:	1,295
Current phosphorus export rate from the PCP Area in lbs/year [=A-(B+C)+D from above]:	2,009.3

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:

See Phosphorus Control Plan Appendix II found online at: <https://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/charlesriverphosphoruscontrolplan.pdf>

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:

See Phosphorus Control Plan Year 6 Performance Evaluation Appendix A found online under Year 6 documents at: <https://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports>

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://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/charlesriverphosphoruscontrolplan.pdf>

*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 increase due to development incurred since 2005 in lb/yr [D]": As discussed in the PCP submitted with the Year 5 annual report, the current phosphorus load also increased by 125 lbs/year to account for separated areas not included in EPA's baseline load calculations. This load was added to Cambridge's allowable load in the PCP, but is not reported under Line [D] because this 125 lb/yr load increase is not due to development incurred since 2005. The City's estimation of current phosphorus export rate from the PCP Area reported above follows the formula given using Lines [A], [B], [C], and [D] is 2,009.3 lbs/yr and reported in the Year 6 PCP Evaluation is 2,134.3 lbs/year.

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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:

NA

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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:

NA

### 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:

• Year 2:

A new outfall was opened at Talbot Street at the end of June 2020 within the Charles River (MA 72-38) section of the river. This outfall was included in the updated SWMP.

Waterbody impairments for Alewife Brook (MA 71-04), Charles River (MA 72-36) and Charles River (MA 72-38) were revised based upon the Massachusetts Year 2016 Integrated List Waters. These updates were included in the updated SWMP for Year 2.

• Year 3:

A new outfall was opened at Lechmere Canal (D03D) within the Charles River (Segment MA 72-36). This outfall was included in the updated SWMP for Year 3.

• Year 4:

The listing of chloride as a new impairment to the Alewife Brook segment MA71-20 and Little River segment MA71-21 in the Final 2018/2020 §303(d) was noted, but not yet incorporated into the City's SWMP.

• Year 5:

Six (6) new outfalls were added along Lechmere Canal (D02A, D02B, D02C, D02D, D02E, and D03E) that were identified as City owned. Four (4) of these outfalls along the north side of the canal were determined to be exempt from IDDE requirements because they serve park areas only with no sanitary infrastructure nearby. Additional field investigation is required for the two (2) outfalls on the south side of the canal to determine priority ranking. These updates were incorporated into the City's SWMP and IDDE Plan in Permit Year 5.

Waterbody impairments for Alewife Brook (MA71-20), Little River (segments MA71-21 and MA71-22), Millers River (MA72-31), and Charles River (segments MA72-36 and MA72-38) were updated based upon the Final 2018/2020 Integrated List Waters. These updates were incorporated into the City's SWMP in Permit Year 5.

• Year 6:

Two (2) new outfalls were added to the City's SWMP and IDDE Plan in Permit Year 6. Outfall D02F along Lechmere Canal (Charles River Segment MA 72-36) was categorized as excluded. Construction of outfall D30 at Willard Street (Charles River Segment MA 72-38) was completed during Permit Year 6 as part of a sewer separation project and categorized as High Priority. Outfalls D02B and D03E along Lechmere Canal were categorized as excluded based on additional field investigations completed during Permit Year 6.



## Part IV: Minimum Control Measures

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

### MCM1: Public Education

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

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

#### **BMP: #1 - Annual Message on Grass Clippings**

Message Description and Distribution Method:

- Social Media Posts: Cambridge is participating in the Mystic River Watershed Association's (MyRWA) Mystic River Stormwater Education Collaborative (Stormwater Collaborative). Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about the impact of grass clippings on water quality and proper use and disposal. MyRWA also posted these messages on their social media platforms.
- Additional educational messages during this reporting period also included information on the topic of grass clippings: BlueBike Station Posters (see BMP #13).

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

- DPW Facebook Post: 200 impressions, 2 engagements and 59 video views
- DPW Twitter Post: 84 impressions, 5 engagements, and 91 video views
- MyRWA Instagram Posts: IG Reel had 1,051 impressions, 904 people reached, and 1,021 video plays; IG Story had 105 impressions and 105 people reached

Message Date(s):

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

#### **BMP: #2 - Annual Message on Fertilizer**

Message Description and Distribution Method:

- Social Media Posts: Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about proper fertilizer application and encouraging phosphorus free fertilizer.
- Additional educational messages during this reporting period also included information on the topic of fertilizer: BlueBike Station Posters (see BMP #13).

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW, MyRWA

Measurable Goal(s):

- DPW Facebook Posts: 5/28 post had 171 impressions, 4 engagements and 42 video views; 6/9 post had 181 impressions, 5 engagements, and 39 video views
- DPW Twitter Posts: 5/28 post had 204 impressions, 3 engagements and 53 video views; 6/9 post had 283 impressions and 67 video views

Message Date(s):

- DPW Facebook Posts: May 28, 2024 and June 9, 2024
- DPW Twitter Posts: May 28, 2024 and June 9, 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:

NA

### **BMP: #3 - Annual Message on Leaf Litter**

Message Description and Distribution Method:

- Social Media Posts: Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about the impact of leaves on water quality and encouraging proper collection and disposal.
- Recycling E-Newsletter: Cambridge included a Clean Water Tip in the monthly DPW Recycling E-Newsletter on leaf litter and encouraging proper disposal by bagging for yard waste pickup to help prevent street flooding and reduce stormwater pollution.
- Letters to Homeowners: Letters were mailed to homeowners in an area where a resident reported improper yard waste disposal in the curblin. These letters reminded residents not to sweep or dump leaves or other yard waste into gutters or storm drains and discussed the impact of yard waste disposal on water quality.
- Be a Leaf Hero Flyer: DPW displayed a flyer in the front lobby encouraging residents to keep fallen leaves out of the streets.
- Additional educational messages during this reporting period also included information on the topic of leaf litter, including BlueBike Station Posters (see BMP #13), Street Sweeping (see BMP #10) and Storm Stewards (see BMP #19).

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW, MyRWA

Measurable Goal(s):

- DPW Facebook Post: 423 impressions and 4 engagements
- DPW Twitter Post: 433 impressions and 9 engagements
- DPW Recycling E-Newsletter: 10/18 sent to 10,103 subscribers and 5,980 emails opened; 12/4 sent to 10,087 subscribers and 6,092 emails opened
- Letters to Homeowners: 10 letters mailed
- Be a Leaf Hero Flyer: estimated 5 views per day

- DPW Facebook Post: October 22, 2023
- DPW Twitter Post: October 22, 2023

Message Date(s):

- DPW Recycling E-Newsletter: October 18, 2023 and December 4, 2023
- Letters to Homeowners: August 4, 2023
- Be a Leaf Hero Flyer: October 16, 2023 to January 8, 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:

NA

#### **BMP: #4 - Annual Message on Pet Waste**

Message Description and Distribution Method:

- Canines for Clean Water Campaign: DPW with assistance from the Cambridge Water Department continued to promote the Canines for Clean Water campaign to inform pet owners of their responsibilities regarding pet waste management. As part of this campaign, residents are able to receive a free pet waste bag dispenser when they commit to picking up after their pet and never throwing the waste bag into a storm drain. The Water Department promoted this campaign through a passive display area with dog waste dispensers, pledge information and a flyer discussing the reasons why it is important to pick up after your pet. Visitors to Cambridge Water Department/Fresh Pond Reservation were able to take dog waste bag dispensers and flyers were also posted on public message boards adjacent to popular walking paths. DPW promoted this program at public outreach events, including Arts in the Park, Cambridge Science Festival, DPW Earth Day, The Port Party, Cambridge Arts River Festival, Riverside Neighborhood Appreciation Day and Fresh Pond Day.
- Social Media Posts: Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about the impact of pet waste on water quality and encouraging proper disposal. MyRWA also posted these messages on their social media platforms.
- The Animal Commission continues to include an informational poster with each dog license sent out in the mail about the importance of picking up after pets and the impact to waterways. This year the Animal Commission also included a dog waste flyer with dog license renewal emails. The Animal Commission maintains several brochures on their website with information about proper pet waste management and how it relates to stormwater.
- DPW Recycling and Forest Friends E-Newsletters: Cambridge included a Clean Water Tip in the monthly DPW Recycling E-Newsletter on pet waste and encouraging proper disposal by always throwing pet waste bags in the trash, and never down a storm drain. A similar message was included in the Forest Friends monthly E-Newsletter.
- Additional educational messages during this reporting period also included information on the topic of pet waste: BlueBike Station Posters (see BMP #13).

Targeted Audience: Residents

Responsible Department/Parties: DPW, Animal Commission, Water Department, MyRWA

Measurable Goal(s):

- Canines for Clean Water campaign: 18 forms signed total (6 pledges signed at Arts in the Park, 2 pledges signed at Cambridge Science Festival, 9 pledge forms signed at DPW Earth Day Event, and 1 pledge form signed at Riverside Neighborhood Appreciation Day). 7 pet waste brochures distributed total (3 at the Port Party, 1 at Cambridge Arts River Festival, 1 at Fresh Pond Day, and 2 at Cambridge Science Festival).
- Water Department: 52 dog waste dispensers taken at Fresh Pond display (indicating pledge was taken), 3-6 flyers taken, and flyers posted on four bulletin boards with 1,500 estimated views per day based on Fresh

Pond Reservation people counts.

- DPW Facebook Post: 431 impressions and 18 engagements
- DPW Twitter Post: 206 impressions and 1 engagement
- MyRWA Facebook Post: 1,141 impressions and 1,127 people reached
- Animal Commission Flyers: 4,200 renewal emails sent and 50 letters mailed; 2 online views of pet waste brochures on Animal Commission website
- DPW E-Newsletters: Recycling sent to 10,221 subscribers and 5,699 emails opened; Forest Friends sent to 562 subscribers and 325 emails opened

- Canines for Clean Water campaign: Arts in the Park 10/14, Cambridge Science Festival 10/1, DPW Earth Day Event 4/13, Riverside Neighborhood Appreciation Day 4/28, The Port Party 6/4, Cambridge Arts River Festival 6/15, and Fresh Pond Day 6/22.

• Water Department display: July 2023 - June 2024

Message Date(s):

- DPW Facebook Post: April 23, 2024
- DPW Twitter Post: April 23, 2024
- MyRWA Facebook Post: April 30, 2024
- Animal Commission Flyers: February 6, 2024 (emails) and February 8, 2024 (letters)
- DPW E-Newsletters: Recycling May 15, 2024; Forest Friends May 16, 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:

NA

**BMP: #5 - Annual Message on Septic Systems Maintenance**

Message Description and Distribution Method:

Letters were mailed to property owners and businesses where the sanitary connection is unknown discussing the proper care of septic systems and requesting updated information regarding a possible connection to the sanitary system. Note: The majority of properties in Cambridge are directly connected to the sanitary system. The City keeps an inventory of properties where the sanitary connection is unknown, which is used to identify a list of properties with the potential for septic systems.

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

8 letters total. 7 letters were mailed to each of the property owners. In addition, 1 letter was mailed to the tenant of the commercial property in addition to the letter sent to the owner of the property.

Message Date(s): October 5, 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:

NA

### **BMP: #6 - Annual Message on Salts and De-icers**

Message Description and Distribution Method:

- Social Media Posts: Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about the impact of salts/de-icers on water quality and encouraging proper use. MyRWA also posted these messages on their social media platforms.
- DPW Snow Center website: The City maintained the Snow Center website, which includes guidance for residents on proper snow and ice management (using minimal amount of salt/de-icer needed; not using sand because it clogs catch basins and not using rock salt because it harms vegetation).
- DPW Flyer: DPW developed a flyer summarizing proper snow and ice removal to help protect local waterways (clear snow first, apply de-icer sparingly etc.). This flyer was posted on the DPW's stormwater webpage for residents and also displayed in DPW's front lobby.
- Outreach to Commercial/Industrial Users: DPW mailed oversized postcards to commercial and industry property owners in the Mystic River Watershed to inform them of the impact of salt/de-icer on water quality and encouraging best practices.
- Snow and Ice Violation Tags: DPW updated language on Snow and Ice Violation tickets to also include best practices to keep sidewalks clear and dry while protecting water quality.
- DPW Recycling and Forest Friends E-Newsletters: Cambridge included a Clean Water Tip in the monthly DPW Recycling E-Newsletter on salts and de-icers encouraging proper use and application rates. A similar message was included in the Forest Friends monthly E-Newsletter.
- Storm Stewards Salt Brochures: As part of Cambridge's Storm Stewards program, DPW developed a flyer to discuss using less salt and de-icer is one way residents can protect water quality. DPW distributed the flyer at public events including The Port Party, Cambridge Arts River Festival, and Fresh Pond Day.

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities; Industrial Facilities

Responsible Department/Parties: DPW, MyRWA

Measurable Goal(s):

- DPW Facebook Posts: 1/8 post had 690 impressions, 31 engagements and 237 video views; 1/29 post had 496 impressions, 28 engagements and 189 video views
- DPW Twitter Posts: 1/8 post had 455 impressions, 10 engagements and 125 video views; 1/29 post had 257 impressions, 7 engagements, and 88 video views
- MyRWA Facebook Post: 317 impressions and 307 people reached
- DPW Snow Center Website: 32,524 views
- DPW Salt Flyer in lobby: estimated 5 views per day
- Outreach to Commercial/Industrial Users: 131 flyers mailed (37 returned not delivered)
- Snow and Ice Violation Tags: 0 issued this permit year (will be used moving forward)
- DPW E-Newsletters: Recycling sent to 10,165 subscribers and 6,040 emails opened; Forest Friends sent to 522 subscribers and 353 emails opened
- Storm Stewards Salt Brochures: 6 brochures distributed total (2 at The Port Party, 2 at Cambridge Arts River Festival, and 2 at Fresh Pond Day).

- DPW Facebook Posts: Jan 8 and Jan 29
- DPW Twitter Posts: Jan 8 and Jan 29
- MyRWA Facebook Post: Jan 6

Message Date(s):

- DPW Snow Center Website: July 2023 - June 2024
- DPW Salt Flyer in lobby: January 2024
- Outreach to Commercial/Industrial Users: Jan 30
- Snow and Ice Violation Tags: finalized Feb 27
- DPW E-Newsletters: Recycling Feb 8; Forest Friends Feb 8
- Storm Stewards Salt Brochures: The Port Party June 4, Cambridge Arts River Festival June 15, and Fresh Pond Day June 22

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:

NA

**BMP: #7 - Pollution Prevention for Commercial and Industrial Facilities**

Message Description and Distribution Method:

- Industrial Sites: DPW mailed flyers to industrial property owners to inform them of best practices for storage and handling of chemicals and hazardous materials to protect water quality, including storing materials in covered containers, keeping sites clean and organized, labeling all materials, and checking storage areas for leaks and spills.
- Letters to Bin Cleaning Companies: Letters were mailed to two local recycling and trash bin cleaning companies after a resident reported wash water in the curblin. Both companies responded to the letter and said they will follow best practices for wash water disposal.
- Letter to Car Detailing Company: A letter was sent to a car detailing company after a resident reported wash water in the curblin. DPW staff had a conversation with the business owner and followed up with a letter.

Targeted Audience: Businesses, Institutions and Commercial Facilities; Industrial Facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

- Industrial Sites: 41 flyers mailed (6 returned not delivered)
- Letters to Bin Cleaning Companies: 2 letters mailed, 2 companies reached
- Letter to Car Detailing Company: 1 letter mailed

Message Date(s):

- Industrial Sites: June 17
- Letters to Bin Cleaning Companies: Sept 5
- Letter to Car Detailing Company: Feb 8

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:

NA

**BMP: #8 - Dumpsters and Trash Pick-up**

**Message Description and Distribution Method:**

- Social Media Posts: Using materials supplied by MyRWA, DPW posted on social media (facebook and twitter) about picking up trash to help keep local waterways clean. MyRWA also posted these messages about trash pick-up on their social media platforms.
- Dumpster Flyer Display: DPW displayed a flyer on how to stormwater proof your dumpster at the DPW permit desk for visitors and staff.

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities; Developers (construction)

Responsible Department/Parties: DPW, MyRWA

**Measurable Goal(s):**

- DPW Facebook Posts: 8/21 had 291 impressions, 2 engagements, and 57 video views; 9/1 had 300 impressions, 1 engagement and 75 video views
- DPW Twitter Post: 491 impressions, 10 engagements, and 120 video views
- MyRWA Facebook Post: 116 impressions and 110 people reached
- Dumpster Flyer Display: estimated 5 views per day; 3 flyers taken

**Message Date(s):**

- DPW Facebook Posts: Aug 21 and Sept 1
- DPW Twitter Post: Aug 21
- MyRWA Facebook Post: Aug 16
- Dumpster Flyer Display: July 2023 - June 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:

NA

**BMP: #9 - Construction Erosion and Sediment Control****Message Description and Distribution Method:**

- Annual Training: DPW holds weekly, virtual construction meetings at the beginning of each week during the construction season to discuss projects, coordination, and reminders about additional erosion and sediment control measures that need to be taken prior to rain events. During one of these meetings at the start of the 2024 construction season, DPW gave a training on the importance of erosion and sediment control on active construction sites, types of controls, and best practices for site management. The audience included contractors, utility companies, municipal staff responsible for construction management and the major universities. The presentation slides were included with the meeting minutes.
- Utility Coordination Letter: At the start of the construction season, DPW sends a letter to contractors with regulations for work in the public right of way and expectations for projects within the City of Cambridge. This letter includes the requirement that erosion and sediment control is required for all project sites disturbing soil and provides a list of best practices that should be used.
- Presentation to Small Contractors: DPW gave a training to small contractors doing work in the City that included information on the importance of erosion and sediment control and best practices to minimize sediment migration. This presentation is targeted towards small contractors working on smaller projects that would not attend weekly construction meetings.
- Excavation Permits: Erosion and Sediment Control information and requirements are attached to all issued Excavation Permits.

• Construction Erosion Control Flyer Display: DPW displayed a flyer on best practices for construction sites to manage erosion and sedimentation at the DPW permit desk for visitors and staff.

Targeted Audience: Developers (construction)

Responsible Department/Parties: DPW

Measurable Goal(s):

- Annual Training: 77 people attended; 211 people were emailed the meeting minutes with the training slides
- Utility Coordination Letter: emailed to 211 people
- Presentation to Small Contractors: 35 people attended the presentation (23 contractors and 12 DPW staff)
- Excavation Permits: 1,223 permits issued
- Construction Erosion Control Flyer Display: estimated 5 views per day

Message Date(s):

- Annual Training: June 3
- Utility Coordination Letter: May 8
- Presentation to Small Contractors: April 2
- Excavation Permits: July 2023 - June 2024
- Construction Erosion Control Flyer Display: July 2023 - June 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:

NA

### **BMP: #10 - Street Sweeping Program**

Message Description and Distribution Method:

- City of Cambridge Social Media: The City of Cambridge posted on facebook reminding residents to move their car at the start of the street cleaning season and again before the last sweep of the year to remove any remaining leaves. These messages highlighted the importance of the City's street sweeping program for water quality.
- DPW News Release: DPW drafted two news releases on the City's street cleaning program reminding residents the program is aimed at improving the water quality of storm water discharged to the Charles River and Alewife Brook. One news release was targeting the start of the sweeping season and one was targeting the fall sweep and the importance of removing leaves from the street.
- City of Cambridge Daily Update Emails: The City of Cambridge included a link to the DPW News Releases on street cleaning in twelve (12) Daily Update Emails, seven (7) in the spring and five (5) in the fall. A preview of the DPW News Release is included in the body of the email with a link to the full news release on DPW's website.
- Street Cleaning Webpage: DPW maintained a street cleaning webpage, which contains information on the importance of street sweeping for water quality and the City's monthly sweeping schedule.
- Street Cleaning CodeRed Message: The City of Cambridge sent a message reminding residents to move their car for street cleaning to help remove leaves from the street through the CodeRed system.
- Recycling E-Newsletter: Cambridge included a Clean Water Tip in the monthly DPW Recycling E-Newsletter on the impact of the City's street cleaning program and reminding residents to move their vehicles.

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities; Industrial Facilities



Responsible Department/Parties: DPW, City of Cambridge

Measurable Goal(s):

- City of Cambridge Facebook Posts: 11/3 post had 856 impressions and 40 engagements; 3/30 post had 1,334 impressions and 16 engagements
- DPW News Releases: 10/30 had 780 views; 3/25 had 568 views
- City of Cambridge Daily Update Emails: 11/2 email sent to 16,003 subscribers with 192 clicks on street cleaning story; 11/3 email sent to 15,994 subscribers with 78 clicks on street cleaning story; 11/4 email sent to 15,981 subscribers with 49 clicks on street cleaning story; 11/5 email sent to 15,978 subscribers with 72 clicks on street cleaning story; 11/6 email sent to 15,994 subscribers with 50 clicks on street cleaning story; 11/7 email sent to 15,993 subscribers with 38 clicks on street cleaning story; 11/8 email sent to 15,983 subscribers with 23 clicks on street cleaning story; 3/27 email sent to 14,952 subscribers with 116 clicks on street cleaning story; 3/28 email sent to 14,990 subscribers with 71 clicks on street cleaning story; 3/29 email sent to 14,988 subscribers with 32 clicks on street cleaning story; 3/30 email sent to 14,983 subscribers with 29 clicks on street cleaning story; 3/31 email sent to 14,980 subscribers with 40 clicks on street cleaning story
- Street Cleaning Webpage: 43,434 views during this reporting period
- Street Cleaning CodeRed Message: sent to 16,100 subscribers
- Recycling E-Newsletter: sent to 10,087 subscribers with 6,092 emails opened

Message Date(s):

- City of Cambridge Facebook Posts: Nov 3 and March 30
- DPW News Releases: Oct 30 and March 25
- City of Cambridge Daily Update Emails: Nov 2 - Nov 8; March 27 - March 31
- Street Cleaning Webpage: July 2023 - June 2024
- Street Cleaning CodeRed Message: Nov 20
- Recycling E-Newsletter: Dec 4

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:

NA

### **BMP: #11 - Rain Barrel Distribution Program**

Message Description and Distribution Method:

- Distribution Event: DPW sponsored a discounted rain barrel program for residents with The Great American Rain Barrel Company. Advertising for the program (DPW Social Media Posts, DPW News Release, and City of Cambridge Daily Update emails) included information for residents about how capturing rainwater for later use helps to reduce stormwater runoff and prevent localized flooding.
- DPW E-Newsletters: The DPW Recycling monthly newsletter included information on the rain barrel program and promoted the benefits of using a rain barrel including capturing rainwater to reduce runoff, lowering municipal water demand and improving residential stormwater management. A similar message was included in the Forest Friends newsletter.

Targeted Audience: Residents

Responsible Department/Parties: DPW, City of Cambridge

Measurable Goal(s):

- Distribution Event: 56 rain barrels were distributed
- DPW Facebook Post: 481 impressions and 6 engagements
- DPW Twitter Post: 295 impressions and 12 engagements
- DPW News Release: 1,549 views
- City of Cambridge Daily Update Emails: 4/12 email sent to 15,046 subscribers with 355 clicks on rain barrel story; 4/13 email sent to 15,049 subscribers with 112 clicks on rain barrel story; 4/14 email sent to 15,051 subscribers with 61 clicks on rain barrel story; 4/15 email sent to 15,052 subscribers with 73 clicks on rain barrel story; 4/16 email sent to 15,064 subscribers with 64 clicks on rain barrel story; 4/17 email sent to 15,063 subscribers with 40 clicks on rain barrel story; 4/18 email sent to 15,070 subscribers with 52 clicks on rain barrel story
- DPW E-Newsletters: Recycling sent to 10,148 subscribers with 5,898 emails opened; Forest Friends sent to 536 subscribers with 359 emails opened

Message Date(s):

- Distribution Event: April 30
- DPW Facebook Post: April 9
- DPW Twitter Post: April 9
- DPW News Release: April 1
- City of Cambridge Daily Update Emails: April 12 - 18
- DPW E-Newsletters: Recycling March 11; Forest Friends April 10

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:

NA

**BMP: #12 - Fats, Oils, and Grease (FOG) Inspection Program**

Message Description and Distribution Method:

- Inspections: DPW completes inspections for proper management of fats, oils and grease at restaurants and other businesses with grease traps. At these inspections, DPW distributes brochures on proper management of FOG and discusses the impact of FOG management on sewer backups with businesses owners. A version of the FOG flyer is available on the City's stormwater webpage for businesses.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

40 inspections with brochures distributed at each

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:

NA

### **BMP: #13 - Stormwater Posters at Bluebike Stations**

Message Description and Distribution Method:

Working with MyRWA, DPW designed a stormwater poster outlining what is stormwater runoff, what the City is doing to help improve stormwater (focusing on the street cleaning program), and what residents can do to reduce their contribution to pollution. The poster focused on encouraging residents to pick up after their pets, use phosphorus free fertilizer, and collect grass clippings and leaf litter for yard waste pickup. These posters were printed and placed at BlueBike stations throughout the City in highly visible areas. This poster was also displayed in the front lobby at DPW.

Targeted Audience: Residents; Businesses, Institutions and Commercial Facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

11 posters were installed. Estimated 100 views/day at each of the 11 stations for a total of 101,200 views. Poster in DPW lobby estimated 5 views/day.

Message Date(s): July 1, 2023 - October 1, 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:

NA

### **BMP: #14 - City Hall Stormwater Program Display**

Message Description and Distribution Method:

The City has a large display (approximately 6ft by 12ft) that contains information about stormwater and water quality, describes the City's stormwater management program, and educates the public on how individuals can keep the City's waters clean. This display was put up in City Hall in a high traffic hallway on the main floor for City staff and members of the public to view.

Targeted Audience: All - Residents; Businesses/Institutions/Commercial; Developers; Industrial

Responsible Department/Parties: DPW

Measurable Goal(s):

Estimated 30 views/day for 75 days (excluding weekends and holidays) for a total of 2,250 potential views.

Message Date(s): March 12 - June 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:

NA

### **BMP: #15 - Stormwater Website and Youtube Videos**

Message Description and Distribution Method:

- Stormwater Website: DPW maintains a stormwater management webpage that has a main page with general information about stormwater in Cambridge, the City's stormwater program and initiatives, and work completed under the MS4 Permit. The website also has separate pages for information relevant to each of the target audiences - Residents, Developers (construction), Industrial Facilities and Businesses/Institutions/Commercial facilities.
- Youtube Videos: DPW developed two (2) informational videos to highlight ongoing efforts to keep the City's receiving waters clean as part of its Stormwater Program during Year 3. Both of these videos (18 minutes and 2 minutes) are maintained on the City's stormwater website. The 18-minute video explores what happens to rain or snowmelt once it hits the ground, why it matters, and the role the city, residents, businesses, developers, contractors, and institutions play in improving water quality. The 2-minute video focuses on what the City is doing to protect waterways.

Targeted Audience: All - Residents; Businesses/Institutions/Commercial; Developers; Industrial

Responsible Department/Parties: DPW

Measurable Goal(s):

- Stormwater website: main page 2,685 views; residents page 238 views; developers page 442 views; businesses page 24 views; industry page 25 views
- Youtube video (18-minutes): 544 total views; 9 new views within this reporting period
- Youtube video (2-minutes): 617 total views; 75 new views within this reporting period

Message Date(s): July 2023 - June 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:

NA

### **BMP: #16 - Water Quality and Combined Sewer Overflows**

Message Description and Distribution Method:

- DPW News Releases: DPW had several news releases related to combined sewer overflows and water quality, including public health warnings after CSO events and information on the CSO Annual update.
- CSO Public Meeting: DPW, the City of Somerville and the Massachusetts Water Resources Authority held a joint virtual public meeting to discuss collaborative efforts to further reduce CSOs and water quality.
- CSO Webpages: DPW maintains webpages with information on the CSOs and the updated CSO Control Plan and how residents can learn more about the process.

Targeted Audience: Residents; Businesses/Institutions/Commercial

Responsible Department/Parties: DPW

Measurable Goal(s):

- DPW News Releases: 12/12 75 views; 12/19 57 views; 3/25 51 views; 4/17 68 views; 5/31 20 views
- CSO Public Meeting: 243 attendees and meeting recording has 122 views
- CSO Webpages: main page 940 views; updated CSO Plan page 572 views

Message Date(s):

- DPW News Releases: Dec 12, Dec 19, March 25, April 17, May 31
- CSO Public Meeting: November 15
- CSO Webpages: July 2023 - June 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:

NA

### **BMP: #17 - Climate Change and Resiliency**

Message Description and Distribution Method:

- CityView Newsletter: The summer 2023 CityView newsletter included an article on Cambridge's Sustainability Initiatives and how the city is addressing climate change and building resilience. The article included a discussion on flood-resilient infrastructure, including rain gardens, and how integrating green infrastructure into street reconstruction projects maximizes the co-benefits of flood mitigation and water quality improvements. This newsletter is mailed to all residents and a version is available online and highlights are translated into several other languages. While this article was published online on June 26, 2023, the distribution and advertising of the newsletter on City of Cambridge's social media occurred within this reporting period.
- CambridgeLife Newsletter: The fall 2023 CambridgeLife newsletter included article on highlighting Sewer and Stormwater Infrastructure Investments and how the City is preparing for impacts of climate change. The article discussed the impact of impervious cover on stormwater pollution and flooding and how strategies such as storage, green infrastructure and sewer separation can help address these issues.

Targeted Audience: Residents; Businesses/Institutions/Commercial; Developers

Responsible Department/Parties: DPW, City of Cambridge

Measurable Goal(s):

- CityView Newsletter: 52,000 copies printed and distributed to residents and City buildings
- City of Cambridge Facebook Post: 1,411 impressions and 150 engagements
- City of Cambridge Twitter Posts: 7/10 post had 1,048 impressions and 28 engagements; 7/13 post had 1,030 impressions and 28 engagements; 7/18 post had 1,342 impressions and 29 engagements; 7/31 post had 932 impressions and 24 engagements
- CambridgeLife Newsletter: 56,000 copies printed and distributed to residents and City buildings; 6 online views

- CityView Newsletter advertised on Facebook July 9 and Twitter July 10, 13, 18 and 31

Message Date(s): • CambridgeLife Newsletter: September 25, 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:

NA

### **BMP: #18 - General Stormwater Education and Green Infrastructure**

Message Description and Distribution Method:

- MyRWA Social Media Post: MyRWA posted a video on social media that explains the impact of impervious cover on stormwater runoff and the problem of stormwater pollution.
- DPW Social Media Posts: DPW posted on social media about rain gardens, with information on how rain gardens improve water quality. DPW also posted a video explaining what stormwater runoff is and where common pollutants come from.

Targeted Audience: Residents; Businesses/Institutions/Commercial; Developers

Responsible Department/Parties: DPW, MyRWA

Measurable Goal(s):

- MyRWA Facebook Post: 131 impressions and 121 people reached
- DPW Facebook Posts: 8/7 post had 854 impressions and 58 engagements; 8/13 post had 530 impressions and 18 engagements; 8/18 post had 310 impressions and 9 engagements; 12/18 video post had 284 impressions and 100 video views
- DPW Twitter Post: 446 impressions and 179 video views

Message Date(s):

- MyRWA Facebook Post: Dec 18, 2023
- DPW Facebook Posts: August 7, 13, and 18; Dec 18
- DPW Twitter Post: Dec 18, 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:

NA

### **BMP: #19 - Storm Stewards Program**

Message Description and Distribution Method:

Through collaboration with MyRWA, the City of Cambridge launched a new Storm Stewards program and website this year. Through this program, residents or businesses can claim a storm drain on their street, give it a custom name, and commit to checking on the drain monthly to keep the inlet clear of trash and leaves. Information about the program includes an educational component about the City's drainage system, common stormwater pollutants (such as trash and leaves) and how clogged storm drains can lead to street flooding. This program was advertised through social media, a DPW NewsStory, the City of Cambridge's Daily Update emails, the DPW Recycling E-Newsletter, and posters at Bluebike stations throughout the City. The Storm

Stewards website is publicly available at: <https://cambridge.mysticdrains.org/>

Targeted Audience: Residents, Businesses/Commercial

Responsible Department/Parties: DPW, MyRWA

Measurable Goal(s):

- 209 claimed storm drains by 114 individuals
- DPW Facebook Post: 618 impressions and 10 engagements
- City of Cambridge Facebook Post: 401 impressions (no engagements)
- City of Cambridge Twitter Post: 2,674 impressions and 22 engagements
- DPW News Release: 888 views
- City of Cambridge Daily Update Emails: 3/13 email sent to 14,975 subscribers with 129 clicks on Storm Stewards story; 3/14 email sent to 14,982 subscribers with 77 clicks on Storm Stewards story; 3/15 email sent to 14,997 subscribers with 50 clicks on Storm Stewards story; 3/16 email sent to 15,003 subscribers with 39 clicks on Storm Stewards story; 3/17 email sent to 15,000 subscribers with 49 clicks on Storm Stewards story; 3/18 email sent to 14,943 subscribers with 40 clicks on Storm Stewards story; 3/19 email sent to 14,952 subscribers with 42 clicks on Storm Stewards story
- DPW Recycling E-Newsletter: sent to 10,148 subscribers with 5,898 emails opened
- Bluebike Posters: 8 posters were installed. Estimated 100 views/day at each of the 8 stations for a total of 60,000 potential views.

Message Date(s):

- Storm Stewards Website: March 5 - June 30, 2024 (website was active before March 5, but DPW began promoting the program on this date)
- DPW Facebook Post: April 1
- City of Cambridge Facebook Post: March 16
- City of Cambridge Twitter Post: March 16
- DPW News Release: March 5
- City of Cambridge Daily Update Emails: March 13 - 19
- DPW Recycling E-Newsletter: March 11
- Bluebike Posters: April 16 - June 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:

This is a new BMP this reporting year.

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:**

- Online Posting of the SWMP: Cambridge maintains a copy of the latest version of the SWMP on the DPW

Stormwater Management webpage and provides an email where the public can submit feedback to allow for ongoing public review.

- **Advertised Public Event:** Cambridge DPW set up a booth with stormwater education materials and an interactive stormwater model at the Port Open House on November 9, 2023. This meeting notice was posted on the City's calendar of events and DPW's website as an opportunity for the public to learn more and provide comments on the City's SWMP. Approximately 50 people attended the event, and 15 individuals engaged with the stormwater model and poster boards showing examples of green infrastructure.

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:**

**\*Community/Neighborhood Events:** At each of these events, Cambridge DPW set up a booth with stormwater educational materials. Depending on the event, the booth included two displays that explain the City's stormwater management program, an interactive stormwater and drainage system model, and Enviroscope watershed model, and interactive poster boards with sticky notes for public participation. City staff were available to answer questions on the City's drainage system and stormwater initiatives and talk with residents about pollutants impacting our local waters and actions they can take to help minimize pollution. Materials distributed included brochures on pet waste, fertilizer, leaves and grass clippings, street cleaning, salt and de-icers, and the City's Storm Stewards program. Dwayne the Drain coloring books, pet waste dispensers, Storm Stewards stickers, and Storm Steward paper fans were available as giveaways.

- **Cambridge Science Festival (Oct 1):** Over 400 people interacted with the booth and two (2) dog owners signed the Canines for Clean Water pledge. 11 brochures were distributed on various stormwater topics.
- **Arts in the Park (Oct 14):** Over 50 people interacted with the booth and six (6) dog owners signed the Canines for Clean Water pledge. 14 brochures were distributed on various stormwater topics.
- **The Port Open House (Nov 9):** Approximately 50 people attended the event, and 15 individuals engaged with the stormwater model and poster boards showing examples of green infrastructure.
- **DPW Earth Day Event (April 13):** Over 100 people attended the event and approximately 25 people engaged with the stormwater booth, which focused on pet waste pickup, the City's Storm Stewards program, and rain barrels. Nine (9) dog owners signed the Canines for Clean Water pledge.
- **Riverside Neighborhood Appreciation Day (April 28):** 150 people attended the event. One (1) dog owner signed the Canines for Clean Water pledge. 20 residents entered a raffle to win a free rain barrel.
- **The Port Party (June 4):** Over 300 people attended the event. 13 brochures on various stormwater topics were distributed. 11 pledges to protect water quality with various actions.
- **Cambridge Arts River Festival (June 15):** Approximately 150 people interacted with the stormwater booth. 25 brochures on various stormwater topics were distributed. 15 pledges to protect water quality with various actions.
- **Fresh Pond Day (June 22):** Approximately 75 people interacted with the stormwater booth. 13 brochures on various stormwater topics were distributed. 5 pledges to protect water quality with various actions.

**\*Outreach Activities for Businesses:** The City of Cambridge hosted a Small Business Open House (April 25) for business owners. DPW attended and provided information to business owners on best practices for parking lot maintenance, dumpsters, and fats/oil/grease disposal. 25 business owners attended the event.

**\*Outreach Activities for Children:**

- **CanoeMobile (Oct 5):** Cambridge DPW partnered with MyRWA and Mass Audubon to host a field trip at Magazine Beach Nature Center for 7th and 8th graders from Amigos School in Cambridge. 90 students attended the event. The event had land stations that included an Enviroscope watershed model, USFS wildlife station, and stormwater station with DPW's interactive stormwater model. The event also gave students the opportunity to canoe on the Charles River.



- DPW Roadshow Touch-a-Truck (May 20): Cambridge DPW set up a station with an interactive stormwater watershed model for students that focused on showing where water goes when it rains and how pollutants can be transported to local rivers. Over 400 pre-school, pre-K, and kindergarten students attended the event, which was also open to the public.

- Cambridge Public Schools (May/June): As part of Cambridge 5th grade curriculum, students learn about non-point source stormwater pollution. Students visit the Alewife Stormwater Wetland to see an example of an engineered solution that addresses non-point source pollution from Cambridge streets and other impervious surfaces. Students move through the wetland as water molecules would (settling over time, absorbing through soil & plants and evaporating in the deep pool areas) leaving behind particulates they collected as runoff before they are discharged to the Little River. During this reporting period, 163 students visited the wetland and learned about stormwater runoff.

\*MyRWA Educational Activities: Cambridge is a member of the Mystic River Watershed Association's (MyRWA) Stormwater Education Collaborative. As part of the MyRWA Stormwater Collaborative, MyRWA staff provide educational outreach to children in member communities.

- Trash Cleanup and CSO Walk (Sept 20): MyRWA hosted a trash cleanup and walk at Dugger Park with 10th grade students from the International School of Boston. 18 youth attended the event.

- STEAM It Up (October 26): MyRWA set up a booth with educational materials focused on creating a garden in a bottle as part of STEAM It Up event at Cambridge Street Upper School. 400 youth attended the event.

- Cambridgeport School (April 1): MyRWA led a stormwater lesson for students in Cambridgeport's after school program. 13 youth attended the program.

- Graham & Parks School (April 11): MyRWA led a stormwater lesson for 4th grade students. 24 students participated in the lesson.

\*Stormwater Wetland Tours: Cambridge hosted a tour of the Alewife stormwater wetland on July 17 for DPW's summer co-ops. 4 co-ops and 2 City staff attended. Cambridge also hosted a tour October 17 for the Charles River Climate Compact with 13 people in attendance.

\*Cambridge Recycling Advisory Committee (RAC):

- RAC hosted a tour of the yard waste processing facility in West Bridgewater, MA where Cambridge's yard waste is composted into soil. The tour included a discussion of the importance of proper yard waste disposal and the relationship between leaves and nutrient pollution. 20 people attended, including Cambridge residents and DPW staff.

- Cambridge's Stormwater Program Manager attended RAC's November 8, 2023 virtual meeting to discuss the City's stormwater program and the importance of leaf and yard waste disposal. This meeting was open to the public and was attended by 25 people.

\*Household Hazardous Waste (HHW) Collection: Cambridge DPW sponsored four (4) HHW collection days during this reporting period (Aug 26, Nov 4, April 6, June 8). A total of 30 tons of waste was collected.

\*Solid Waste, Recycling and Compost Collection: Cambridge continued it's curbside trash, yard waste, recycling and compost programs and continued to educate residents and business owners on proper waste disposal. During this reporting period the following were collected:

- 2,236 tons of compost
- 8,256 tons of recycling
- 1,868 tons of yard waste
- 13,808 tons of trash

### 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:

The percent of Phase II map complete reported above reflects that the map is substantially complete, but minor modifications and additions are continuously being added as IDDE investigations progress and as-builts are received from completed projects. A copy of the current Stormwater Catchment Area and Outfalls map (last updated June 2024) can be found online at [https://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/filesfrom628/app\\_B\\_Cambridge\\_MS4\\_PhaseIMap\\_2024\\_DRAFT.pdf](https://www.cambridgema.gov/-/media/Files/publicworksdepartment/stormwatermanagement/filesfrom628/app_B_Cambridge_MS4_PhaseIMap_2024_DRAFT.pdf).

The City maintains an online interactive map of the sewer and drain systems showing all gravity mains, force mains, service laterals, catch basins, manholes, outfalls, underground structures, BMPs and other elements related to the sewer and drain systems. This map is available online at: <https://next.axisgis.com/cambridgema/>

#### 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:

See Appendix A of IDDE Investigation Progress Permit Year 6 Report available at: [www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports](http://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports)

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:*

- Dry weather screening: Outfall D30 was added to the City's SWMP and IDDE Plan in Permit Year 6. This outfall became active in late fall 2023, but construction in the area has delayed dry weather screening, which is planned for Permit Year 7. This is the only outfall where dry weather screening is incomplete. Dry weather outfall screening for all other outfalls was completed in Year 3 and is available under "Annual Report and Information: July 2020 to June 2021" at <https://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports>
- Wet weather sampling: One (1) wet weather sample was collected from outfall D10 during this reporting period as part of the catchment investigation.

### **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:

See IDDE Investigation Progress Permit Year 6 Report available at: <https://www.cambridgema.gov/Departments/publicworks/Initiatives/stormwatermanagement/annualreports>

*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 catchment investigation for one (1) high priority outfall was completed this reporting period (D10). Catchment investigations are in progress for 13 high priority outfalls including D07, D08, D09, D15, D19, D21, D27, D30, D31, D33, D36, D38, and D46.

### **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:

See Illicit Discharge Removal Permit Year 6 Report available at: [www.cambridgema.gov/](http://www.cambridgema.gov/)

Departments/publicworks/Initiatives/stormwatermanagement/  
annualreports

*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:

One (1) illicit discharge was removed during this permit year at 6 Marie Ave.

In Permit Year 6, the City confirmed through dye testing that an illicit discharge at 255 Main St, which was identified during Permit Year 3, had been removed (estimated 610 gpd). The property owner stated this illicit was removed during Permit Year 3. This illicit discharge has been added to the total number of illicit discharges removed since the effective date of the permit reported above.

In Permit Year 6, the City added three (3) illicit discharges to the Illicit Discharge Removal Report identified as part of the Cambridgeport Stormwater Improvements Project. Two (2) of these illicit discharges at 750 Mass Ave and 219 Vassar St were identified in April 2018 prior to the effective date of the permit. One (1) illicit discharge at 57-59 Magazine St was identified during Permit Year 1. Dye testing was completed during Permit Year 2 that confirmed all three illicit discharges were removed. These three (3) illicit discharges have been added to the total number of illicit discharges identified and removed since the effective date of the permit reported above.

Two (2) illicit discharges identified that still require removal require work by the property owner to remove (internal re-plumbing or removing and cap of an illicit fixture). The City is actively coordinating with both property owners. For other illicit discharges, the City is working to address through repair of sewer mains and lining of laterals as needed.

Note: As part of the River Street project, the combined sewer main is being removed and a drainage main is being installed in the same location. This project identified and removed two (2) sewer connections during this reporting period to the combined sewer that were identified via dye testing. These laterals were connected to the existing sewer main. Because this area is currently combined, these connections are not included in the totals above.

### **Employee Training**

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

An in-person IDDE Training was held at a monthly DPW engineering meeting on April 9, 2024 attended by 22 DPW staff. The training included a powerpoint presentation, discussion of the IDDE program and findings to date. Topics included the Cambridge MS4 System and MS4 Permit Overview, Cambridge IDDE Program status, types of illicit discharges and how to identify them in the field, SSOs, dry weather outfall screening protocol, catchment investigation procedures and wet weather sampling protocol.

An in-person IDDE Training was held at a weekly standing meeting on May 13, 2024 with DPW's Streets and Sewer field crews attended by 19 DPW staff. The training included an overview of IDDE investigation protocols and emphasized how to identify an illicit discharge in the field.

Two SWPPP trainings were held during this reporting period for City staff responsible for facility maintenance and/or quarterly SWPPP inspections. Ten (10) employees attended the SWPPP training on March 20 and 16 employees attended the training on March 26. This SWPPP training covered Massachusetts Stormwater regulations, SWPPP overview, and best practices for spill response, good housekeeping, and material management for each Cambridge facility with a SWPPP. The trainings also included a practice site inspection and reviewed how to complete SWPPP inspection forms.

#### **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: 4

Number of inspections completed: 94

Number of enforcement actions taken: 4

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

The DPW issued four (4) Stormwater Control Permits (SWCP) during this permit year which accounts for the 4 site plan reviews identified above. In addition to Stormwater Control Permit projects, the DPW reviewed 279 Building Permit applications for projects that did not trigger a SWCP and were not jurisdictional under MS4 Permit requirements. The review of these smaller projects sought to, amongst other things, identify opportunities for smaller projects to make improvements to contribute to the goals of the MS4 Permit. Of the 279 building permits, at least 45 of them included review of a civil site plan.

In addition to the 94 inspections completed for sites with SWCPs, an additional 28 inspections were completed for smaller projects not covered under MS4 Permit requirements.

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

**Ordinance or Regulatory Mechanism**

Date update was completed (due in year 3): June 2021

Website of ordinance or regulatory mechanism:

www.cambridgema.gov/stormwater

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

Number of as-built drawings received: 2

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

Two (2) as-built drawings were received for projects with Stormwater Control Permits during the last reporting period.

**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:

No updates to local regulations or guidelines were made this permit year.

**Green Infrastructure Report**

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

The Green Infrastructure Report concluded that green infrastructure practices are allowable and encouraged in Cambridge. The adoption of the Green Factor Standard in Cambridge's Climate Resiliency Zoning Ordinance in Permit Year 5 will further support the inclusion of green infrastructure and low impact development on sites through practices such as preserving and planting trees, green roofs, and minimum open space requirements.

**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):

Cambridge completed an initial BMP retrofit opportunities inventory in June 2022. This inventory is evaluated and updated annually. The following projects have been identified as potential sites that could be modified or

retrofitted with BMPs as of Permit Year 6:

1. River Street: The River Street project consists of upgrades to all infrastructure in its corridor, including subsurface utilities, and surface elements. Sewer separation is required for a portion of the project area, and the project also includes drainage improvements to reduce flooding. Final street design is to be to complete street standards, including a separated bicycle facility, stormwater improvements and additional tree plantings. BMPs include replacement of all catch basins with deep sump catch basins with hoods and incorporation of green infrastructure features, including a pervious asphalt bicycle lane the full length of River Street. Estimated impervious reduction is approximately 30,000 sf.
2. The Port Phases 2 & 3: The Port neighborhood project will reduce the frequency and severity of stormwater flooding and sewer backups in the neighborhood, and upgrade the neighborhood's surface infrastructure, including streets, sidewalks, shade trees, landscaping, and open spaces. Phases 2 and 3 will include completion of storm/sanitary separation in the neighborhood, construction of additional underground sanitary storage and pump stations, connections to existing storm and sewer systems for post-storm discharge, and full reconstruction of neighborhood streets including green infrastructure.
3. Willard Street: The Willard Street neighborhood is a combined sewer system and has experienced flooding on several occasions. Sewer separation in this area will include replacing and/or rehabilitating the sewer and stormwater infrastructure and the construction of a new stormwater pipe and outfall at the Charles River, evaluation and implementation of stormwater best management practices, and water main replacement. Following subsurface work, the street will be reconstructed along "complete streets" principles, including traffic calming elements and improvements to bicycle and pedestrian accessibility. Planned BMPs will include deep sump catch basins with hoods for pre-treatment; tree pits with extended underground infiltration trenches; and permeable surface strips over subsurface gravel infiltration trenches. The infiltration trenches are sized to store/infiltrate runoff exceeding ½-inch across the contributing impervious area. The new outfall was completed in Permit Year 6 and the green infrastructure will be constructed in Permit Year 7. In Longfellow Park, a subsurface infiltration system sized to infiltrate runoff from up to the 10-year storm was completed in fall 2019 and reduces stormwater inflow into the combined sewer system.
4. Binney Park: A new City park is being developed at 322 Binney Street in the East Cambridge neighborhood that will include a segment of the planned Grand Junction Greenway shared use path, a fenced dog run, and a hardscape plaza. Stormwater management includes porous pavement and infiltration systems.
5. Huron Avenue and Cushing Plaza: Huron Avenue from Fresh Pond Lane to Fresh Pond Parkway is scheduled for reconstruction as part of the City's Five-Year Street and Sidewalk Reconstruction Plan. Cushing Plaza, located within the project area at Cushing Street and Huron Avenue, is being reconstructed to allow stormwater to infiltrate and provide enhanced tree and garden planting areas. This project includes impervious cover reduction of 3,750 square feet.
6. Tobin Montessori and Vassal Lane Upper Schools: This project provides new facilities for Tobin Montessori School, Vassal Lane Upper School, Special Start and Department of Human Services Programs preschool and after school programs. The project is also addressing street flooding in the neighborhood with the installation of a 1.5 million gallon underground stormwater tank on-site. Beyond these large improvements, the City is also including a bioretention rain garden designed to treat 100,000 gallons of stormwater.
7. Park Avenue Road: Park Avenue from Huron Avenue to Holworthy Street, is being reconstructed as part of the City's Five-Year Street and Sidewalk Reconstruction Plan. The roadway will be reconstructed to improve drainage, make sidewalks more accessible for all users, add trees and green infrastructure and make the street

safe for all users. The project includes three (3) bioretention curb extension planters.

8. Alewife Linear Park: The Cambridge Forestry Department proposed this restoration project to address the City's decline in tree canopy. The project will include the development of additional tree canopy and soil remediation and enhancement, and will evaluate opportunities for stormwater BMPs.

9. Cambridge Rindge and Latin School Plaza: Reconstruction of the plaza at Cambridge's Rindge and Latin School includes retrofitting an existing dry well into a bioretention area for stormwater treatment.

10. Lechmere Canal Park Improvements Project: As part of this park improvements project, infiltration trenches with underdrains are proposed along the lower canal walk to infiltrate the first flush.

11. The following streets are scheduled for reconstruction as part of the City's Five-Year Street and Sidewalk Reconstruction Plan. The City evaluates each street that is scheduled for reconstruction for green infrastructure opportunities and identifies plazas and other hardscape areas where plantings can be enhanced and pavement removed.

- Webster Ave
- Elm Street
- Chestnut Street
- Green Street
- Dana Street
- Sciarappa Street

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.

The following permittee-owned properties have been modified with BMPs. Note some projects were completed before the initial BMP retrofit opportunities inventory (June 2022), but were completed after the 2018 MS4 Permit became effective.

1. King Open School: This project was completed in August 2019, and is the first Net Zero Emissions and first LEED V4 Platinum school in Massachusetts. Stormwater BMPs included four (4) bioretention areas (note two of these areas discharge to a combined sewer system and two discharge to a separated sewer system), two (2) underground infiltration systems, and a 30,000 gallon rainwater harvesting tank.

2. The Port Phase 1/Parking Lot 6: This project was completed in early 2021 and consisted of the Parking Lot 6 stormwater storage tank and pump station. In addition, the project included two (2) subsurface infiltration systems to treat stormwater runoff from a municipal parking lot. Although the overflow from the infiltration system will discharge to a combined sewer system, it is designed to be connected to the separated system in the future.

3. Timothy Toomey Jr. Park (Rogers Street Park): This project was completed in September 2021 and replaced the pre-existing developed site with a community park, resulting in a reduction of approximately 70,000 sf of impervious area. Stormwater BMPs included three (3) subsurface infiltration systems that will treat the runoff from the park as well as surrounding roadways.

4. Franklin Street: This street reconstruction project was completed in late 2021 as part of the City's Five-Year Street and Sidewalk Reconstruction Plan. Porous pavement (pervious paver strips on sidewalks) was included



to treat stormwater runoff.

5. Chapter 90 Contract 23A: This street reconstruction project was completed as part of the City's Five-Year Street and Sidewalk Reconstruction Plan. Four (4) subsurface infiltration trenches and porous pavement was included to treat stormwater runoff.

6. Glacken Field: As part of the Glacken Field restoration project, infiltration trenches, porous pavement and dry wells were installed in 2021. This project was selected to serve as the City's demonstration project within the Mystic River Watershed.

7. Inman Square: The Inman Square project (completed Permit Year 6) decreased impervious surfaces by approximately 7,000 SF with the installation of porous cycle tracks, permeable pavers, and planting beds. Overflow from the infiltration systems discharges to a combined sewer system, however the majority of which is planned for separation in the future. Additionally, the infiltration systems are designed to promote plant and tree growth.

8. Triangle Park: The Triangle Park project (completed Permit Year 6) converted an unused gravel lot into a new public park, including the addition of over 400 new trees. Stormwater gardens, infiltration trenches and a subsurface chamber system will capture and infiltrate rainwater as a part of the park's stormwater management system, decreasing the rate and volume of surface runoff in all modeled storm events.

## 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:

During this reporting period 442 inspected catch basins within the MS4 had sediment depths greater than 50%. The City will continue to measure and track sediment depth and take action when a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events.

Note: The City began its inspection and tracking of depth of catch basin sediment in June 2019. Since then the City has completed an initial inspection of 2,894 out of 3,241 catch basins within the MS4 (89%). There are

6,200 total municipal owned catch basins, 3,241 are within the MS4 (separated areas). A total of 5,520 of 6,200 catch basins have been inspected citywide. A total of 2,781 catch basins were cleaned citywide and a total of 2,698 catch basins were inspected citywide during Permit Year 6. The total mass of material removed from all cleaned catch basins citywide was 537 tons.

**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:  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:

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

- Alewife Staging Area: No corrective actions identified.
- Police Vehicle Maintenance Garage: Sink area was cleaned and trash disposed of.
- Solomon Maintenance Garage: No corrective actions identified.
- Water Department Maintenance Garage: Used oil pads were cleaned up and disposed of. New dumpster covers needed.
- Cemetery Garage and Staging Area: New dumpster covers needed.
- Fire Station Maintenance Garage: No corrective actions identified.

**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:

**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.

MCM 3: The City uses Commonwealth Connect (powered by SeeClickFix) to help residents reach the City on-line or via their smartphone to request services or get help fixing issues. "Dumping in Storm Drain" is a reporting category. During this reporting period, there were 32 issues reported through the SeeClickFix system.

MCM 6: The City actively maintains city-owned sewer and stormwater infrastructure. Through several maintenance contracts, the City completed the following maintenance and improvements during this reporting period:

- 2 catch basin hoods replaced
- 23 new catch basins installed with deep sump and hoods
- 56 catch basins remodeled with deep sump and hoods
- 1 common manhole removed
- 4 catch basin "Do Not Dump" curb markers installed
- 5 grit chambers constructed
- 2,152 linear feet of combined sewer lined
- 6,227 linear feet of sanitary sewer lined
- 3,449 linear feet of storm drain lined
- 29 linear feet of mainline drain replaced
- 103,075 linear feet of sewer pipe cleaned and TV'd
- 48,320 linear feet of stormwater pipe cleaned and TV'd
- 87 linear feet of sewer pipe installed
- 706 linear feet of stormwater pipe installed

Additional training for City staff:

- Stormwater Retrofits for Meeting MS4 Treatment Requirements (July 25; 1 attendee)
- Community Based Social Marketing (Dec 11 - 13; 1 attendee)

**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:

NA

## 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:  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.*