

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>

Impairment(s)

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

TMDL(s)

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

Out of State: Bacteria/Pathogens Metals Nitrogen Phosphorus

Clear Impairments and TMDLs

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

Annual Requirements

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

- Updated system map due in year 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:

Parameters and departmental assignment for inspection of all permittee owned treatment structures by the City were ongoing during Permit Year 6, and are set to be active along with other BMP inspection schedules as part of a comprehensive Green Infrastructure maintenance effort during Permit Year 7. The City currently has the following installed BMPs:

- 3 Stormceptors in Dollar General Parking Lot at 121 Webster Avenue as included in the City's GIS mapping. The City has determined that these are not City assets.
- 3 Infiltration Swales at the Boys and Girls Club at 30 Willow Street.
- Permeable pavement at the Mace Tot Lot - the City's new Parks Manager will oversee inspections.
- 2 Stormwater tree pits on Broadway, adjacent to Mystic Overlook Park
- 2 Stormwater tree pits on Chester Avenue, between Hawthorne Street and Shawmut Street.
- 2 Stormwater tree pits on Clark Avenue, between Lawrence Street and Crescent Avenue.
- 2 Silva Cell Tree Pits on Crescent Avenue between Eastern Avenue and Eleanor Street.

The City continues its commitment to establishing an improved records management system during Permit Year 7, to avoid a loss of records and to improve inspection planning and action item response, going forward.

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:

A social media post about dog waste was made using materials provided through the City's partnership with MyRWA in Permit Year 6. An interactive map showing all 40 dog waste stations is located on the city web page at the following address:

https://www.chelseama.gov/departments/public_works/trash,_recycle,___yard_waste/index.php

Chelsea does not allow septic systems.

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:

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:

Chelsea's streets are swept twice per side per month. Broadway and Hawthorne Street along with others are swept each weekend. Street sweeping runs from March 1st through December 31st. It would not be practicable to increase this.

https://www.chelseama.gov/departments/public_works/street_sweeping.php

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

Part III: Receiving Waters/Impaired Waters/TMDL

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

- Yes
 No

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

The City has made changes to its list of outfalls, receiving waters and impairments since the NOI was filed. These changes have come as a result of mapping updates made during outfall inspections and catchment investigations, and are documented in the SWMP.

The Final 2022 Integrated List of Waters included the addition of enterococcus impairments to Segment MA71-08 of Mill Creek and Segment MA71-03 of the Mystic River, and a Nutrient/Eutrophication Biological Indicators impairment to Segment MA71-03 of the Mystic River. There is an approved TMDL for bacteria/pathogen impairments for both Mill Creek and the Mystic River. There is no approved TMDL for nutrient impairments in the Boston Harbor watershed.

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:Stormwater Management Services Web Page

Message Description and Distribution Method:

The Stormwater Management Services portion of the Water and Sewer web page offers links to Chelsea's most recent Stormwater Management Plan, and information from the Mystic River Watershed Association, USEPA [Polluted Runoff: Nonpoint Source (NPS) Pollution], MWRA [A Healthy Environment Starts at Home], Mass.gov [Stormwater Permitting info], SSO information, and National Pollution Discharge Elimination System.

https://www.chelseama.gov/departments/water___sewer/index.php

During Permit Year 6, messaging from MyRWA was distributed through social media, along with a new page being set up for the Adopt-A-Drain program. The program has also been introduced to the beautification committee and will be featured at Chelsea Day.

A social media post about dog waste was made using materials provided through the City's partnership with MyRWA in Permit Year 6. An interactive map showing all 40 dog waste stations is located on the city web page at the following address:

https://www.chelseama.gov/departments/public_works/trash,_recycle,___yard_waste/index.php

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Chelsea's goal is to centralize all stormwater information in a single web page to make the information easier to find. The City continues to work with local and national environmental groups to develop educational material for Chelsea to distribute.

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:Climate Resilience and Sustainability Web Page

Message Description and Distribution Method:

The City maintains a Climate Resilience and Sustainability web page on their website, which features information about ongoing and upcoming resiliency projects in the City. Projects and information on the web page include:

The Urban Heat Mitigation Project, which is aimed at regional resilience efforts to analyze air and land surface temperatures, social vulnerability assessments, heat mitigation interventions, and planning and implementation of heat mitigation projects on public properties.

The Mill Creek Project is working to address the impacts of climate change by restoring ecological habitats, improving water quality, and expanding the network of open space around Mill Creek in Chelsea.

The Island End Park and Flood Barrier Project is developing a comprehensive flood protection system along the Island End River.

The Green Parcel Park and Coastal Remediations Design Project is advancing planning, design, and permitting of enhanced open space and remediation along Mill Creek.

The Eastern Avenue Resilience Project seeks to identify future solutions to flooding from sea level rise and storm events on Eastern Avenue.

https://www.chelseama.gov/departments/housing_and_community_development/climate_resilience_sustainability.php

Targeted Audience: Residents

Responsible Department/Parties: Department of Housing and Community Development

Measurable Goal(s):

Track number of page views

Message Date(s): Permit Year 6

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period:**

Chelsea's Stormwater Management Plan is posted to the City's web page, and available to the public for review and comment.

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

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

The City's yard waste pickup schedule is posted to the City's web page:
https://www.chelseama.gov/departments/public_works/trash,_recycle,___yard_waste/waste_collection_schedules/yard_waste_collection.php

The DPW's paint collection is ongoing from April to October, every first Saturday of the month, from 8:00 am to 12:00 pm.

Rain Barrel Program

Ordering Deadline: April 21, 2024

Barrel Pickup: May 4, 2024, 9:00 am to 11:00 am, Chelsea City Yard

The City of Chelsea has an ongoing relationship with The Great American Rain Barrel to offer discounted rain barrels to all Chelsea residents. The City also posts information about the benefits of rain barrels on their website and Facebook page with the rain barrel ordering link.

https://www.chelseama.gov/departments/water___sewer/2023_rain_barrel_program.php

Earth Day Clean Up

Event Date: April 27, 2024, 9:00 am

Chelsea City Hall

The event was hosted by Green Roots, Inc., and offered an opportunity for residents to gather for breakfast and lunch and participate in tree planting, clean-ups, and beautification projects.

<https://greenrootsej.org/get-involved/events/earth-day-2024>

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 City's current drainage mapping does reflect integration of the required Phase 2 mapping components. The City's mapping is updated as needed with information from completed catchment investigations. The City's mapping is listed at 90% complete to reflect anticipated refinement still needed.

Screening of Outfalls/Interconnections

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

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

*Below, report on the number of outfalls/interconnections screened **during this reporting period.***

Number of outfalls screened:

*Below, report on the percent of outfalls/interconnections screened **to date.***

Percent of outfalls screened:

Optional: Provide additional information regarding your outfall/interconnection screening:

During Permit Year 6, 22 outfalls and 5 incoming interconnections from the City of Everett were screened during dry and wet weather conditions.

Catchment Investigations

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

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

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

Prior to Permit Year 1, catchment investigations had been initiated in 16 of 23 known catchment areas, one of which discharges to the Commandants Way catchment area and outfall via force main (Carter St. Pump Station). The list of outfalls and catchment areas was updated this permit year to account for the abandonment of 2 outfalls (Beacham IE-3 and Beacham IE-5), and the addition of 5 outgoing interconnections part of the Beacham Street and Williams Street Utility and Roadway Improvements project completed in 2022. The 5 new outgoing interconnections discharge to a private culvert tributary to Island End River, for a total of 28 City-owned catchment areas.

In Permit Year 6, catchment investigations were continued in the following 6 priority catchment areas discharging to Mill Creek: Gillooly, Gillooly North, Locke 12", Locke 24", Washburn, and Webster at Revere Beach Parkway. Catchment investigations were completed in 2 catchment areas during Permit Year 6, Washburn and Locke 12". To date, catchment investigations have been initiated in 16 of 28 catchment areas (57%).

IDDE Progress

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

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

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

Evidence of non-stormwater input in the Gillooly North, Locke 24" and Webster at Revere Beach Parkway catchments are under continuing investigation, by the City and their consultant, in order to determine the source of dry weather likely sewer input indicators. The 6 unresolved illicit discharges will be revisited during Permit Year 7 to confirm removal or identify next steps for removal.

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

8 As-Builts received by Conservation Commission.

Street Design and Parking Lots Report

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

The City is in the process of reviewing their Zoning Ordinance and will be revisiting the recommendations in the Street Design and Parking Lots Report developed during Permit Year 4 to make amendments to the ordinance, where feasible.

Green Infrastructure Report

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

The City is in the process of reviewing their Zoning Ordinance and will be revisiting the recommendations in the Green Infrastructure Report developed during Permit Year 4 to make amendments to the ordinance, where feasible.

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):

Bellingham Square Plaza
Eastern Avenue
Downtown Broadway Redevelopment Plan

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.

During Permit Year 5, funding was obtained for BMP retrofits of the park at the base of Chelsea Street Bridge

as well as for a new park at 88 Clinton Street. The work at the base of the Chelsea Street Bridge is currently pending, and the park at 88 Clinton Street is estimated to be completed in October 2024.

During Permit Year 6, 2 Silva Cell green infrastructure tree pits were installed on Crescent Avenue in the area between Eastern Avenue and Eleanor Street.

In addition, Chelsea has been collaborating on the C-Heat project with GreenRoots to mitigate the urban heat island effect by incorporating different green infrastructure around the City. A pilot project has been launched at the Chelsea Boys and Girls Club, which included adding infiltration swales and street trees to the sidewalks. More information on the project can be found here:
<https://www.c-heatproject.org/>

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:

When a sump is found to be more than 50% full, Water & Sewer Department personnel will document the findings, investigate the contributing drainage area for sources of excessive sediment loading, and if possible, address the contributing sources. If no contributing sources are found, Water & Sewer Department personnel will increase the inspection and cleaning frequencies of the sump where practicable.

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: [Select Units]

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:

One instance of paint being improperly stored outside of the storage shed was remedied.

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:

IDDE/CMOM Progress Report dated 1/29/2024
IDDE/CMOM Progress Report dated 7/31/2024
2023 Stormwater Outfall Monitoring Report

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.

Year 7

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 7 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

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

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 7 below:

Part V: Certification of Small MS4 Annual Report 2024

40 CFR 144.32(d) Certification

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

Name: Title:

Signature: Date:

[Signatory may be a duly authorized representative]