

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

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

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2022 and June 30, 2023 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (publicly available web address):

Date SWMP was Last Updated:

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

Part II: Self-Assessment

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

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input 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"/> Nitrogen	<input type="checkbox"/> 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:

<https://www.revere.org/departments/engineering>

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

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

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

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
 - This is not applicable because there are no septic systems present

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

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

The City of Revere does not have any 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:

<https://www.revere.org/departments/public-works#trash-yard-waste>

- ☑ 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:

Revere maintains an aggressive street sweeping schedule, sweeping every street at least once every two weeks between April and November. Streets with the potential for higher loads are swept more frequently - one or more times per week.

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 impairments since the NOI was filed. These changes have come as a result of updates to the Massachusetts Integrated List of Waters.

The Final 2022 Integrated List of Waters included the addition of Enterococcus impairments to Segment MA71-14 of the Belle Isle Inlet and Segment MA71-08 of Mill Creek. There is an approved TMDL for the Mystic River 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: Bag Your Leaves Message

Message Description and Distribution Method:

The City website features an educational message about the importance of bagging leaves to prevent blocked storm drains and water pollution, as well as steps residents can take to properly dispose of their leaf waste.
<https://www.revere.org/departments/engineering#mvp>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

BMP: Diamond Creek Brochure

Message Description and Distribution Method:

The City developed a brochure for the Diamond Creek Catchment Improvements Investigation and Assessment Project to share information to residents regarding the goals of the project and steps the City is taking towards those goals. The brochure featured the impacts of climate vulnerability on Revere, as well as the purposes and benefits of nature based solutions. The brochure also included a QR code connecting to a feedback survey, where residents could comment on their experiences with flooding and stormwater management in Revere. The brochure and survey links are posted to the City's website as well as the City's Facebook page.

<https://www.revere.org/departments/engineering#mvp>

<https://www.facebook.com/CityofRevere/>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Track number of survey responses.

Message Date(s): Ongoing through Permit Year 5.

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

BMP: Diamond Creek Storyboard and Video

Message Description and Distribution Method:

The City of Revere developed a comprehensive story map and video to share information about the Diamond Creek Catchment Improvement Investigation and Assessment Project. The storyboard includes information about the purpose of the project, potential nature-based solutions, and interactive flood projection maps. The story map and video are posted to the City's website.
<https://www.revere.org/departments/engineering#mvp>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):

Track viewership.

Message Date(s): Posted June 27, 2023 and ongoing through Permit Year 5.

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

BMP: Think Blue Massachusetts

Message Description and Distribution Method:

The City posted Massachusetts's Think Blue video campaign to the City website and Facebook page, encouraging resident to be mindful about how pollutants from their property may affect stormwater runoff and

local water quality.
<https://www.revere.org/departments/engineering#mvp>

Targeted Audience: Residents

Responsible Department/Parties: Engineering

Measurable Goal(s):
Track number of views.

Message Date(s): Ongoing through Permit Year 5

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

BMP: Scoop the Poop Brochure

Message Description and Distribution Method:
The City of Revere distributed Scoop the Poop brochures with dog licenses to new pet owners, encouraging owners to properly dispose of their pet's waste.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):
Number of brochures distributed.

Message Date(s): Ongoing through Permit Year 5

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

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

The City's most recent SWMP, dated June 2019, is available on their website. The City is in the process of updating their Stormwater Management Plan, and the updated version will be uploaded to the City's website upon completion.

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:**

Diamond Creek Catchment Improvements Investigation and Assessment Project Public Workshop

Event Date: June 7, 2023, 5:00 pm to 7:00 pm

Council Chambers, Revere City Hall

The City hosted this public workshop to help inform residents about the impacts of climate change on storm events and flooding in Revere. A presentation was shown to attendees, which included relevant local impacts and mitigation strategies for flooding as well as feedback opportunities.

Revere Kite Festival Tabling Event

Event Date: May 20, 2023, 10:00 am to 1:00 pm

Revere Beach Boulevard

At the 8th Annual Revere Beach Kite Festival, the City of Revere hosted a table with information regarding the Diamond Creek Catchment Improvement Investigation and Assessment Project, and a coastal resilience activity from the Stone Living Laboratory. Residents had the opportunity to ask questions about and provide feedback on the Diamond Creek Project and learn about the impacts of increasing storm intensity on local beaches.

Hazardous Waste Collections Days

Event Date: Bi-weekly through Permit Year 5

Revere High School Parking Lot

During Hazardous Waste Collections Days, the City accepted electronic and appliances, batteries, mercury products, waste oils, chemical cleaners, pesticides, paint, tires, and other hazardous items from residents for proper disposal.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

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

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

Number of SSOs identified: Number of SSOs removed: **MS4 System Mapping***Optional:* Provide additional status information regarding your map:**Screening of Outfalls/Interconnections**

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

- No outfalls were inspected
- The 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:

These 25 outfalls were screened during both dry and wet weather during Permit Year 5.

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:

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:

2 illicit discharges have been identified since the permit effective date, July 1, 2018.

Employee Training

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

During Reporting Period 5, an educational IDDE video was distributed to 80 staff members.

MCM4: Construction Site Stormwater Runoff Control

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

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

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

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

Website of ordinance or regulatory mechanism:

As-built Drawings

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

Number of as-built drawings received:

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

Street Design and Parking Lots Report

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

During permit Year 4, the City developed their Street Design and parking lot Report, which assessed current street design and parking lot guidelines and other local requirements that affect the creation of impervious cover. Regulatory mechanisms were reviewed to determine if changes to existing design standards could be made to support low impact design options and, where appropriate, proposed recommendations to incorporate policies and standards to minimize impervious cover in parking areas and street designs. The City will be revisiting these recommendations during Permit Year 6 in an effort to make updates to local regulations, where feasible.

Green Infrastructure Report

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

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

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

The City will be revisiting these recommendations during Permit Year 6 in an effort to make updates to local regulations, when 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):

Beachmont Veterans Memorial High School
 190 VFW Parkway (New Revere High School site)
 Garfield School
 Gibson Park
 Central Avenue Parking Lot

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

MCM6: Good Housekeeping

Catch Basin Cleaning

*Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins **during this reporting period.***

Number of catch basins inspected:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

Street Sweeping

*Report on street sweeping completed **during this reporting period** using one of the three metrics below.*

Number of miles cleaned:

Volume of material removed: [Select Units]

Weight of material removed: [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:

The City of Revere's Department of Public Works Facility was under construction throughout Permit Year 5, preventing SWPPP inspections during the reporting period.

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

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above. If any of the above year 5 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 6 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to

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

Provide any additional details on activities planned for permit year 6 below:

Part V: Certification of Small MS4 Annual Report 2023

40 CFR 144.32(d) Certification

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

Name: Nicholas Rystrom Title: City Engineer

Signature: NJRystrom Date: 9/28/23

[Signatory may be a duly authorized representative]