

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

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

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

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

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

Part II: Self-Assessment

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

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

Year 4 Requirements

- Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:
 - No updates were recommended
 - Updates were recommended. The anticipated date or date of completion for updates is/was:

- Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:
 - No updates were recommended
 - Updates were recommended. The anticipated date or date of completion for updates is/was:

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

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

There was insufficient budget in PY4 to complete the assessment of local regulations and the BMP retrofit analysis. These items will be completed in PY5 with the assistance of a grant from the Buzzard Bay National Estuarine Research Reserve. The Town will also continue to complete any additional outstanding

requirements in PY5 as budget allows.

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:
- Updated system map due in year 2 as necessary
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

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

The Town had limited budget to complete Year 4 requirements but will continue to make progress on outstanding requirements in Permit Year 5. The Town identified permittee owned structures in PY4 and will inspect them in PY5. Not all roads were swept this year due to delay in purchase of new Town sweeper.

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

Annual Requirements

*Public Education and Outreach**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
 - Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
- * Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

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

The Carver Board of Health provides links to the MassDEP website about care and maintenance of septic systems.

Nitrogen (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) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release 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)

Nitrogen Source Identification Report

- Completed the Nitrogen Source Identification Report
 - The Nitrogen Source Identification Report is attached to the email submission
 - The Nitrogen Source Identification Report can be found at the following website:

Potential structural BMPs

- Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was
- estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

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

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:

There was insufficient budget in PY4 to complete the Nitrogen Source Identification Report and the BMP nitrogen removal tracking. These items will be completed in PY5 with the assistance of a grant from the Buzzard Bay National Estuarine Research Reserve. Not all roads were swept in Permit Year 4. Two municipally-owned stormwater treatment structures were identified.

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)

Phosphorus Source Identification Report

- Completed the Phosphorus Source Identification Report
 - The Phosphorus Source Identification Report is attached to the email submission
 - The Phosphorus Source Identification Report can be found at the following website:

Potential structural BMPs

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

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:

There was insufficient budget in PY4 to complete the Phosphorus Source Identification Report and the BMP phosphorus removal tracking. These items will be completed in PY5 with the assistance of a grant from the Buzzard Bay National Estuarine Research Reserve. Not all roads were swept in Permit Year 4. Two

municipally-owned stormwater treatment structures were identified.

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

The new Town Planner will be assisting the Town with regulatory review in PY5 to complete outstanding requirements.
The Town was awarded a grant from the Buzzard Bay National Estuarine Research Reserve Watershed Assistance program to implement NPDES requirements to improve water quality.

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 outfall list has been updated based on the final field assessment. A final outfall map has been attached, and also replaced in the Carver IDDE Plan. Based on review of the Massachusetts Final 2018-2020 Integrated List of Water-bodies, updates to the SWMP were completed and posted on the Town's website.

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: 4

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:Multimedia Methods for Residents

Message Description and Distribution Method:

The Town of Carver maintains a stormwater webpage with educational information for residents. Educational topics include the proper use of slow-release fertilizers, pet waste management, leaf litter management, and proper care of septic systems. These material were used to meet the requirements per Appendix H for discharge to waters impaired for phosphorus and nitrogen.

Targeted Audience: Residents

Responsible Department/Parties: Conservation Commission/ Board of Health

Measurable Goal(s):

The website was visited 87 times in PY4.

Message Date(s): The messages are available all year on the Town's website.

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:Multimedia Methods for Businesses

Message Description and Distribution Method:

The Town of Carver maintains a stormwater webpage with education information for businesses on topics such as managing grease waste, cleaning up spills, preventing pollution, and winter deicing.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Conservation Commission/ Board of Health

Measurable Goal(s):

The website was visited 87 times in PY4.

[Empty text box]

Message Date(s): The messages are available all year on the Town's website.

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:

[Empty text box]

BMP:Multimedia Methods for Construction Developers

Message Description and Distribution Method:

The Town of Carver maintains a stormwater webpage with educational information for construction developers on erosion and sediment control and BMP maintenance.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Conservation Commission/ Board of Health

Measurable Goal(s):

The website was visited 87 times in PY4.

Message Date(s): The messages are available all year on the Town's website.

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:

[Empty text box]

BMP:Multimedia Methods for Industrial Facilities

Message Description and Distribution Method:

The Town of Carver has very few industrial facilities. However, the Town maintains a stormwater webpage with educational information for automotive facilities on practicing good housekeeping and pollution prevention.

Targeted Audience: Industrial facilities

Responsible Department/Parties: Conservation Commission/ Board of Health

Measurable Goal(s):

The website was visited 87 times in PY4.

Message Date(s): The messages are available all year on the Town's website.

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 Carver Stormwater Task Force met in September 2021 and reviewed the SWMP BMP's and reporting metrics. No changes were suggested.

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:

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: 0

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

Municipally-owned stormwater treatment structures were identified. Initial catchment delineations were not identified due to lack of information on piped catch basin system. Remainder of catch basins are leaching and catchment delineations are limited to paved roads.

Screening of Outfalls/Interconnections

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

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

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

Number of outfalls screened:

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

Percent of outfalls screened:

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

No outfall screenings were conducted in this reporting period.

Catchment Investigations

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

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

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

Initial catchment delineations were not identified due to lack of information on limited piped catch basin system in three areas of Carver. The remainder of catch basins are leaching catch basins. Standard catchment delineation methodology is ineffective in the highly pervious, sandy soils found in Carver, and catchment areas are limited to paved roads. A detailed topographic map book for the outfalls was created in lieu of the delineations to identify high points on the roadways.

IDDE Progress

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

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

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

No illicit discharges have been identified in the Town of Carver.

Employee Training

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

Carver Operations and Maintenance Staff received IDDE training on 6/20/22. The sign in sheet is attached to the annual report.

MCM4: Construction Site Stormwater Runoff Control

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

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

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

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

As-built Drawings

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

Number of as-built drawings received:

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

No as-built drawings were received by the Town's Planning Department consultant. The sediment and erosion control bylaws have not been reviewed due to staff shortages and severe limitations with Town Budget. This requirement has been postponed until PY6.

Retrofit Properties Inventory

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

A BMP retrofit inventory has not been completed to date. This requirement is scheduled for PY5.

--

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:

No sumps were more than 50% full.

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:

Weight of material removed:

Stormwater Pollution Prevention Plan (SWPPP)

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed:

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

No corrective actions were needed.

Additional Information

Monitoring or Study Results

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

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

[Empty text box for website information]

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:

[Empty text box for monitoring description]

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:

Due to budget, minimal progress was made on stormwater management program permit requirements, however the Town applied for and was granted an award from the Buzzard Bay National Estuarine Research Reserve Watershed Program for implementation in PY5. Outstanding tasks from PY4 including the Local Code assessment and BMP Retrofit Inventory will be completed in PY5 with the assistance of the grant funding.

COVID-19 Impacts

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

[Empty text box for COVID-19 impacts]

[Empty rectangular box]

Activities Planned for Next Reporting Period

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

Yes, I agree

Annual Requirements

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

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

[Empty rectangular box]



Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

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

Name: Title:

Signature: Date:

[Signatory may be a duly authorized representative]