

**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>

<u>Impairment(s)</u>			
<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<u>TMDL(s)</u>			
In State:	<input type="checkbox"/> Assabet River Phosphorus	<input checked="" type="checkbox"/> Bacteria and Pathogen	<input checked="" type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
Out of State:	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			<b>Clear Impairments and TMDLs</b>

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:

The Town of Brewster is working to catch up to Year 4 requirements. These are anticipated to be completed by June 30, 2023.

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:

N/A

- 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:

IDDE training was completed May 24th, 2022

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:

#### 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)

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 (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:

The Town of Brewster does not own or maintain any stormwater BMPs within the MS4 nutrient source study area. As the Town implements BMPs within this area the phosphorous removal provided will be tracked.

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 Town's Notice of Intent (NOI), published in 2018, used the previous Massachusetts 2016 Integrated List of Waters. There are a few changes regarding Brewster impaired waters classification between the 2016 and 2018/2020 Integrated Lists of Waters. In this period, Quivett Creek has been elevated from a Category 4a waterbody to a Category 5 waterbody. Additionally, Curly-leaf Pondweed and Dissolved Oxygen have been added to its list of impairments. Walkers Pond is now impaired for Nutrient/Eutrophication Biological Indicators due to new data/assessments.

Outfall count has decreased to 15. One outfall was removed due to not being an MS4 outfall.

## 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:Pet Waste Message

Message Description and Distribution Method:

The Board of Health created an informational page on their website titled "Pet Waste" which outlines the problem with pet waste, why clean water is important, and gives tips on how you can get rid of pet waste in order to keep local waters clean. The web page also provides additional links to find out more about how non point source pollution and how to prevent it.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The "Pet Waste" page is always available for residents to reference on the Board of Healths Website here: <https://www.brewster-ma.gov/departments-mainmenu-26/health-department-mainmenu-33/1181-pet-waste>

Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate;  
 Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

Message Date(s):

Message Completed for:    Appendix F Requirements     Appendix H Requirements

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

If yes, describe why the change was made:

BMP:Septic Systems Message

Message Description and Distribution Method:

The Board of Health created an informational page on their website titled "How often should I get my septic system pumped?" which advises residents to pump their septic systems every 3 years to avoid system failure.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The "How often should I get my septic system pumped?" page is always available for residents to reference on the Board of Health's Website here: <https://www.brewster-ma.gov/departments-mainmenu-26/health-department-mainmenu-33/141-how-often-should-i-have-my-septic-system-pumped>

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

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:Be a Leaf Hero #1-4

Message Description and Distribution Method:

The Town shared a Facebook post titled "Be a leaf Hero" encouraging residents to help clean our waterways by keeping storm drains clear of debris such as leaf litter and yard debris, which plug storm drains and increase flooding.

The Town shared a Face Book post titled "Be a leaf Hero" encouraging residents to help clean our waterways by avoiding dumping into ditches or streams, because decaying leaf litter releases excess nutrients causing eutrophication and algal blooms.

The Town shared a Face Book post titled "Be a leaf Hero" encouraging residents to help clean our waterways by composting leaves and yard clippings, and reducing added chemicals in your yard and garden by utilizing composted leaves as natural fertilizer.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

The Town of Brewster Face Book page has 2,800 followers. <https://www.facebook.com/brewstermass>

Link can be found on Cape Cod Stormwater Collaborative page here: <https://capecodstormwater.wordpress.com/for-towns/>

Distributed an annual message in the fall (October/November) encouraging the proper disposal of leaf litter.

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: Catch Basin Cleaning Post

Message Description and Distribution Method:

The Town shared a Face Book post aiming to educate residents on the importance of catch basin cleaning in regards to stormwater runoff. The post links the Towns "Private Road Catch Basin Cleaning" page on their website which goes on to explain how removing trash, sediments, debris, and other solids from catchbasins keeps them out of stormwater runoff, and thus reduces pollutants that could potentially enter waterways, as well as prevents stomrdrains from becoming clogged.

Targeted Audience: Residents

Responsible Department/Parties: Town of Brewster

Measurable Goal(s):

The Town of Brewster Face Book page has 2,800 followers. <https://www.facebook.com/brewstermass>

The post titles "Private Road Catch Basin Cleaning" can be found here: <https://www.brewster-ma.gov/departments-mainmenu-26/dept-of-public-works-mainmenu-34/3249-private-road-catch-basin-cleaning>

Message Date(s): September 2021

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

### BMP: Fowl Water Campaign

Message Description and Distribution Method:

Stormwater social media video campaign called "Fowl Water" that educates residents on how "stormwater pollution is trash, oil, cigarette butts, & dog waste." Campaign is run by Think Blue Massachusetts and published with advertisements on Facebook, Instagram, and YouTube.

Targeted Audience: Residents

Responsible Department/Parties: Think Blue Massachusetts

Measurable Goal(s):

11,984 impressions were documented between Facebook, Instagram, and YouTube.

Message Date(s): January 13, 2022

Message Completed for: Appendix F Requirements  Appendix H Requirements

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

If yes, describe why the change was made:

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 Stormwater Management Plan is available for viewing/commenting on the Town's website.  
Comments can be directed to the DPW at 508-896-3212 or emailed to dpw@brewster-ma.gov.

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 Town participates in 6 regional Household Hazardous Waste Collection Days for residents at the Harwich Transfer Station: Second Saturday of the month in May, June, July, August, September, and October from 9-12.

### 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:

The Town of Brewster has been mapping and tracking of catch basin cleaning and inspections with tablets.

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: 0

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

Percent of outfalls screened: 80

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

Three (3) outfalls could not be located during dry weather screening, two of which were blocked by dense vegetation, and one was submerged due to high tide. These locations will be revisited during catchment investigations.

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: 0

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

Percent of total catchments investigated: 0

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 website:

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed:  gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

Employee Training

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

IDDE employee training was completed by our stormwater consultant on May 24, 2022. A presentation covering the entire MS4 permit, while focusing on IDDE identification and reporting was given to DPW and Natural Resources staff.

**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: 1

Number of enforcement actions taken: 1

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

Enforcement action taken: Land disturbance of 10k square feet or greater without a permit.

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

#### Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): March 4, 2022

#### As-built Drawings

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

Number of as-built drawings received: 0

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

Due to staff turnover in the Building Department as-builts were not tracked this past reporting year. DPW will work with the Building Dept. to track as-builts in the future.

#### Retrofit Properties Inventory

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

### 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:

The Town of Brewster does not often see catch basins frequently full of material. When this issue does arise, the Town investigates the source of the sediment or other material and develops a solution to mitigate that source.

The Town of Brewster cleaned 205 privately owned catch basins in addition to the 838 town-owned catch basins.

#### Street Sweeping

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

Number of miles cleaned:

Volume of material removed:  [Select Units]

Weight of material removed:

#### Stormwater Pollution Prevention Plan (SWPPP)

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

Number of site inspections completed:

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

Empty rectangular box at the top of the page.

### 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 rectangular 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:

Large empty rectangular box for describing monitoring or studies.

#### 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:

Large empty rectangular box for additional information.

#### 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:

The Town has been experiencing staffing and other issues related to COVID-19. Numerous town staff have been unable to work for extended periods of time due to COVID illnesses and mandatory quarantining.

Empty rectangular box for COVID-19 impacts details.

Activities Planned for Next Reporting Period

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

Yes, I agree

Annual Requirements

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

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

---

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

### 40 CFR 144.32(d) Certification

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

Name:  Title:

Signature:  Date:

[Signatory may be a duly authorized representative]