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 Orga	nization: Town of Barnstable
EPA NPDES Permit Number:	MAR041090

Primary MS4 Program Manager Contact Information

Name:	Amber Unruh		Title: Senior Project Manager - Special Projects				
Street .	Street Address Line 1: Barnstable Department of Public Works						
Street	Address Line 2: 382 Falmouth Roa	d					
City:	Hyannis	State: MA	Zip Code: 02601				
Email:	Amber.Unruh@town.barnstable.m	a.us	Phone Number: (508) 790-6400				
Storm	water Management Program (SV	VMP) Inform	nation				
SWM	Location (publicly available web	addressi	ps://www.town.barnstable.ma.us/Departments/ plicWorks/Projects and Updates/MS4-Program.asp				

Date SWMP was Last Updated: June 30, 2022

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: <u>https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state</u>

Impairment(<u>s)</u>			
	⊠ Bacteria/Pathogens	Chloride	🛛 Nitrogen	🖂 Phosphorus
	Solids/ Oil/ Grease (Hy	drocarbons)/ Metal	S	
TMDL(s)				
In State:	Assabet River Phosphor	rus 🛛 🖾 Bacte	eria and Pathogen	🛛 Cape Cod Nitrogen
	Charles River Watershe	d Phosphorus	\Box Lake and Pond	Phosphorus
Out of State:	Bacteria/Pathogens	☐ Metals	🗌 Nitrogen	Phosphorus
			Cl	ear 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
- \boxtimes The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - \bigcirc 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 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

- \boxtimes 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*

- \bowtie 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

 \Box 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:

Public Education - The Town is a member of the statewide ThinkBlue campaign which provides extensive public education messages to various target audiences. Additionally, the Town makes Mutt Mitt pet waste dispensers available at locations frequented by dog walkers.

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)

Structural BMPs

Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the Nitrogen Source Identification Report, including: (select the items of the evaluation that have been *completed below*)

Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date

Estimated cost of redevelopment or retrofit BMPs

Engineering and regulatory feasibility of redevelopment or retrofit BMPs

Completed a listing of planned structural BMPs and a plan and schedule for implementation

• The BMP list and implementation schedule is attached to the email submission

C The BMP list and implementation schedule can be found at the following publicly available website:

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix F 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 F. 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.

- \bigcirc No BMPs were installed
- The above referenced BMP information is attached to the email submission
- The above referenced BMP information can be found at the following publicly available website:

Total estimated nitrogen removed in lbs/year from the installed BMPs: 0

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 Source Identification Report - It is assumed that all waterbodies currently listed as impaired for total nitrogen or estuarine bioassessments will eventually be covered under the Cape Cod Nitrogen TMDL or similar document. As currently written, this document largely identifies wastewater as the primary cause of nitrogen pollution rather than stormwater and exempts communities from completing the Nitrogen Source Identification Report, as well as the accompanying BMP evaluation and construction of a stormwater demonstration BMP. Thus, the Town is not currently planning on completing these requirements. Remaining items outlined above as required are being completed according to the schedule outlined in the permit.

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

Public Education and Outreach*

- Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers
- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Structural BMPs

Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the

Phosphorus Source Identification Report, including: *(select the items of the evaluation that have been completed below)*

Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date

- Estimated cost of redevelopment or retrofit BMPs
- Engineering and regulatory feasibility of redevelopment or retrofit BMPs

Completed a listing of planned structural BMPs and a plan and schedule for implementation

- The BMP list and implementation schedule is attached to the email submission
- \bigcirc The BMP list and implementation schedule can be found at the following publicly available website:

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.

- \bigcirc No BMPs were installed
- The above referenced BMP information is attached to the email submission
- \bigcirc The above referenced BMP information can be found at the following publicly available website:

Total estimated phosphorus removed in **lbs/year** from the installed BMPs: 0.03

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:

Public Education - The Town posted a seasonal message on proper lawn care and fertilizer application its website. In addition, the Town is a member of the statewide ThinkBlue campaign which provides extensive public education messages to various target audiences.

Lovells Pond Boat Ramp - An existing structure near the Lovells Pond boat ramp was removed, resulting in removal of approximately 220 square feet of directly connected impervious surface. This area was retrofitted with native plantings and receives runoff from approximately 600 square feet of the boat ramp area. Total pollutant removals are estimated at 0.03 pounds of annual phosphorus reduction. This area serves as the required public demonstration project within the Lovells Pond watershed.

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

 \boxtimes Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads

 \bigcirc The street sweeping schedule is attached to the email submission

• The street sweeping schedule can be found at the following publicly available website:

Included as an appendix in the SWMP Plan, available for download at: https:// www.town.barnstable.ma.us/Departments/PublicWorks/Projects_and_Updates/MS4-Program.asp

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:

Street Sweeping - In addition to contracted street sweeping, the Town completed periodic sweeping using inhouse resources on an as-needed basis in high priority areas.

Increased Sweeping for High Pollutant Loads - This was determined not to be necessary for the Town as these areas are not observed to accumulate more sediment and debris than other areas within the Town.

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 has determined it is subject to the following additional TMDL and Impaired Waters requirements:

- -Centerville Harbor (MA96-03), estuarine bioassessments or nutrient/eutrophication biological indicators (Appendix H, Part I)
- -Hyannis Harbor (MA96-05), estuarine bioassessments or nutrient/eutrophication biological indicators (Appendix H, Part I)
- -Lewis Bay (MA96-36), estuarine bioassessments or nutrient/eutrophication biological indicators (Appendix H, Part I)
- -Maraspin Creek (MA96-06), estuarine bioassessments or nutrient/eutrophication biological indicators (Appendix H, Part I)
- -Little River (MA96-99), bacteria water quality impairments requirements (Appendix H, Part III)
- -Unnamed Tributary (MA96-100), bacteria water quality impairments requirements (Appendix H, Part III)
- -Lovells Pond (MA96185), turbidity water quality impairments requirements (Appendix H, Part V)

Note, the Hyannis Harbor (MA96-05), fecal coliform impairment removed from 303(d) list

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**: 8

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:Video, Think Blue Massachusetts "Fowl Water"

Message Description and Distribution Method:

ThinkBlue Massachusetts "Fowl Water" video (https://www.thinkbluemassachusetts.org/) Advertisement on Facebook, Instagram, & YouTube

Targeted Audience: Residents

Responsible Department/Parties: Information Technology

Measurable Goal(s):

Follow "Think Blue" Campaign on Social Media platforms. Note, results of the statewide ThinkBlue campaign were not available prior to submitting this annual report.

Message Completed for: Appendix F F	Requirements 🖂 🛛 A	Appendix H Requirements 🖂
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Was this message different than	what was proposed in	your NOI?	Yes (No	igodoldoldoldoldoldoldoldoldoldoldoldoldol
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If yes, describe why the change was made:

BMP:Mutt Mitt Dispensers

Message Description and Distribution Method:

Provide Mutt Mitt dispensers and refills at public areas frequented by dog walkers to encourage pet waste pickup.

Targeted Audience: Residents

Responsible Department/Parties	: Recreation Department,	Department of Public	Works, Public Health Div	vision
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Measurable Goal(s):

Maintain Mutt Mitt dispensers at certain public areas frequented by dog walkers. Add additional dispensers at problem locations as budget allows.

Fown of Barnstable	Page 10
Message Date(s): Ongoing	
Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🖂	
Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc	
If yes, describe why the change was made:	
BMP:Social Media Campaign	
Message Description and Distribution Method:	
Posted various messages for Leaf Litter, Dog Waste, Fertilizers, Septic Smart Tips, Stormwar Hazardous Waste Days on Facebook (13,000 followers) and Instagram (2,000 followers).	ter 101, and
Targeted Audience: Residents	
Responsible Department/Parties: Department of Public Works, Information Technology	
Measurable Goal(s):	
Posted a variety of messages during the permit year.	
Message Date(s): Continuous / ongoing	
Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🖂	
Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc	
If yes, describe why the change was made:	
BMP:Radio / News Announcements	
Message Description and Distribution Method:	
Made daily radio and newspaper announcements over a two to three week period prior to Haz	zardous Waste

Targeted Audience: Residents

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Collection Drives.

Advertise the HHW event to encourage residential participation.

Message Date(s): September 2022

Message Completed for: Appendix F Requirements Appendix H Requirements						
Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc						
If yes, describe why the change was made:						
BMP:Community Newsletters						
Message Description and Distribution Method:						
Released 8 publications on a variety of topics distributed to over 700 subscribers.						
Targeted Audience: Residents						
Responsible Department/Parties: Department of Public Works						
Measurable Goal(s):						
Release periodic news articles with stormwater-related information.						
Message Date(s): Continuous / Ongoing						
Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🖂						
Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc						
If yes, describe why the change was made:						

BMP:Seasonal Messages

Message Description and Distribution Method:

Developed 720 bookmarks for each seasonal message (Pet Waste, Leaf Litter, and Fertilizer) and distributed 120 bookmarks to each of the 6 libraries in Barnstable. Also, sent Pet Waste Flyers to all licensed dog owners (2,600+ residents).

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

Responsible Department/Parties: Department of Public Works

Measurable Goal(s):

Distribute informational bookmarks to the Town libraries.

Message Date(s): Continuous / Ongoing

Message Completed for: Appendix F Requirements ☑ Appendix H Requirements ☑ Was this message different than what was proposed in your NOI? Yes ○ No If If yes, describe why the change was made:	Yown of Barnstable Page 1
If yes, describe why the change was made: BMP:Barnstable Water Resources Websites Message Description and Distribution Method: Maintained a website with up to date information on topics that include stormwater and wastewater. Targeted Audience: Residents, Businesses, Institutions, Commercial Facilities, Developers (construction) Responsible Department/Parties: Department of Public Works, Information Technology Measurable Goal(s): Keep website updated with information at various times throughout the year. Message Date(s): Continuous / Ongoing 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:[Message name here] Message Description and Distribution Method: Targeted Audience: Responsible Department/Parties:	Message Completed for: Appendix F Requirements 🖂 Appendix H Requirements 🖂
BMP:Barnstable Water Resources Websites Message Description and Distribution Method: Maintained a website with up to date information on topics that include stormwater and wastewater. Targeted Audience: Residents, Businesses, Institutions, Commercial Facilities, Developers (construction) Responsible Department/Parties: Department of Public Works, Information Technology Measurable Goal(s): Keep website updated with information at various times throughout the year. Message Date(s): Continuous / Ongoing Message Completed for: Appendix F Requirements ⊠ Was this message different than what was proposed in your NOI? Yes ○ No If yes, describe why the change was made: Image: Complete the structure of	Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc
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BMP:[Message name here] Message Description and Distribution Method: Targeted Audience: Responsible Department/Parties:	Was this message different than what was proposed in your NOI? Yes \bigcirc No \bigcirc
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Measurable Goal(s):	Measurable Goal(s):
Message Date(s):	Message Date(s):

Message Completed for:	Appendix F Requirements 🗌	Appendix H Requirements
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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**:

SWMP Plan for Download - The Town has posted the SWMP Plan and other relevant information on Town website along with contact information to allow for public comment.

Was this opportunity	different than	what was	proposed in	vour NOI?	$Yes \cap$	No	
was this opportunity	uniferent than	what was	proposed in	your 1101.		110	

Describe any other public involvement or participation opportunities conducted **during this reporting period**: The Town conducted 10+ meetings with local pond, civic, and homeowners associations to discuss CWMP, as well as various methods to improve water quality, including fertilizer reduction, pet waste clean-up etc.

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: 0

MS4 System Mapping

Town of Barnstable

Optional: Provide additional status information regarding your map:

All known outfalls, stormwater BMPs, and receiving waterbodies with impairments have been mapped to date. Initial catchment delineations have also been completed based on topographic mapping and available stormwater system information. Mapping of open channel conveyances and any newly located outfalls is ongoing. Mapping interconnections with other MS4s (e.g. DOT) is ongoing, and it is expected that this will continue as part of DOT's own mapping efforts to be completed under a future TS4 permit.

The Town has identified a number of data gaps in its drainage mapping (e.g., catch basins without piping, disconnected drainage networks, etc.) and has begun investigating these through field efforts. Any new outfalls/interconnections discovered through this process will be mapped and screened for dry weather flow.

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.

- \bigcirc No outfalls were inspected
- The above referenced outfall screening data is attached to the email submission
- C 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: 1

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

Percent of outfalls screened: 100

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

As/if additional outfalls are located, they are screened during dry weather for potential illicit discharges.

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.

- $\ensuremath{\textcircled{}}$ No catchment investigations were conducted
- \bigcirc The catchment investigation data is attached to the email submission
- \bigcirc 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: 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:

The Town is assessing catchment investigation status during Year 6. Many catchments do not have Key Junction Manholes and/or System Vulnerability Factors; and thus inspections are complete as outfalls have been screened during dry weather.

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.

- \bigcirc 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:	1	
Number of illicit discharges removed:	1	
Estimated volume of sewage removed:	0	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:	1
Total number of illicit discharges removed:	1

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

One illicit discharge of motor oil into a leaching catch basin was identified 6/30/2023. The Town of Barnstable and their licensed site professional are actively correcting it.

Employee Training

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

IDDE Training - DPW held an IDDE training session on December 7, 2023 for all DPW staff to review stormwater maintenance activities, such as good housekeeping, operation and maintenance, inspections, identification of illicit discharges, and methods to ensure appropriate road salting, etc.

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: 1		
Number of inspections completed: 1		
Number of enforcement actions taken: 0		

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): N/A, not yet adopted

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: 0

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:

No changes to date. To be determined pending discussions between various departments. Estimated June 30, 2027.

Green Infrastructure Report

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

No changes to date. To be determined pending discussions between various departments. Estimated June 30, 2027.

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):

In order of impervious cover, the following properties are the top five that should be considered for BMP retrofit opportunities:

- -Barnstable High School
- -West Villages Elementary School and adjacent park area
- -Barnstable DPW
- -Barnstable Transfer Station and Recycling Center and adjacent areas
- -Barnstable Intermediate School

As the Barnstable Municipal Airport is administered separately from the Town, this location is not currently being considered. Additionally, Sandy Neck Beach Park is located outside the regulated urbanized area.

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.

Lovells Pond Boat Ramp - An existing structure near the Lovells Pond boat ramp was removed, resulting in removal of approximately 220 square feet of directly connected impervious surface. This area was retrofitted with native plantings and receives runoff from approximately 600 square feet of the boat ramp area. Total pollutant removals are estimated at 0.03 pounds of annual phosphorus reduction. This area serves as the required public demonstration project within the Lovells Pond watershed.

Page 18

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: 1,537

Number of catch basins cleaned: 1,537

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

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

Total number of catch basins: 5,140

If applicable:

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

Note, the majority of catch basins are leaching structures and do not directly connect to the Town's regulated MS4 or Waters of the United States.

Street Sweeping

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

• Number of miles cleaned:	64.97	
○ Volume of material remov	ed:	[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: 1

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

Coir roll replaced to address erosion near salt shed.

Page 19

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
- \bigcirc The results from additional reports or studies are attached to the email submission
- \bigcirc 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

Town of Barnstable

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.

Daniel W. Santos, P.E.	Title: DPW Director
Signatory may be a duly authorized	Date: 9 22 23

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA:

MassDEP:

Paper Signature:

If you did not sign electronically above, you can print the signature page by clicking the button below.

Print Signature Page

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.

Lock Form