Year 3 Annual Report

Massachusetts Small MS4 General Permit Reporting Period: July 1, 2020-June 30, 2021

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, 2020 and June 30, 2021 unless otherwise requested.

Part I: Contact Information

Name	of Municipality or Organizat	tion: Town of Denn	nis
EPA N	PDES Permit Number: MAI	R041103	
Prima	ry MS4 Program Manager	Contact Informati	tion
Name:	Thomas Andrade		Title: Town Engineer
Street	Address Line 1: 120 Theoph	ilus F. Smith Road	
Street .	Address Line 2:		
City:	South Dennis	State: MA	Zip Code: 02660
Email:	tandrade@town.dennis.ma.u	ıs	Phone Number: (508) 760-6233
Storm	water Management Progra	m (SWMP) Inforn	mation
SWMF	P Location (web address): ht	tps://www.town.der	nnis.ma.us/engineering-department/pages/stormwater-
Date S	WMP was Last Updated: Ju	ne 30, 2021	
If the S	SWMP is not available on the	e web please provid	de 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

	☐ Bacteria/Pathogens	☐ Chloride	☐ Nitrogen	Phosphorus
	☐ Solids/ Oil/ Grease (Hy	vdrocarbons)/ Metal	S	
TMDL(s)				
In State:	☐ Assabet River Phospho	orus 🔀 Bact	eria and Pathogen	
	☐ Charles River Watersho	ed Phosphorus	☐ Lake and Pon	d Phosphorus
Out of State:	☐ Bacteria/Pathogens	☐ Metals	☐ Nitrogen	☐ Phosphorus
			C	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 3 Requirements

	•
	Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
X	Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary
	Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 3 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:

Dry Weather Outfall Screening - During 2020 and 2021, the Town attempted to inspect all 44 known stormwater outfalls within the urbanized area during dry weather to investigate for potential illicit discharges. Of the 44 known stormwater outfalls that were attempted to be inspected, 36 were located and 3 of which were flowing. The 3 flowing outfalls were sampled, none of which met the permit criteria for being highly likely to contain illicit discharges. The remaining 8 outfalls that could not be located or accessed were instead investigated at the immediate upgradient structure for potential illicit discharge indicators, of which none were observed. Note, numbers above represent all outfall screening completed to date. Numerous outfalls were revisited between Year 2 and Year 3 and thus it is difficult to quantify the number of outfalls screened in individual years.

Update Outfall Inventory and Priority Ranking - Outfall inventory and priority ranking was conducted concurrent with a comprehensive update of the SWMP and IDDE Plans, completed on June 30, 2021. The Town will continue to locate and inspect additional stormwater infrastructure during future permit years.

Construction and Post-Construction Bylaw - The Town previously adopted a "Stormwater Management" bylaw under Chapter 154 Stormwater Management, Sections 154-1 through 154-8 which regulate construction projects greater than 20,000 square feet. The town also previously adopted accompanying regulations; however, regulations do not meet all Permit requirements. The Town is currently in the process of revising its stormwater regulations to meet all permit requirements to address nitrogen removal optimization for new development and redevelopment projects, among other requirements. Town offices have been closed to the public and business conducted largely electronically for the past 1+ years which has limited opportunities for meetings to finalize the regulatory mechanisms.

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:
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- × Provided training to employees involved in IDDE program within the reporting period
- ⊠ All curbed roadways were swept at least once within the reporting period
- ☑ Updated system map due in year 2 as necessary
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPs 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, provide any additional information, and/or if any of the above annual 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:

SWPPPs - The Town has no standalone maintenance garage or other waste handling facility. The Town's DPW Facility and and Transfer Station are located on adjacent parcels within the urbanized area, however, all stormwater infiltrates onsite. Facilities do not discharges to Waters of the U.S. and/or the Town's regulated MS4 system. Based on the location of both facilities, underlying pervious soils, and surrounding topography, it has been determined that both facilities will not discharge to the Town's MS4 or a Waterbody of the United States under any conditions.

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
- * 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 P	'ermit
part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)	

<i>Optional:</i> 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 - the Town swept all high traffic areas and areas with windblown sand near beaches two or three times per year. Most other main and secondary roadways, as well as municipal parking lots, were swept once per year.
Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:
SCII-assessment.

Part III: Receiving Waters/Impaired Waters/TMDL

Have you m	nade any	changes t	to your lis	ts of rece	eiving wate	ers, outfalls	, or impair	ments s	since the	NOI was
submitted?										
	O Vac									

YesNo

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: -Chase Garden Creek (MA96-103), bacteria impaired waters requirements (Appendix H, Part III)

The Town also updated its list of outfalls and receiving waters as new outfalls were found during the dry weather screening. The inspection results are attached to this annual report and a list and updated prioritization are also kept with the Town's IDDE Plan.

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 : 3
Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program. BMP: Stormwater pollution is trash, oil/cigarette butts, & dog waste
Message Description and Distribution Method:
Think Blue Massachusetts "Fowl Water" video (https://www.thinkbluemassachusetts.org/) Advertisement on Facebook, Instagram, & YouTube
Targeted Audience: Residents
Responsible Department/Parties: Planning Department, Information Technology
Measurable Goal(s):
20,103 social media impressions from Town residents.
Message Date(s): Ongoing / Continuous
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: Stormwater Webpage Message Description and Distribution Method:
Develop a town stormwater website with a links to external sites such as EPA and NHDES as well as provide stormwater brochures for download.
Targeted Audience: Residents, Businesses, institutions and commercial, Developers, Industrial
Responsible Department/Parties: Engineering Dept, Planning Dept, Building Dept, Information Technology
Measurable Goal(s):
Continue to maintain and update webpages with relevant information, links, and BMPs. Make seasonal messages available on the town's website.

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Message Date(s): Ongoing / Continuous	
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: Social Media Outreach	
Message Description and Distribution Method:	
Post seasonal messages on the town's Facebook page. Messages address fertilizer usage (spring), pet was (summer), and leaf litter (fall). Also post message on construction site runoff control periodically throug the year. All messages were also posted on the town's website.	
Targeted Audience: Residents, Businesses, institutions and commercial	
Responsible Department/Parties: Engineering Dept, Information Technology	
Measurable Goal(s):	
Post seasonal messages during all seasons to the town's Facebook page and website.	
Message Date(s): Seasonal	
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**:

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.

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Was this opportunity different than what was proposed in your NOI? Yes ○ No ●	
Describe any other public involvement or participation opportunities conducted during this repo	rting period:
MCM3: Illicit Discharge Detection and Elimination (IDDE)	
Sanitary Sewer Overflows (SSOs) Check off the how below if the statement in true	
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 repor	ting period.
Number of SSOs identified: 0	
Number of SSOs removed: 0	
MS4 System Mapping	
Optional: Provide additional status information regarding your map:	
All known outfalls, stormwater BMPs, and receiving waterbodies with impairments have been m date. Initial catchment delineations have also been completed based on topographic mapping and stormwater system information. Mapping of open channel conveyances and any newly located o ongoing. Mapping interconnections with other MS4s (e.g. DOT) is ongoing, and it is expected the continue as part of DOT's own mapping efforts to be completed under a future TS4 permit.	l available utfalls is
<u>Screening of Outfalls/Interconnections</u> If conducted, please submit any outfall monitoring results from this reporting period. Outfall mon	itorina
results should include the date, outfall/interconnection identifier, location, weather conditions at	_
sampling, precipitation in previous 48 hours, field screening parameter results, and results from a	•
Please also include the updated inventory and ranking of outfalls/interconnections based on months	toring results
No outfalls were inspected The outfall screening data is attached to the amail submission.	
 The outfall screening data is attached to the email submission The outfall screening data can be found at the following website: 	
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Below, report on the number of outfalls/interconnections screened during this reporting period.	
Number of outfalls screened: 44	

Below, report on the percent of outfalls/interconnections screened to date.
Percent of outfalls screened: 82
Optional: Provide additional information regarding your outfall/interconnection screening:
During 2020 and 2021, the Town attempted to inspect all 44 known stormwater outfalls within the urbanized area during dry weather to investigate for potential illicit discharges. Of the 44 known stormwater outfalls that were attempted to be inspected, 36 were located and 3 of which were flowing. The 3 flowing outfalls were sampled, none of which met the permit criteria for being highly likely to contain illicit discharges. The remaining 8 outfalls that could not be located or accessed were instead investigated at the immediate upgradient structure for potential illicit discharge indicators, of which none were observed. Note, numbers above represent all outfall screening completed to date. Numerous outfalls were revisited between Year 2 and Year 3 and thus it is difficult to quantify the number of outfalls screened in individual years.
<u>Catchment Investigations</u> 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.
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.

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

Number of as-built drawings received: 2 Optional: Enter any additional information relevant to the submission of as-built drawings: Street Design and Parking Lots Report Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	As-built Drawings
Optional: Enter any additional information relevant to the submission of as-built drawings: Street Design and Parking Lots Report Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	Below, report on the number of as-built drawings received during this reporting period.
Street Design and Parking Lots Report Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	Number of as-built drawings received: 2
Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	Optional: Enter any additional information relevant to the submission of as-built drawings:
Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	
any planned or completed changes to local regulations and guidelines: N/A, to be completed during Permit Year 4. Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	Street Design and Parking Lots Report
Green Infrastructure Report Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	
Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	N/A, to be completed during Permit Year 4.
Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:	
and progress towards making the practice allowable:	Green Infrastructure Report
N/A, to be completed during Permit Year 4.	Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:
	N/A, to be completed during Permit Year 4.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

The Town completed an inventory of its permittee-owned properties during this permit year. Facilities will be evaluated for potential BMP retrofit opportunities during Permit Year 4.

MCM6: Good Housekeeping

Catch Basin Cleaning Below, report on the number of catch basins i removed from the catch basins during this rep		caned, along with the total ve	olume of material
Number of catch basins inspec	eted: 76		
Number of catch basins cleaned	ed: 1,552		
Total volume or mass of mater	rial removed fro	m all catch basins: 513.5	tons
Below, report on the total number of catch ba	sins in the MS4	system.	
Total number of catch basins:	4,636		
If applicable:			
Report on the actions taken if a catch basin su inspections/cleaning events:	amp is more that	n 50% full during two consec	cutive routine
Street Sweeping			
Report on street sweeping completed during t	his reporting pe	riod using <u>one</u> of the three n	netrics below.
• Number of miles cleaned: 1,1	38		
O Volume of material removed:		[Select Units]	
O Weight of material removed:	1,410.52	tons	

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: 0

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

Not Applicable. The Town has no standalone maintenance garage or other waste handling facility. The Town's DPW Facility and and Transfer Station are located on adjacent parcels within the urbanized area, however, all stormwater infiltrates onsite. Facilities do not discharges to Waters of the U.S. and/or the Town's regulated MS4 system. Based on the location of both facilities, underlying pervious soils, and surrounding topography, it has been determined that both facilities will not discharge to the Town's MS4 or a Waterbody of the United States under any conditions.

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.

OO	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):
	ring or studies were conducted on your behalf or if monitoring or studies conducted by other eported to you, a brief description of the type of information gathered or received shall be w:
Additional Inf	<u>formation</u>
	er any additional information relevant to your stormwater management program implementation orting period. Include any BMP modifications made by the MS4 if not already discussed above:
COVID-19 Im	<u>ipacts</u>
please identify	ny of the above year 3 requirements could not be completed due to the impacts of COVID-19, of the requirement that could not be completed, any actions taken to attempt to complete the nd reason the requirement could not be completed below:
years. This ha	have been closed to the public and business conducted largely electronically for the past 1+ is limited opportunities for public education/participation, as well as meeting opportunities for regulatory mechanisms.

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 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ⊠

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

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)

Provide any additional details on activities planned for permit year 4 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:

Elizabeth Sullivan

Title: Town Administrator

Signature:

[Signatory may be a duly authorized representative]

Date: 9/13/21