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 Organi	zation: Town of Brool	kline	
EPA N	PDES Permit Number: M	AR041075		
Prima	ry MS4 Program Manag	er Contact Informat	tion	
Name:	James W. Hersey, P.E.		Title: Environmental Engineer	
Street	Address Line 1: 333 Wash	ington Street		
Street .	Address Line 2:			
City:	Brookline	State: MA	Zip Code: 02445	
Email:	jhersey@brooklinema.go	V	Phone Number: (617) 264-6467	
Storm	water Management Prog	ram (SWMP) Inform	mation	
SWMF	Location (web address):	https://www.brooklin	nema.gov/483/Stormwater-Information	
Date S	WMP was Last Updated:	Sep 22, 2021		
If the S	SWMP is not available on	the 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

<u>Impairmen</u>	t(S)

× Bacteria/Pathogens × Chloride Nitrogen × Phosphorus

× Solids/ Oil/ Grease (Hydrocarbons)/ Metals

TMDL(s)

In State: Assabet River Phosphorus × Bacteria and Pathogen Cape Cod Nitrogen

× Charles River Watershed Phosphorus Lake and Pond Phosphorus

Out of State: Bacteria/Pathogens Metals Nitrogen Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. By checking each box you are certifying that you have completed that permit requirement fully. If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 3 Requirements

- × Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
- \times 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:

Annual Requirements

- \times Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- imes 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
 - O This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs

Fown of Brookline Pa	age 3
○ 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 discharacteristics receiving waters	rge to
imes Provided training to employees involved in IDDE program within the reporting period	
imes 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 procede minimize the use of road salt	ures to
X Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yas transfer stations, and other waste handling facilities	rds,
imes Updated inventory of all permittee owned facilities as necessary	
imes O&M programs for all permittee owned facilities have been completed and updated as necessary	
\times Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs	
imes Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants	
imes Inspected all permittee owned treatment structures (excluding catch basins)	
Optional: If you would like to describe progress made on any incomplete requirements listed above, pro any additional information, and/or if any of the above annual requirements could not be completed due t 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:	to the
Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as App	licable
Annual Requirements	ĺ

<u>annual Requirements</u>

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:
Chloride
Annual Requirements
Public Education and Outreach
Included an annual message in November/ December to private road salt applicators and commercial × industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies
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)
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:

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Optional: If you would like to describe progress made on any incomplete requirements listed above ny additional details, please use the box below:	or provide
Solids, Oil and Grease (Hydrocarbons), or Metals nnual Requirements	
Good Housekeeping and Pollution Prevention for Permittee Owned Operations Increased street sweeping frequency of all municipal owned streets and parking lots to a scheduling targets areas with potential for high pollutant loads	dule that
Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more to excessive sediment or debris loadings	
Optional: If you would like to describe progress made on any incomplete requirements listed above ny additional details, please use the box below:	or provide
Charles River Watershed Phosphorus TMDL × Completed the funding source assessment Optional: If you would like to describe progress made on any incomplete requirements listed above ny additional details, please use the box below:	or provide
Optional: Use the box below to provide any additional information you would like to share as part o elf-assessment:	f your

Part III: Receiving Waters/Impaired Waters/TMDL

Have you m submitted?	nade any changes to your lists of receiving waters, outfalls, or impairments since the NOI was
	○ Yes
	No
If yes, desc	ribe below, including any relevant impairments or TMDLs:

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Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education
Number of educational messages completed during this reporting period: 4
Below, report on the educational messages completed during this reporting period . For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program. BMP:Public Education
Message Description and Distribution Method:
Think Blue Ad campaign messages sent out via Facebook and on the Stormwater Website (https://www.brooklinema.gov/483/Stormwater-Information).
Targeted Audience: Residents, businessess, institutions, comercial facilities, and developers.
Responsible Department/Parties: Engineering
Measurable Goal(s):
Tracked the number of messages and responses on Facebook and website.
Message Date(s): September 15, 2020, January 20, 2021, April 9, 2021, and June 1, 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:
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:

Allowed public to review SWMP on the Town's Stormwater website and provide comments.	

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Was this opportunity different than what was proposed in your NOI? Yes O No	•
Describe any other public involvement or participation opportunities conducted durin Annual DPW open house for third graders was postponed again due to COVID-19	ng this reporting period
MCM3: Illicit Discharge Detection and Elimination (I	DDE)
Sanitary Sewer Overflows (SSOs)	222)
Check off the box below if the statement is true.	
☐ This SSO section is NOT applicable because we DO NOT have sanita	ry sewer
Below, report on the number of SSOs identified in the MS4 system and removed during	g this reporting period.
Number of SSOs identified: 0	
Number of SSOs removed: 0	
MS4 System Mapping	
Optional: Provide additional status information regarding your map:	
Screening of Outfalls/Interconnections If conducted, please submit any outfall monitoring results from this reporting period. results should include the date, outfall/interconnection identifier, location, weather cosampling, precipitation in previous 48 hours, field screening parameter results, and replease also include the updated inventory and ranking of outfalls/interconnections base. 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:	nditions at time of esults from all analyses.
Below, report on the number of outfalls/interconnections screened during this reporti	ng period.
Number of outfalls screened: 26	

Below, report on the percent of outfalls/interconnections scre	ened to date	
Percent of outfalls screened: 90	encu to unic.	
Optional: Provide additional information regarding your outf	all/interconnection screening:	
Catchment Investigations		
If conducted, please submit all data collected during this repoint investigations. Also include the presence or absence of System		
O No catchment investigations were conducted		
 The catchment investigation data is attached to 	o the email submission	
 The catchment investigation data can be found 	at the following website:	
Below, report on the number of catchment investigations com	pleted during this reporting period.	
Number of catchment investigations complete	d this reporting period: 5	
Below, report on the percent of catchments investigated to da	te.	
Percent of total catchments investigated: 90		
Optional: Provide any additional information for clarity rega	rding the catchment investigations below:	
IDDE Progress		
If illicit discharges were found, please submit a document des	1 0	
period, and cumulative to date, including location source; des date of discovery; and date of elimination, mitigation, or enfo schedule of removal.		
O No illicit discharges were found		
• The illicit discharge removal report is attached to the email submission		
 The illicit discharge removal report can be for 	and at the following website:	
Below, report on the number of illicit discharges identified an removed during this reporting period.	d removed, along with the volume of sewage	
Number of illicit discharges identified: 1		
Number of illicit discharges removed: 1		
Estimated volume of sewage removed: 4,057	gallons/day	

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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: 2 Total number of illicit discharges removed: 2 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**: Annual IDDE training was completed this spring/summer 2021. Educational video was watched by DPW employees. 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: 43 Number of inspections completed: 43 Number of enforcement actions taken: 1 Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

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

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Below, report on the number of as-built drawings received during this reporting period.	
Number of as-built drawings received: 11	
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:	ding
Brookline adopted a "Complete Streets Policy" in May 2016. The Town also has a "Transporation Access Plan Guidelines" that was institued in January 1, 2018.	3
Green Infrastructure Report	
Describe the status of the green infrastructure report due in year 4 of the permit term, including the finding and progress towards making the practice allowable:	gs
Brookline is working on a Climate Action Plan that includes sections of implementing Green Infrastructur	e.
Retrofit Properties Inventory	
Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that c be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have be modified or retrofitted:	
Brookline continues to review and assess municipal retrofits. Parks, schools, and roadway projects are examined to see if retrofits are feasible. One school/park project had two infiltration systems installed dur this reporting period.	ring
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.	ıl
Number of catch basins inspected: 1,633	
Number of catch basins cleaned: 1,633	
Total volume or mass of material removed from all catch basins: 299 tons	

Below, report on the total number of catch ba	usins in the MS4 s	system.	
Total number of catch basins:	3,300		
If applicable:			
Report on the actions taken if a catch basin so inspections/cleaning events:	ump is more than	1 50% full during two consecutive	routine
Street Sweeping			
Report on street sweeping completed during t	this reporting per	riod using <u>one</u> of the three metric	s below.
O Number of miles cleaned:			
O Volume of material removed:		[Select Units]	
• Weight of material removed:	521	tons	
Stormwater Pollution Prevention Plan (SW Below, report on the number of site inspection reporting period. Number of site inspections con Describe any corrective actions taken at a factorial storm.	ns for facilities the mpleted: 6		uring this
Ado Monitoring or Study Results Results from any other stormwater or receiving reporting period not otherwise mentioned about permit effectiveness must be attached.		monitoring or studies conducted c	~
Not applicableThe results from additional re	_	are attached to the email submission and be found at the following webs	

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If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted entities were reported to you, a brief description of the type of information gathered or received shadescribed below:	
Additional Information	
Optional: Enter any additional information relevant to your stormwater management program impduring the reporting period. Include any BMP modifications made by the MS4 if not already discussions are stormwater management program implications.	
COVID-19 Impacts	
<i>Optional:</i> If any of the above year 3 requirements could not be completed due to the impacts of Coplease identify the requirement that could not be completed, any actions taken to attempt to complete requirement, and reason the requirement could not be completed below:	
Activities Planned for Next Reporting Period	

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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: Melvin A. Kleckner Title: Town Administrator

Signature: Wel A. Kleckner Date: 9/22/21

[Signatory may be a duly authorized representative]