Year 1 Annual Report

Massachusetts Small MS4 General Permit Reporting Period: May 1, 2018-June 30, 2019

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.

Part I: Contact Information

Name of Municipality or Organization: Town of Plymo	outh	
EPA NPDES Permit Number: MAR041150		
Primary MS4 Program Manager Contact Informati	on	
Name: Sid Kashi	Title: Town Engineer	
Street Address Line 1: Town of Plymouth		
Street Address Line 2: 26 Court St		
City: Plymouth State: MA	Zip Code: 02360	
Email: skashi@townhall.plymouth.ma.us Phone Number: (508) 747-1620		
Fax Number: na		
Stormwater Management Program (SWMP) Inform	nation	
SWMP Location (web address):		
Date SWMP was Last Updated: Jun 28, 2019		
If the SWMP is not available on the web please provid not posted on the web:	e the physical address and an explanation of why it is	
https://www.plymouth-ma.gov/engineering/pages/storn	nwater	

Part II: Self Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

Impairment(<u>(s)</u>			
	☒ Bacteria/Pathogens☒ Solids/ Oil/ Grease (Hy	☐ Chloride ydrocarbons)/ Metal	⊠ Nitrogen s	☐ Phosphorus
TMDL(s)				
In State:	☐ Assabet River Phospho☐ Charles River Watersh		eria and Pathogen ⊠ Lake and Pond	☐ Cape Cod Nitrogen Phosphorus
Out of State:	☐ Bacteria/Pathogens	☐ Metals	□ Nitrogen	☐ Phosphorus
			Cl	ear Impairments and TMDLs
you have con	npleted that permit requiren dditional information will b	nent fully. If you ha	ve not completed a re	ch box you are certifying that equirement leave the box
	op and begin public education	on and outreach pro	gram	
_	fy and develop inventory of	1		scharged to the MS4 in the
·	• The SSO inventory is a	attached to the emai	l submission	
	○ The SSO inventory can	n be found at the fol	lowing website:	
⊠ Develo	op written IDDE plan includ	ling a procedure for	screening and sample	ing outfalls
\boxtimes IDDE	ordinance complete			
Identify each outfall and interconnection discharging from MS4, classify into the relevant category, and priority rank each catchment for investigation				
	• The priority ranking of			
	C The priority ranking of	f outfalls/interconne	ctions can be found a	t the following website:
	ruction/ Erosion and Sedime		_	
⊠ Develomeasur	op written procedures for sit res	te inspections and en	nforcement of sedime	nt and erosion control
	op written procedures for sit	-		
-	a log of catch basins cleaned	-		
	lete inspection of all stormw	ater treatment struc	tures	

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□ Annual opportunity for public participation in review and implementation of SWMP	
□ Comply with State Public Notice requirements	
⊠ 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 dischar receiving waters	ge to
☐ All curbed roadways have been swept a minimum of one time per year	
Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as A	pplicable)
Annual Requirements	
Public Education and Outreach*	
Annual message encouraging the proper management of pet waste, including noting any existir ordinances where appropriate	ng
Permittee or its agents disseminate educational material to dog owners at the time of issuance of renewal of dog license, or other appropriate time	or
Provide information to owners of septic systems about proper maintenance in any catchment the discharges to a water body impaired for bacteria	at
* Public education messages can be combined with other public education requirements as applic Appendix H and F for more information)	able (see
Nitrogen (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)	
Annual Requirements Public Education and Outreach*	
Distribute an annual message in the spring (April/May) that encourages the proper use and disp grass clippings and encourages the proper use of slow-release fertilizers	osal of
Distribute an annual message in the summer (June/July) encouraging the proper management o waste, including noting any existing ordinances where appropriate	f pet
Distribute an annual message in the fall (August/September/October) encouraging the proper d of leaf litter	isposal
* Public education messages can be combined with other public education requirements as applic (see Appendix H and F for more information)	rable
Good Housekeeping and Pollution Prevention for Permittee Owned Operations	
Increase street sweeping frequency of all municipal owned streets and parking lots subject to Pepart 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)	ermit
Potential structural BMPs	
Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or instath the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate introgen removal by the BMP consistent with Attachment 1 to Appendix H. Document the BM total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogenerm removed in mass per year by the BMP in each each annual report	e the P type,

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads

Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50

percent full; Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings

Lake and Pond Phosphorus TMDL

☐ Begin Phase 1 Lake Phosphorus Control Plan (LPCP)

Use the box below to input additional details on any unchecked boxes above or any additional information you would like to share as part of your self assessment:

Public Outreach and Education program: prepared messages for Residential audience and Industrial audience, which will be distributed in Year 2; also prepared annual spring message for lawn care that will be posted on stormwater web page in Year 2.

Inspection of stormwater treatment structures will begin in Year 2. Annual training of IDDE program employees will begin in Year 2.

Potential structural BMPs: catchment investigation procedure and estimated nitrogen removal by BMP will be completed in Year 2.

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any chai submitted?	nges to your lists of receiving waters, outfalls, or impairments since the NOI was
Yes 🗌	No ⊠
If yes, describe below, i	including any relevant impairments or TMDLs:

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 the reporting period: 0
Below, report on the educational messages completed during the first year. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.
BMP:[Message name here] Message Description and Distribution Method:
Targeted Audience:
Responsible Department/Parties:
Measurable Goal(s):
Message Date(s):
Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐
Was this message different than what was proposed in your NOI? Yes ☐ No ☐
If yes, describe why the change was made:
Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during the reporting period:

Stormwater Management Plan posted at https://www.plymouth-ma.gov/engineering/pages/stormwater

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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 of	conducted during the reporting period:
Began coordination of SWMP public meeting for Year 2.	3 1 31
MCM3: Illicit Discharge Detection and El	limination (IDDE)
	, ,
Sanitary Sewer Overflows (SSOs)	
Below, report on the number of SSOs identified in the MS4 system and	removed during this reporting period.
Number of SSOs identified: 8	
Number of SSOs removed: 8	
Below, report on the total number of SSOs identified in the MS4 system report SSOs identified since 2013.	n and removed to date. At a minimum,
Total number of SSOs identified: 8	
Total number of SSOs removed: 8	
MS4 System Mapping	
Describe the status of your MS4 map, including any progress made du	<u> </u>
1-Town reviewed outfalls to determine ownership. Several outfalls we collection systems were not part of the MS4.	vere eliminated as the stormwater water
2 - MS4 Maps updated on a ongoing basis as new information is deve	loped.
Screening of Outfalls/Interconnections	
If conducted, please submit any outfall monitoring results from this rep	
results should include the date, outfall/interconnection identifier, local sampling, precipitation in previous 48 hours, field screening paramete	· · · · · · · · · · · · · · · · · · ·
The outfall screening data is attached to the email su	·
The outfall screening data is attached to the chian se	
•	
Outfall screening to begin permit year 2.	

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

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Number of outfalls screened: 0	
Below, report on the percent of total outfalls/interconnections screen	ened to date.
Percent of total outfalls screened: 0	
Catchment Investigations If conducted, please submit all data collected during this reporting investigations. Also include the presence or absence of System Vuln The catchment investigation data is attached to the The catchment investigation data can be found at	erability Factors for each catchment. e email submission
Below, report on the number of catchment investigations completed Number of catchment investigations completed this	
Below, report on the percent of catchments investigated to date.	
Percent of total catchments investigated:	
Optional: Provide any additional information for clarity regarding to Catchment investigations will begin Year 2	he catchment investigations below:
Catchinent hivestigations will begin 1 ear 2	
IDDE Progress If illicit discharges were found, please submit a document describin period, and cumulative to date, including location source; descriptidate of discovery; and date of elimination, mitigation, or enforceme schedule of removal. The illicit discharge removal report is attached to The illicit discharge removal report can be found	on of the discharge; method of discovery; nt OR planned corrective measures and the email submission
Illicit discharges have not been identified to date.	
Below, report on the number of illicit discharges identified and rem removed during this reporting period.	oved, along with the volume of sewage
Number of illicit discharges identified: 0	
Number of illicit discharges removed: 0	
Estimated volume of sewage removed:	[UNITS]
Below, report on the total number of illicit discharges identified and the number of illicit discharges identified and removed since the effective of the interest of illicit discharges identified:	

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Total number of illicit discharges removed: 0	
Optional: Provide any additional information for clarity regarding illicit discharges identified, remorplanned to be removed below:	oved, or
Illicit discharges have not been identified to date.	
Employee Training	
Describe the frequency and type of employee training conducted during the reporting period:	
Engineering personnel attended workshop by the Central MA Regional Stormwater Coalition.	

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 complet	ted: 138
Number of inspections completed: n/	'a
Number of enforcement actions taken	n: n/a

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

Ordinance Development

Describe the status of the post-construction ordinance required to be complete in year 2 of the permit term:

Plymouth Guide for the Design of Storm Water Facilities will be updated to revise standards for runoff volume and pollutant removal by June 2020. Update will also require BMPs to be optimized for nitrogen removal including infiltration practices where feasible.

As-built Drawings

Describe the status of the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites required to be complete in year 2 of the permit term:

Guide for the Design of Storm Water Facilities will be updated with procedure for submission of as-built plans by June 2020.

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Street Design and Parking Lots Report	
Describe the status of the street design and parking lots assessment due in year 4 any planned or completed changes to local regulations and guidelines:	of the permit term, including
The report will be completed by June 2022.	
Green Infrastructure Report	
Describe the status of the green infrastructure report due in year 4 of the permit te and progress towards making the practice allowable:	rm, including the findings
The report will be completed by June 2022.	
Retrofit Properties Inventory Describe the status of the inventory, due in year 4 of the permit term, of permittee be modified or retrofitted with BMPs to mitigate impervious areas and report on a modified or retrofitted: The inventory will be completed by June 2022.	
MCM6: Good Housekeeping	
Catch Basin Cleaning Describe the status of the catch basin cleaning optimization plan:	
The catch basin cleaning optimization plan will be completed by June 2020.	
If complete, attach the catch basin cleaning optimization plan or the schedule to g the optimization plan: O The catch basin cleaning optimization plan or schedule is attach to the catch basin cleaning optimization plan or schedule can be seen to website:	ned to the email submission

Below, report on the number of catch basins inspect removed from the catch basins during this reporting		ıl volume of material
Number of catch basins inspected:		
Number of catch basins cleaned:		
Total volume or mass of material rea	moved from all catch basins:	[UNITS]
Below, report on the total number of catch basins in	n the MS4 system, if known.	
Total number of catch basins:		
If applicable:		
Report on the actions taken if a catch basin sump is inspections/cleaning events:	s more than 50% full during two con	nsecutive routine
The Town currently attempts to clean all catch basis	ins at least once a year.	
Street Sweeping		
Describe the status of the written procedures for sw	veeping streets and municipal-owne	d lots:
Outline of street sweeping procedures is posted on	the Plymouth DPW Highway Divis	ion web page.
Report on street sweeping completed during the rep	porting period using one of the three	e metrics below.
O Number of miles cleaned:		
O Volume of material removed:	[UNITS]	
O Weight of material removed:	[UNITS]	
If applicable:		
For rural uncurbed roadways with no catch basins, targeted sweeping plan:	describe the progress of the inspect	ion, documentation, and
Winter Road Maintenance		
Describe the status of the written procedures for wi sand:	inter road maintenance including the	e storage of salt and
Winter road maintenance/snow removal plan is pos	sted on Plymouth DPW Engineering	g Division web page.

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Inventory of Permittee-Owned Properties	
Describe the status of the inventory, due in year 2 of the permit term, of permit parks and open spaces, buildings and facilities, and vehicles and equipment, and	
The inventory will be completed by June 2020.	
O&M Procedures for Parks and Open Spaces, Buildings and Facilities, an	d Vehicles and Equipment
Describe the status of the operation and maintenance procedures, due in year 2 permittee-owned properties (parks and open spaces, buildings and facilities, ve include maintenance activities associated with each:	*
The O&M procedures will be completed by June 2020.	
Stormwater Pollution Prevention Plan (SWPPP) Describe the status of any SWPPP, due in year 2 of the permit term, for permi including maintenance garages, public works yards, transfer stations, and othe pollutants are exposed to stormwater:	<u> </u>
The SWPPP will be completed by June 2020.	
Below, report on the number of site inspections for facilities that require a SW reporting period. Number of site inspections completed:	PPP completed during this
Describe any corrective actions taken at a facility with a SWPPP:	
NA	
O&M Procedures for Stormwater Treatment Structures	
Describe the status of the written procedure for stormwater treatment structure	e maintenance:
The O&M procedures are included in IDDE Plan that was completed in Year	1.

Additional Information

Monitoring or Study Results

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

Not applicable
The results from additional reports or studies are attached to the email submission
○ The results from additional reports or studies can be found at the following website(s):
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
<i>Optional:</i> 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:

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

Yes, I agree ⊠

- Complete system mapping Phase I
- Begin investigations of catchments associated with Problem Outfalls
- Develop or modify an ordinance or other regulatory mechanism for post-construction stormwater runoff from new development and redevelopment
- Establish and implement written procedures to require the submission of as-built drawings no later than two years after the completion of construction projects
- Develop, if not already developed, written operations and maintenance procedures
- Develop an inventory of all permittee owned facilities in the categories of parks and open space,

buildings and facilities, and vehicles and equipment; review annually and update as necessary

- Establish a written program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained in a timely manner
- Develop and implement a written SWPPP for maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater
- Enclose or cover storage piles of salt or piles containing salt used for deicing or other purposes
- Develop, if not already developed, written procedures for sweeping streets and municipal-owned lots
- Develop, if not already developed, written procedures for winter road maintenance including storage of salt and sand
- Develop, if not already developed, a schedule for catch basin cleaning
- Develop, if not already developed, a written procedure for stormwater treatment structure maintenance
- Develop a written catchment investigation procedure (18 months)

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 in the last 5 years
- 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 uncurbed streets at least annually

Provide any additional details on activities planned for permit year 2 below:					

Part V: Certification of Small MS4 Annual Report 2019

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:	Sid Kashi, P.E.	Title: Town Engineer
Signature:	Signatory may be a duly authorized	Date: 09/27/19
	Signatory may be a auty authorizea representative]	