# **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 Organization	: Department of	Conserv	ation and	Recreation	n	
EPA N	IPDES Permit Number: MAR04	3001					
Prima	ry MS4 Program Manager Co	ntact Informat	ion				
Name:	Robert Lowell		Title:	Deputy C	hief Engi	neer	
Street	Address Line 1: 251 Causeway	St					
Street .	Address Line 2:						
City:	Boston	State: MA	Zip Co	ode: 02114			
Email:	robert.lowell@mass.gov		Phor	e Number	: (508) 50	09-1757	
Storm	water Management Program	(SWMP) Infort	nation				
SWMI	P Location (web address): https://	//www.mass.go	v/doc/sto	rmwater-1	nanagem	ent-plan/download	
Date S	WMP was Last Updated: 6/30/	2021					
If the S	SWMP is not available on the w	eb please provid	le the ph	ysical add	ress:		

## 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: <a href="https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state">https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state</a>

	1 0	1			
Impairment(	( <u>s</u> )				
	⊠ Bacteria/Pathogens	⊠ Chloride	Nitrogen		
	⊠ Solids/ Oil/ Grease (Hy	drocarbons)/ Metal	S		
TMDL(s)					
In State:	☐ Assabet River Phospho	rus 🗵 Bacte	eria and Pathogen	☐ Cape Cod Nitrogen	
		ed Phosphorus	imes Lake and Pond	Phosphorus	
Out of State:	☐ Bacteria/Pathogens	☐ Metals	⊠ Nitrogen	☐ Phosphorus	
			Cle	ear Impairments and TMDI	_s
you have com	ff all requirements below the <b>pleted that permit requiren</b> dditional information will be	<b>nent fully.</b> If you ha	ve not completed a re	•	ıat
Year 3 Requi	<u>rements</u>				
⊠ Inspec	ted and screened all outfalls	/interconnections (e	excluding Problem and	d Excluded outfalls)	
	ed outfall/interconnection prer inspections as necessary	riority ranking based	d on the information c	ollected during the dry	
	onstruction bylaw, ordinanc ermit requirements	e, or other regulator	y mechanism was upo	dated and adopted consister	ıt

*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:

DCR has developed a draft Stormwater Handbook to meet the requirement for a post-construction regulatory mechanism. COVID-19 impacted the schedule to complete this Handbook since many departments need to contribute to the guidance, review the Handbook, and assist in development of protocols. DCR will finalize the draft of the Handbook this Fall and review project design review protocols to ensure that the Handbook guidance is included in appropriate projects while the Stormwater Handbook is being finalized. DCR Stormwater Engineering will provide training to DCR staff and design consultants on the requirements in the Handbook.

#### **Annual Requirements**

- $\bowtie$  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

<ul> <li>○ This is not applicable because we do not have sanitary sewer</li> <li>○ This is not applicable because we did not find any new SSOs</li> <li>○ The updated SSO inventory is attached to the email submission</li> <li>● The updated SSO inventory can be found at the following website:</li></ul>	⊠ The SSO implement	inventory has been updated, including the status of mitigation and corrective measures
<ul> <li>○ This is not applicable because we did not find any new SSOs</li> <li>○ The updated SSO inventory is attached to the email submission</li> <li>⑥ The updated SSO inventory can be found at the following website:         <ul> <li>https://www.mass.gov/doc/illicit-discharge-detection-and-elimination-idde-plan/download</li> </ul> </li> <li>Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters</li> <li>☑ Provided training to employees involved in IDDE program within the reporting period</li> <li>☑ All curbed roadways were swept at least once within the reporting period</li> <li>☑ Updated system map due in year 2 as necessary</li> <li>☑ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt</li> <li>☐ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities</li> <li>☑ Updated inventory of all permittee owned facilities as necessary</li> <li>☑ O&amp;M programs for all permittee owned facilities have been completed and updated as necessary</li> <li>☑ Implemented all maintenance procedures for permittee owned facilities in accordance with O&amp;M programs</li> <li>☑ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants</li> <li>☑ Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>witional: If you would like to describe progress made on any incomplete requirements listed above, provide yadditional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:</li> </ul>	(	
https://www.mass.gov/doc/illicit-discharge-detection-and-elimination-idde-plan/download  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 SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities  Updated inventory of all permittee owned facilities as necessary  O&M programs for all permittee owned facilities have been completed and updated as necessary  Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs  Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants  Inspected all permittee owned treatment structures (excluding catch basins)	(	•
https://www.mass.gov/doc/illicit-discharge-detection-and-elimination-idde-plan/download  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 SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities  Updated inventory of all permittee owned facilities as necessary  O&M programs for all permittee owned facilities have been completed and updated as necessary  Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs  Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants  Inspected all permittee owned treatment structures (excluding catch basins)  properly stored and updated as necessary  and/or if any of the above annual requirements listed above, provide y additional information, and/or if any of the above annual requirements could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	(	The updated SSO inventory is attached to the email submission
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 SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities  Updated inventory of all permittee owned facilities as necessary  O&M programs for all permittee owned facilities have been completed and updated as necessary  Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs  Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants  Inspected all permittee owned treatment structures (excluding catch basins)	(	• The updated SSO inventory can be found at the following website:
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)  prional: If you would like to describe progress made on any incomplete requirements listed above, provide yadditional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:		https://www.mass.gov/doc/illicit-discharge-detection-and-elimination-idde-plan/download
<ul> <li>✓ All curbed roadways were swept at least once within the reporting period</li> <li>✓ Updated system map due in year 2 as necessary</li> <li>✓ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt</li> <li>✓ Implemented SWPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities</li> <li>✓ Updated inventory of all permittee owned facilities as necessary</li> <li>✓ O&amp;M programs for all permittee owned facilities have been completed and updated as necessary</li> <li>✓ Implemented all maintenance procedures for permittee owned facilities in accordance with O&amp;M programs</li> <li>✓ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants</li> <li>✓ Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>Mional: If you would like to describe progress made on any incomplete requirements listed above, provide yadditional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:</li> </ul>		
<ul> <li>☑ Updated system map due in year 2 as necessary</li> <li>☑ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt</li> <li>☑ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities</li> <li>☑ Updated inventory of all permittee owned facilities as necessary</li> <li>☑ O&amp;M programs for all permittee owned facilities have been completed and updated as necessary</li> <li>☑ Implemented all maintenance procedures for permittee owned facilities in accordance with O&amp;M programs</li> <li>☑ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants</li> <li>☑ Inspected all permittee owned treatment structures (excluding catch basins)</li> </ul>	⊠ Provided	training to employees involved in IDDE program 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  Vupdated 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)  Inspected all permittee owned treatment structures (excluding catch basins)	⊠ All curbe	ed roadways were swept at least once within the reporting period
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)  witional: If you would like to describe progress made on any incomplete requirements listed above, provide yadditional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	⊠ Updated	system map due in year 2 as necessary
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)  Inspected all permittee owned treatment structures (excluding catch basins)		
<ul> <li>         ⊠ O&amp;M programs for all permittee owned facilities have been completed and updated as necessary         <ul> <li>Implemented all maintenance procedures for permittee owned facilities in accordance with O&amp;M programs</li> <li>Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants</li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> </ul> </li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li> </ul> <li>Inspected all permittee owned treatment structures (excluding catch basins)</li>		
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)  Inspected all permittee owned treatment structures (excluding catch basins)  Inspected all permittee owned treatment structures (excluding catch basins)  Inspected all permittee owned treatment structures (excluding catch basins)	⊠ Updated	inventory of all permittee owned facilities as necessary
programs  Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants  Inspected all permittee owned treatment structures (excluding catch basins)  Itional: If you would like to describe progress made on any incomplete requirements listed above, provide y additional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	⊠ O&M pro	ograms for all permittee owned facilities have been completed and updated as necessary
Inspected all permittee owned treatment structures (excluding catch basins)  **Total*: If you would like to describe progress made on any incomplete requirements listed above, provide y additional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	X	
otional: If you would like to describe progress made on any incomplete requirements listed above, provide y additional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	⊠ Impleme	nted program for MS4 infrastructure maintenance to reduce the discharge of pollutants
y additional information, and/or if any of the above annual requirements could not be completed due to the pacts of COVID-19, please identify the requirement that could not be completed, any actions taken to empt to complete the requirement, and reason the requirement could not be completed below:	⊠ Inspected	l all permittee owned treatment structures (excluding catch basins)
"U had nontomized initial cita rights to explicate manifested togething and aid in the devial amount of the	y additional i pacts of COV empt to comp	nformation, and/or if any of the above annual requirements could not be completed due to the /ID-19, please identify the requirement that could not be completed, any actions taken to

DC SWPPPs. DCR has draft SWPPPs for all required facilities. COVID-19 impacted the schedule to complete this SWPPPs at facilities and working within the remote work challenges. The SWPPPs will be finalized during the Fall of 2021 and quarterly site inspections will commence.

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable) **Annual Requirements** 

Dubl	ia Edu	aation	and Or	utrogo	<i>L</i> *
Punn	ic rau	canon	ana Un	uireac	$M^{-1}$

X	Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
X	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:

Check box 3 (septic systems) is not applicable to DCR as a non-traditional and transportation MS4. DCR does not have privately-owned septic systems.

#### 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:

Not Applicable. DCR does not use private salt applicators at our facilities and the facilities are not leased by commercial/industrial site owners.

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)

#### Potential structural BMPs

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

- The BMP information is attached to the email submission
- The BMP information can be found at the following website:

Department of Conservation and Recreation	Page 5
Optional: If you would like to describe progress made on any incomplete requirements	listed above or provid
any additional details, please use the box below:	instead doove or provid
Per Appendix H requirements for discharges to nutrient-impaired waterbodies, DCR winutrient removal for structural BMPs after developing a list of potential structural BMP Year 5. DCR did work to build a database to track BMP treatment information and to make locations this year. DCR has developed an automated record keeping process to estimate will implement this process as additional BMP information is gathered. DCR also has be to develop nitrogen removal crediting methods for BMPs not currently in Appendix F to pollutant removal provided on DCR sites.	s by the end of Permit nap existing BMP te nitrogen removal an been working with EPA
Dhoga house (Combination of Inspaired Waters Dogwinsmants and TMDI Dogwinsmants	og Amaliachia)
<b>Phosphorus</b> (Combination of Impaired Waters Requirements and TMDL Requirements	s as Applicable)
Annual Requirements	
Public Education and Outreach*  Distributed an annual message in the spring (April/May) encouraging the proper grass clippings and encouraging the proper use of slow-release and phosphorus-f Distributed an annual message in the summer (June/July) encouraging the proper waste, including noting any existing ordinances where appropriate	
Distributed an annual message in the fall (August/September/October) encourage of leaf litter	ing the proper disposal
* Public education messages can be combined with other public education requiren Appendix $H$ and $F$ for more information)	nents as applicable (se
Good Housekeeping and Pollution Prevention for Permittee Owned Operations	
Increased street sweeping frequency of all municipal owned streets and parking l part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)	ots subject to Permit
Potential structural BMPs	
Any structural RMPs already existing or installed in the regulated area by the per	mittee or its agents

Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP were documented.
○ The BMP information is attached to the email submission
○ The BMP information can be found at the following website:

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Per Appendix H requirements for discharges to nutrient-impaired waterbodies, DCR will track and estimate nutrient removal for structural BMPs after developing a list of potential structural BMPs by the end of Permit Year 5. DCR did work to build a database to track BMP treatment information and map existing BMP locations this year. DCR has developed an automated record keeping process to determine estimated phosphorus removal and will implement this process as additional BMP information is collected. DCR also has been working with EPA to develop phosphorus removal crediting methods for BMPs not currently in

Appendix F to fully reflect the pollutant removal provided on DCR sites.

#### Solids, Oil and Grease (Hydrocarbons), or Metals

#### **Annual Requirements**

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
  - 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:
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 or provide any additional details, please use the box below:
Lake and Pond Phosphorus TMDL
⊠ Completed the funding source assessment
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:

*Optional:* Use the box below to provide any additional information you would like to share as part of your self-assessment:

Since DCR is a statewide entity with facilities in many watersheds, DCR completed an analysis to determine which water bodies which require development of PCPs and/or NSIRs, and which water bodies are applicable to DCR's regulated facilities. DCR has determined that 5 PCPs, and likely between 8-12 NSIRs, will need to be developed. DCR will continue to evaluate the regulated status of facilities within watersheds requiring NSIRs to finalize the list of NSIRs.

DCR determined load calculations from each regulated facility in PCP watersheds. DCR has completed initial reviews of facilities in PCP and NSIR watersheds to determine locations with high potential for BMPs and tracking these locations in GIS. DCR is developing documents to summarize the approach and inputs to

complete the PCPs/NSIRs and developing templates to meet Permit Year 4 reporting requirements.

# Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any	changes to your	lists of receiving	g waters, outfalls,	or impairments	since the NOI was
submitted?					

YesNo

If yes, describe below, including any relevant impairments or TMDLs:

Since submitting the NOI, we completed a GIS analysis of DCR-owned and maintained properties in Year 1 and have further refined the list of regulated facilities in Permit Years 2 and 3 as DCR's GIS drainage mapping is refined and facilities are evaluated more closely in support of the development of PCPs and NSIRs. The refined Permit Year 3 regulated facility list available online at: https://vhb.maps.arcgis.com/apps/webappviewer/index.html?id=1fffa8d7b9e144e793dcffb0445846e2

A list documenting the changes to the regulated facilities in Permit Year 3 is included as an attachment to this report.

## **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 advantional massages completed during this reporting paried:	5
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: 1-1: Social Media Public Service Messages**

Message Description and Distribution Method:

All messages are shared and viewable on DCR's Twitter feed @MassDCR

Fall message about leaf litter pollution and proper collection

Spring message about managing grass clippings and fertilizers

Summer message about dog waste management

SWMP posting message noting updated SWMP and encouraging public's review

Targeted Audience: Visitors, General Public

Responsible Department/Parties: Engineering/External Affairs

Measurable Goal(s):

@MassDCR Twitter account has 22,900 followers

Fall message - 5 retweets/7 likes

Spring message - 7 retweets/7 likes

Spring message also posted on @MASSDCR Instagram (7,385 followers) - 106 likes

Summer message - 7 retweets and comments/11 likes

SWMP message - 1 retweets/3 likes

Message Date(s): Summer message 7/22/20, Fall message 9/18/20, 9/19/20, 9/27/20 & 9/27/20, Spring message 4/9/21, SWMP message 8/3/21

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:

Social media public service messages have replaced the 'Downstream Newsletter' which has been discontinued.

# **BMP:1-2: Signs about Not Feeding Gulls**

Message Description and Distribution Method:

Continued to post and maintain signs around Wachusett Reservoir informing public not to feed seagulls, as part of an ongoing water quality protection program.

Department of Conserva	tion and Recreation Page 10
Targeted Audience:	Visitors, General Public, Staff
Responsible Depart	ment/Parties: Operations
Measurable Goal(s	· :
	12 facilities in Leominster, Shrewsbury, Northborough, Clinton, Worcester, Hudson,
Message Date(s):	ngoing
Message Completed	for: Appendix F Requirements  Appendix H Requirements
Was this message d	fferent than what was proposed in your NOI? Yes O No •
If yes, describe why	the change was made:
BMP:1-3: Stormw	ater Posters and Brochures
	ater Posters and Brochures n and Distribution Method:
Message Description	
Message Description  Displayed education	n and Distribution Method: nal signage and distributed brochures about water quality and stormwater pollution
Message Description  Displayed education  prevention.  Targeted Audience:	n and Distribution Method: nal signage and distributed brochures about water quality and stormwater pollution
Message Description  Displayed education  prevention.  Targeted Audience:	n and Distribution Method: nal signage and distributed brochures about water quality and stormwater pollution  Visitors, Staff ment/Parties: External Affairs
Message Description  Displayed education prevention.  Targeted Audience:  Responsible Depart  Measurable Goal(s)  Lakes and Ponds/Pa	n and Distribution Method: nal signage and distributed brochures about water quality and stormwater pollution  Visitors, Staff ment/Parties: External Affairs
Message Description Displayed education prevention.  Targeted Audience: Responsible Depart Measurable Goal(s) Lakes and Ponds/Pa Longfellow Bridge	n and Distribution Method:  nal signage and distributed brochures about water quality and stormwater pollution  Visitors, Staff  ment/Parties: External Affairs  :  ark Facilities - various kiosks interpretative signage [example - Charles River Reservation

Yes O No •

#### **BMP: 1-4: Dog Waste Management**

Message Completed for:

Message Description and Distribution Method:

If yes, describe why the change was made:

Was this message different than what was proposed in your NOI?

Continued to post signs at DCR properties about dog waste management. Provided mutt mitt stations at highuse dog walking areas. Initiated commercial dogwalker permit program. Maintained website with educational materials about dog waste management.

Department of Conser	vation and Recreation	Page 11
Targeted Audienc	e: Visitors	
Responsible Depa	artment/Parties: External Affairs/Operations	
Measurable Goal	(s):	
Lakes and Ponds/ Commercial Dog Websites: https://	tion - Quabbin Reservoir/Ware River/Wachusett Reservoir Park Facilities - various kiosks/ mutt-mitt stations/dogwalking permit information Walker Permits - 72 www.mass.gov/service-details/brochures-fact-sheets-and-reports s.gov/guides/dogs-in-dcr-parks	
Message Date(s):	Watershed Protection - ongoing Lakes and Ponds/Park Facilities/Website - Ongoing Dog Walking Permit Information - permits issued annually	
Message Complet	ed for: Appendix F Requirements ⊠ Appendix H Requirements ⊠	
Was this message	different than what was proposed in your NOI? Yes O No •	
If yes, describe w	hy the change was made:	
BMP:1-5: Storm	water Management Website	
Message Descript	tion and Distribution Method:	
_	cuments to DCR Stormwater Management website s.gov/service-details/dcr-stormwater-management	
Targeted Audienc	e: Staff, Visitors, General Public, Designers/Contractors	
Responsible Depa	artment/Parties: Engineering/External Affairs	
Measurable Goal	(s):	
	P Page Views - 495 views downloads - 43 downloads	
Message Date(s):	9/28/20, Permit Year 3 version updated 6/30/2021, posted 7/30/21	
Message Complet	ed for: Appendix F Requirements   Appendix H Requirements	
Was this message	different than what was proposed in your NOI? Yes ○ No ●	
If yes, describe w	hy 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:

DCR posted our SWMP online on 9/28/2020 and the Permit Year 3 version was updated 6/30/2021 and posted on 7/30/2021 at https://www.mass.gov/service-details/dcr-stormwater-management. No comments were received during this period.

Was this opportunity different than what was proposed in your NOI? Yes O No •

Describe any other public involvement or participation opportunities conducted **during this reporting period**: COVID-19 prevented public involvement and participation opportunities noted in the SWMP and group activities did not happen during the permit year due to COVID-19. DCR was involved with multiple public participation activities in Permit Year 3.

DCR's annual Park Serve Day was canceled due to COVID-19 concerns. In replacement, DCR is working with various Friends Groups and stewardship initiatives to encourage smaller groups to work on park cleanup efforts at various DCR properties. These activities include but are not limited to DCR /NepRWA partnership cleanup event on 4/17/21 (https://www.neponset.org/happenings/neprwa-blog/2021-spring-river-cleanup-recap), a similar partnership "CoastSweep" with CZM at DCR beaches, and a tire cleanup event on the Charles River with CRWA. Details are available on our website: https://www.mass.gov/service-details/dcr-park-serve-make-every-day-earth-day.

Additionally DCR operations coordinated with the Charles Basin friends groups to clean the Esplanade, Charlesgate (Muddy River) and Upper Basin on 4/24/21. The Neponset River effort on April 17th included Tenean Beach, Finnigan Park at Port Norfolk, Granite Ave. along the Greenway, Ventura Park/Playground, Sqauntum Point Park, Boston Scientific Canoe Launch on Shea Blvd. and Neponset Landing. Public involvement has expanded this year to include volunteers ranging from families to corporate groups. Other operational assisted cleanups were performed at Magazine Beach, Wompatuck State Park, Blackstone, Alewife Reservation, Draw 7 Park, Blessing of the Bay, Norumbega Rd., Houghton's Pond, Wollaston Beach, Quincy Homestead, Revere Beach, Harold Parker State Forest, Robinson/Chicopee Memorials and Castle Island.

Wachusett Educational Program canceled in-person events due to COVID-19 concerns. The program has significantly increased online efforts to include new videos and stay at home activities, including an interactive trail brochure of Stillwater Farm that includes details on the hydrology and and stormwater resources on the farm. We posted the Stay at Home Activities on our website: https://www.mass.gov/info-details/wachusett-reservoir-watershed-education-programs.

Additionally, DCR Stormwater staff gave presentations highlighting DCR's stormwater efforts including to the DCR Stewardship Council (12/21/20), Charles River Watershed Association (4/9/21), and Mystic River Watershed Association (4/14/21).

# MCM3: Illicit Discharge Detection and Elimination (IDDE)

<b>Sanitary Sewer Overfl</b>	ows (SSOs)
Check off the box below	if the statement is true.
☐ This SS	O section is NOT applicable because we DO NOT have sanitary sewer
Below, report on the nu	mber 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	
Optional: Provide addi	tional status information regarding your map:
	pdating and refining our drainage infrastructure mapping in GIS as we conduct our tenance program and IDDE investigation work.
Screening of Outfalls/l	Interconnections
<u> </u>	omit any outfall monitoring results from this reporting period. Outfall monitoring
•	he 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.
O No outfa	alls were inspected
The out	fall screening data is attached to the email submission
• The out	fall screening data can be found at the following website:
-	hb.maps.arcgis.com/apps/webappviewer/index.html? 5a2683aa4478a07ade7ffb7c1b2a
Below, report on the nu	mber of outfalls/interconnections screened during this reporting period.
Number	of outfalls screened: 630
Below, report on the pe	rcent of outfalls/interconnections screened to date.
Percent	of outfalls screened: 100
Optional: Provide addi	tional information regarding your outfall/interconnection screening:

# **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 of System Valuerability Eastern for each eatelment.
investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.  O No catchment investigations were conducted
• The catchment investigation data can be found at the following website:
https://vhb.maps.arcgis.com/apps/webappviewer/index.html? id=87a35a2683aa4478a07ade7ffb7c1b2a
Below, report on the number of catchment investigations completed during this reporting period.
Number of catchment investigations completed this reporting period: 3
Below, report on the percent of catchments investigated to date.
Percent of total catchments investigated: 0.4
Optional: Provide any additional information for clarity regarding the catchment investigations below:
DCR began catchment investigations on the remaining problem outfalls and the highest priority outfalls. Details of the catchment investigations are included in the attached IDDE Summary Report. We will continue catchments investigations in PY4.
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.
<ul> <li>No illicit discharges were found</li> </ul>
<ul> <li>The illicit discharge removal report is attached to the email submission</li> </ul>
The illicit discharge removal report can be found at the following website:
Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.
Number of illicit discharges identified: 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:

The illicit discharge was identified during a catchment investigation and was promptly eliminated. DCR was unable to estimate the volume of illicit discharge into the system. Details of the illicit discharge removal are in the IDDE Summary Report attached.

#### **Employee Training**

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

DCR has provided Stormwater staff training to new employees in December 2020, April and June 2021 for IDDE investigations, GIS mapping, SWPPP inspections, and BMP inspections. A department-wide training did not occur this reporting period due to COVID-19.

#### MCM4: Construction Site Stormwater Runoff Control

Below, r	report on the	construction	site plan	reviews,	inspections,	and en	forcement	actions	completed	during
this repo	orting period	<i>!</i> .								

Number of site plan reviews completed: 58	
Number of inspections completed: 42	
Number of enforcement actions taken: 0	

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

DCR ensures construction site stormwater management through compliance with the NPDES Construction General Permit (GP). DCR includes special provisions on construction contracts which exceed the one-acre land disturbance threshold. The special provisions require preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the Construction GP. The special provisions also reference the construction erosion and sediment control guidelines outlined in DCR's Stormwater Handbook. Inspections and corrective actions are conducted in accordance with the Construction GP and SWPPP. No enforcement actions were required from the site inspections performed this year.

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

<u> </u>	ls-	<u>b</u>	ui	<u>ilt</u>	$\mathbf{D}$	<u>r</u>	a	W	<u>ir</u>	ıgs	3

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

Number of as-built drawings received:	1
Number of as-built drawings received.	4

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

DCR is utilizing as-built drawings to ensure that new or re-constructed drainage infrastructure is included in MS4 GIS database. DCR requires as-built drawings as part of general construction specifications.

#### **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:

DCR has included guidance for street design and parking lot assessments in the draft Stormwater Handbook.

#### **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:

Not applicable to	non-traditional M	S4s		

#### **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:

DCR has mapped existing BMP locations in GIS. DCR has begun a high level analysis of potential retrofit BMP locations as part of the PCP and NSIR tasks. DCR will continue to evaluate facilities to develop an inventory of potential retrofit BMPs.

# 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	d: 1,257
Number of catch basins cleaned:	1,227

Total volume or mass of material removed from all catch basins: 550 cubic yards

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

Total number of catch basins: 7,34	4
------------------------------------	---

*If applicable:* 

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

If a catch basin sump has been reported as more than 50% full after two yearly visits, notation will be made to visit twice a year.

#### **Street Sweeping**

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

$\bigcirc$	Number of miles cleaned:		
•	Volume of material removed:	2,190	cubic yards
$\circ$	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:	0

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

DCR has completed initial site evaluations to aid in the development of the draft SWPPPs for the sites. Due to COVID-19, the SWPPPs have not been finalized and quarterly site inspections have not been completed. Although SWPPP inspections haven't occurred, in accordance with DCR's O+M Plan and DCR's standard practices, all DCR sites throughout the state implement best practices to minimize pollutants entering the environment.

## **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 website(s):

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:

DCR has continued to improve upon our GIS mapped drainage data in PY3, confirming accurate mapping through site inspections, CCTV investigations and collaborating with adjacent municipalities to identify interconnections. DCR had worked with more than 6 municipalities to share mapped drainage and sewer data, confirm ownership of structures and identify interconnections. DCR will continue to work with neighboring municipalities throughout the state to share GIS and eliminate illicit discharges.

DCR stormwater staff has encouraged design projects to incorporate stormwater treatment practices to go above those required for the project in an effort to reduce pollutants from DCR properties, especially in TMDL watersheds like the Charles River.

DCR completed a project in PY3 along Morrissey Blvd in Dorchester, installing tide gates to limit flooding of the roadway and promote sediment collection in catch basins upstream from the tide gates to reduce pollutants to Dorchester Bay.

#### **COVID-19 Impacts**

*Optional:* 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:

The COVID-19 pandemic has caused a triple digit increase in DCR parks usage throughout the state. Increased park and facility usage has lead to increased support by all DCR staff. This, in addition to COVID restrictions at facilities, has slowed DCR's ability to meet some requirements including SWPPP reports and inspections. As noted above, the SWPPPs are in draft form and will be finalized soon so quarterly inspections may begin.

#### **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 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 SWPPs 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 be	elow:
---	-------

DCR plans to continue meeting the annual requirements of the permit, continue on the progress made in Permit Year 3 and expand the MS4 program to meet Permit Year 4 requirements.

#### 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:	Jim Montgomery	Title:	Commissioner
	Jim Montgomery Digitally signed by Jim Montgomery Date: 2021.09.23 18:44:03 -04'00' [Signatory may be a duly authorized representative]	Date:	