Year 6 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2023-June 30, 2024

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are to publicly accessible sites

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2023 and June 30, 2024 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Department of Conservation and Recreation

EPA NPDES Permit Number: MAR043001

Primary MS4 Program Manager Contact Information

Name: Robert Lowell Title: Deputy Chief Engineer

Street Address Line 1: 10 Park Plaza

Street Address Line 2:

City: Boston State: MA Zip Code: 02116

Email: robert.lowell@mass.gov Phone Number: (508) 509-1757

Stormwater Management Program (SWMP) Information

SWMP Location (publicly available web address): https://www.mass.gov/info-details/dcr-stormwater-management

Date SWMP was Last Updated: 6/20/2024

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state

Impairment(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.*

Annual Requirements

☒ Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements

☒ Kept records relating to the permit available for 5 years and made available to the public

☒ The SSO inventory has been updated, including the status of mitigation and corrective measures implemented

- ○ This is not applicable because we do not have sanitary sewer
- ○ This is not applicable because we did not find any new SSOs
- ○ The updated SSO inventory is attached to the email submission
- ◉ The updated SSO inventory can be found at the following publicly available website:

https://www.mass.gov/doc/illicit-discharge-detection-and-elimination-idde-plan/download

☒ Updated system map due in year 10 with information from completed catchment investigations

☒ Provided training to employees involved in IDDE program within the reporting period

☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters

☒ All curbed roadways were swept at least once within the reporting period

☒ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt

☒ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities

☒ Updated inventory of all permittee owned facilities as necessary

☒ O&M programs for all permittee owned facilities have been completed and updated as necessary

☒ Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs

☒ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants

☒ Inspected all permittee owned treatment structures (excluding catch basins)

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

DCR inspected 475 (100%) subsurface and 212 (100%) surface treatment structures (BMPs) in Permit Year 6. DCR has utilized ArcGIS Dashboards and webmaps to help track progress towards inspecting all BMPs. DCR will continue to use these tools for Permit Year 7 and continue working to optimize maintenance activities that need to occur based on the inspections.

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

Annual Requirements

*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

☒ This is not applicable because there are no septic systems present

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

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

DCR's SWMP includes posting public educational messages on X (formerly Twitter) and Instagram including messages about proper management of pet waste. The annual message for proper management of dog waste was not posted in Permit Year 6 on X or Instagram but was posted at the end of PY5 (6/29/23) where it was viewable at the start of the PY6, and throughout the permit year. The PY7 message was posted on 8/1/24.

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

The following type(s) of salt were applied **during this reporting period (year 6)**:

☒ Sodium chloride

☐ Calcium chloride
☐ Potassium chloride
☐ Magnesium chloride
☐ Brine solution

Total amount of salt applied **during this reporting period (year 6) including units**:	47.5 cubic yards

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:

Salt application amount listed above is only for areas within Salt Reduction Plan watersheds and which winter maintenance is provided by DCR. Public education messages are not applicable because DCR does not use private salt applicators at facilities in its Salt Reduction Plan watershed. Winter maintenance at DCR facilities is performed by either DCR or MassDOT, depending on the road. Both DCR and MassDOT provide annual trainings to their winter maintenance operators, which cover proper storage and application rates of winter deicing material along with the steps that can be taken to minimize salt use and protect waterbodies. This is discussed further in DCR's Salt Reduction Plan and O&M Plan.

Based on DCR's review of the 2022 303d list, DCR needs to develop Salt Reduction Plans for 4 new waterbodies newly impaired for chloride including Aberjona River (MA71-01), Alewife Brook (MA71-20), Little River (MA71-21) and Beaver Brook (MA72-28) by February 2025. DCR has begun updating the existing Salt Reduction Plan to include the additional waterbodies and new requirements in PY7 and plans to have the updates complete in February 2025.

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

Annual Requirements

*Public Education and Outreach**

☒ Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
☐ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Structural BMPs

☐ Installed a structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries. The type of BMP installed is (*e.g. biofiltration)*:

Demonstration BMPs for NSIR watersheds were required to be installed in PY6 according to the MS4 Permit. Demonstration BMPs are installed in the Mount Hope Bay NSIR and Outer New Bedford Harbor NSIR watersheds and are documented in the NSIR reports linked below. As of the end of Permit Year 6, the demonstration BMP (an infiltration trench) at McVann-O'Keefe Rink in the Proctor

Brook NSIR-PSIR watershed was in construction. Construction of the infiltration trench was completed in Summer 2024 (PY7) and will be included in BMP crediting in PY7 once as-built plans are received. There are multiple BMPs in the Long Island Sound watershed that were newly mapped in DCR's database but installed during the permit term in 2018, counting as the demo BMP for this NSIR. Additionally, BMPs for the Long Island Sound watershed is designed for Chicopee State Park and construction is planned for Fall 2024.

DCR's SWMP includes posting public educational messages on X (formerly Twitter) and Instagram including messages about proper management of pet waste. The annual message for proper management of dog waste was not posted in Permit Year 6 on X or Instagram but was posted at the end of PY5 (6/29/23) where it was viewable at the start of the PY6, and throughout the permit year. The PY7 message was posted on 8/1/24.

☒ Any structural BMPs listed in Attachment 3 to Appendix F already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP, and the estimated nitrogen removed in mass per year by the BMP were documented.

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

Found in the NSIR document for the applicable watershed available here: https://www.mass.gov/info-details/dcr-stormwater-management

Total estimated nitrogen removed in lbs/year from the installed BMPs: 44.6

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:

DCR MS4 regulated property extends into 4 watersheds that require Nitrogen Source Identification Reports. The sum of nitrogen removed in these watersheds is 44.6 lb/yr with the following existing treatment in each watershed:

Long Island Sound: 36.6 lb/yr
Mount Hope Bay: 3.5 lb/yr
Outer New Bedford Harbor: 4.5 lb/yr
Proctor Brook: 0.0 lb/yr^

^A demonstration BMP was designed and began construction in Permit Year 6 for Proctor Brook. Construction was completed Summer 2024 and will be credited in Permit Year 7.

DCR has BMPs throughout the state that remove nitrogen from runoff. The treatment tallied above is only for MS4-creditable BMPs within DCR's NSIR watersheds. The location of each BMP in a NSIR watershed can be found in the NSIR webmap, which is linked within each NSIR. All NSIRs can be found here: https://www.mass.gov/info-details/dcr-stormwater-management

DCR's SWMP includes posting public educational messages on X (formerly Twitter) and Instagram including messages about proper management of pet waste. The annual message for proper management of dog waste was not posted in Permit Year 6 on X or Instagram but was posted at the end of PY5 (6/29/23) where it was viewable at the start of the PY6, and throughout the permit year. The PY7 message was posted on 8/1/24.

Based on DCR's review of the 2022 303d list, DCR needs to develop NSIRs for 3 new waterbody segments newly impaired for nitrogen, all of which are segments of the Taunton River (MA62-02, MA62-03, MA62-04), by February 2026. DCR plans to begin developing the reports in PY7 and having them completed by February 2026.

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

Annual Requirements

*Public Education and Outreach**

☒ Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers

☐ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Structural BMPs

☒ Installed a structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries. The type of BMP installed is (*e.g. biofiltration)*:

Demonstration BMPs for PSIR watersheds were required to be installed in PY6 according to the MS4 Permit. Demonstration BMPs are installed in the Blackstone River PSIR, Merrimack River PSIR, Mother Brook PSIR, Mystic River PSIR and the Ten Mile River PSIR watersheds. The demonstration BMPs in each watershed are documented in the PSIR reports linked below. As of the end of Permit Year 6, the demo BMP (an infiltration trench) at McVann-O'Keefe Rink in the Proctor Brook NSIR-PSIR watershed was in construction. Construction of the infiltration trench was completed in Summer 2024 (PY7).

☒ 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.

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

Found in the PSIR and PCP documents for the applicable watershed available here: https://www.mass.gov/info-details/dcr-stormwater-management

Total estimated phosphorus removed in **lbs/year** from the installed BMPs: 103

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:

DCR MS4 regulated property extends into 6 watersheds that require Phosphorus Source Identification Reports and 4 watersheds that require Phosphorus Control Plans. The sum of phosphorus removed in these watersheds is 103 lb/yr with the following existing treatment in each watershed:
PSIR Watersheds:
Mystic River: 16.9 lb/yr
Blackstone River: 5.3 lb/yr
Merrimack River: 4.2 lb/yr
Mother Brook: 3.9 lb/yr
Proctor Brook: 0.0 lb/yr^
Ten Mile River: 0.0 lb/yr^

PCP Watersheds:
Charles River: 72.7 lb/yr
Lake Quinsigamond & Flint Pond: 4.5 lb/yr*
Bents Pond/Ramsdall Pond: 0.5 lb/yr*
Auburn Pond/Leeseville Pond: 0.0 lb/yr*^
*Treatment in the 3 PCP watersheds with an asterisk are not summed in the total listed in the box above (5 lb/yr) to avoid double-counting treatment because the treatment in these watersheds are also within a PSIR watershed.
^ BMPs were constructed in these 3 watersheds in Permit Year 6 (and Summer 2024 in PY7) to meet NSIR-PSIR and PCP requirements. While estimated credit was calculated for the proposed designs, DCR will update the crediting based on as-builts and include in watershed summaries in PY7.

DCR has BMPs throughout the state that remove phosphorus from runoff. The treatment tallied above is only for MS4-creditable BMPs within DCR's PSIR and PCP watersheds. The location of each BMP in a PSIR or PCP watershed can be found in the webmaps for the respective documents, which are linked within each document. All PSIRs and PCPs can be found here: https://www.mass.gov/info-details/dcr-stormwater-management

DCR's SWMP includes posting public educational messages on X (formerly Twitter) and Instagram including messages about proper management of pet waste. The annual message for proper management of dog waste was not posted in Permit Year 6 on X or Instagram but was posted at the end of PY5 (6/29/23) where it was viewable at the start of the PY6, and throughout the permit year. The PY7 message was posted on 8/1/24.

Based on DCR's review of the 2022 303d list, DCR needs to develop a PSIR for 1 new waterbody segment newly impaired for phosphorus- Taunton River (MA62-02)- by February 2026. DCR plans to begin developing the reports in PY7 and having them completed by February 2026.

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

○ The street sweeping schedule is attached to the email submission

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

https://www.mass.gov/guides/dcr-street-sweeping

☒ 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:

DCR developed a ranking system to prioritize catch basin inspections and cleaning so no sump is more than 50 percent full. The rankings recalculate based on new inspections records. DCR created a ArcGIS dashboard and map to show the catch basins that require cleaning and suggested cleaning frequency. This process has allowed DCR field staff to focus efforts on catch basins that need immediate attention and plan out cleaning schedules.

Charles River Watershed Phosphorus TMDL

Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.

Baseline phosphorus export rate from PCP Area, as identified in Appendix F **(lbs/year) [A]**:	873
Total phosphorus reduction from all nonstructural controls implemented **this reporting period (lbs/year) [B]**:	31
Total phosphorus reduction from all structural controls installed this reporting period and all previous years **(lbs/year) [C]**:	41.7
Phosphorus load increase due to development incurred since 2005 in **lbs/year [D]**:	3.1
Current phosphorus export rate from the PCP Area in **lbs/year [=A-(B+C)+D** from above**]**:	803.4

☒ I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.

☒ All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31 pertaining to proper use of fertilizers on turf grasses

☒ Implemented all nonstructural control measures **during this reporting period** and documented the measures and their phosphorus reduction. The nonstructural control measure information:

- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in Section 4.1 of the Charles River PCP available here: https://www.mass.gov/info-details/dcr-stormwater-management

☒ Documented the structural control measures implemented during **this reporting period and all previous years**, including location, phosphorus reduction in mass/year, and date of last completed maintenance and inspection for each control. The structural control measure information:

- ○ is not applicable; no structural control measures were implemented
- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in Section 4.2 of the Charles River PCP available here: https://www.mass.gov/info-details/dcr-stormwater-management

The Phase 1 PCP: (*select one of the following options. If you submitted your PCP last year and have an updated website, please include the website below)*

- ○ was submitted in the Year 5 Annual Report
- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in the Charles River PCP available here: https://www.mass.gov/info-details/dcr-stormwater-management

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:

DCR has inspected all BMPs in the PCP area in Permit Year 6 and is working to ensure all BMPs get inspected annually and maintained by developing inspection schedules and reviewing inspection data to determine maintenance needed. Overall all BMPs are maintained in accordance with DCR's O&M Plan which is available here: https://www.mass.gov/doc/operations-and-maintenance-om-plan/download

---

NON-TRADITIONAL AND TRANSPORTATION MS4s ONLY- *municipalities please skip this section:*

Describe the planned phosphorus reduction activities on site and coordination progress with the applicable municipality:

Planned phosphorus reduction activities are addressed in the Charles River PCP. Because DCR has already met its Phase 1 PCP target with existing BMPs, significant coordination with municipalities has not been necessary yet. However, DCR has been coordinating with some municipalities, including discussing a possible partnership on a grant opportunity with one large municipality in the Charles River Watershed, and working to compare mapping data with several other communities.

Lake and Pond Phosphorus TMDL

Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.

Baseline phosphorus export rate from LPCP Area **(lbs/year) [A]**:	24.7
Total phosphorus reduction from all nonstructural controls this reporting period **(lbs/year) [B]**:	0.04

Total phosphorus reduction from all structural controls installed this reporting period and all previous years **(lbs/year) [C]**:	6.7
Phosphorus load increase due to development incurred since baseline loading was calculated in **lbs/year [D]**:	0
Current phosphorus export rate from the LPCP Area in **lbs/year [=A-(B+C)+D** from above**]**:	17.96

☒ I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.

☒ All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31.00 pertaining to proper use of fertilizers on turf grasses

☒ Implemented all nonstructural control measures **during this reporting period** and documented the measures and their phosphorus reduction. The nonstructural control measure information:

- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in Section 4.1 of the LPCP document available here: https://www.mass.gov/info-details/dcr-stormwater-management

☒ Documented the structural control measures implemented during **this reporting period and all previous years**, including location, phosphorus reduction in weight/year, and date of last completed maintenance and inspection for each control. The structural control measure information:

- ○ is not applicable; no structural control measures were implemented
- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in Section 4.2 of the LPCP document available here: https://www.mass.gov/info-details/dcr-stormwater-management

The LPCP: (*select one of the following options. If you submitted your LPCP last year and have an updated website, please include the website below)*

- ○ was submitted in the Year 5 Annual Report
- ○ is attached to the email submission
- ◉ can be found at the following publicly available website:

Found in the LPCP available here: https://www.mass.gov/info-details/dcr-stormwater-management

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:

DCR MS4 regulated property extends into 3 watersheds that require Lake Phosphorus Control Plans. The sums from all three of DCR's LPCP watersheds are provided in the boxes above, but the breakdown for each watershed is as follows:

[A] Baseline Phosphorus Export Rate:
Lake Quinsigamond & Flint Pond: 18.5 lb/yr
Bents Pond/Ramsdall Pond: 1.7 lb/yr
Auburn Pond/Leeseville Pond: 4.5 lb/yr

[B] TP Reduction from all nonstructural controls:
Lake Quinsigamond & Flint Pond: 0.03 lb/yr
Bents Pond/Ramsdall Pond: 0.0 lb/yr
Auburn Pond/Leeseville Pond: 0.01 lb/yr

[C] Total Phosphorus Reduction from Installed BMPs:
Lake Quinsigamond & Flint Pond: 4.5 lb/yr
Bents Pond/Ramsdall Pond: 0.5 lb/yr
Auburn Pond/Leeseville Pond: 0 lb/yr^

[D] DCR evaluated each PCP watershed for changes to baseline load due to development. In the three Lakes and Ponds watersheds there was no change in load due to development.

Current Phosphorus Export Rate:
Lake Quinsigamond & Flint Pond: 13.97 lb/yr
Bents Pond/Ramsdall Pond: 1.2 lb/yr
Auburn Pond/Leeseville Pond: 4.49 lb/yr
^BMPs were constructed in Auburn/Leeseville Pond watersheds at the Horgan Skating Arena in Auburn and and will be credited in Permit Year 7.

DCR has inspected all BMPs in the PCP area in Permit Year 6 and is working to ensure all BMPs get inspected annually and maintained by developing inspection schedules and reviewing inspection data to determine maintenance needed. Overall all BMPs are maintained in accordance with DCR's O&M Plan which is available here: https://www.mass.gov/doc/operations-and-maintenance-om-plan/download

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

As a statewide agencies with hundreds of facilities and over 1,500 MS4 regulated outfalls, DCR has invested significant effort over the past 6 years developing a geodatabase of facilities, drainage systems, and BMPs. Continued refinement of the stormwater data has allowed DCR to develop a better understanding of the regulated drainage system and prioritize efforts to meet the MS4 requirements including crediting structural BMPs for pollutant removal throughout the state, but most specifically the PCP and NSIR/PSIR watersheds.

DCR has developed ArcGIS dashboards and web applications to help track and visualize data as well as plan for inspections and maintenance activities for catch basins, BMPs, and quarterly SWPPP inspections. DCR will continue to use these tools to improve the process for field inspections to meet the permit requirements.

The size of DCR's regulated area results in DCR being required to develop and implement 4 PCPs and 9 NSIR/PSIRs. Through DCR's work in Permit Years 4, 5 and 6 DCR was able to calculate credit for existing BMPs in 8 of the PSIR/NSIR watersheds to meet the demonstration BMP requirements and is currently constructing the demonstration BMP for the remaining watershed in Summer 2024. DCR's continued emphasis on implementing BMPs into DCR projects allows DCR to maximize treatment in PCP watersheds, specifically the Charles River. Because of DCR's efforts to incorporate BMPs into programmed projects DCR

is currently meeting the Charles River Phase 1 PCP phosphorus reduction requirements and working to implement BMPs to meet the Phase 2 required reduction. Additionally, DCR began tracking leaf and yard waste disposal amounts in Permit Year 6 to help understand the increased effort needed to potentially receive treatment credit in the future. In Permit Year 6 DCR removed over 1,700 cubic yards of leaf litter and yard waste.

DCR continues to make progress on IDDE requirements and has field staff performing catchment investigations as much as funding allows to try to make progress toward closing catchment investigations and removing nonstormwater flows from the DCR drainage system. DCR has added full-time staff to the stormwater team to help meet the MS4 requirements and hopes to add additional staff dedicated to the stormwater program. Additionally, the hiring of construction inspection staff has helped better track the completion of construction site inspections and enforcement actions in Permit Year 6. DCR will continue to inform staff about the approach to stormwater design and treatment included in Stormwater Handbook.

Part III: Receiving Waters/Impaired Waters/TMDL

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

- (●) Yes
- ( ) No

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

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, 3, and 4 as DCR's GIS drainage mapping is refined and facilities are evaluated more closely in support of the development of PCPs and NSIRs. In Permit Year 5 and 6 there were no changes to facility regulated statuses but some facility boundaries were refined based on updated information. Newly mapped outfalls were added to the database in Permit Year 6 through continued field mapping. Each new outfall was evaluated by DCR and assigned a regulated status, IDDE priority status and receiving waterbody based on it's location. The receiving waterbody impairments were updated in Permit Year 6 to reflect the updated 2022 303d list. The regulated facilities and outfalls can be viewed online at: https://vhb.maps.arcgis.com/apps/webappviewer/index.html?id=1fffa8d7b9e144e793dcffb0445846e2

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:1-1 Social Media Public Service Messages

Message Description and Distribution Method:

All messages are shared and viewable on DCR's X (formerly Twitter) and Instagram feeds @MassDCR
- Fall message was focused on leaf litter pollution and proper collection
- Spring message was focused on managing grass clippings and fertilizers
- Summer message was focused on dog waste management
- SWMP posting message noting updated SWMP and encouraging public's review

Targeted Audience: Visitors, General Public

Responsible Department/Parties: Division of Water Supply Protection, Office of Watershed Management

Measurable Goal(s):

@MassDCR X (formerly Twitter) account has 26,900 followers
@MASSDCR Instagram has 26,700 followers

- Fall message: leaf litter - X: 6 reposts/3 likes/3,211 views. Instagram: 35 likes
- Spring message: grass clippings: X: 2 reposts/12 likes/2 bookmarks/1,255 views. Instagram 120 likes
- Spring message: fertilizer - X: 3 reposts/4 likes/1 bookmark/1,475 views. Instagram: fertilizer: 63 likes
- Summer message - the summer message was not posted in PY6. but was shared on X at the end on PY5 (6/29/23: 2 reposts/3 likes) and PY7 (8/1/24: 7 reposts/ 5 likes/2,000 views)
- SWMP message - X: 3 likes/1,979 views; Instagram: 137 likes

Message Date(s): Fall message 11/1/2023; Spring message 4/13/2024, 4/20/2024; Summer message posts were outside permit year 6/29/23 & 8/1/24; SWMP message 9/1/2023

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 is no longer being published. The increased use of Twitter and Instagram has allowed DCR to share stormwater messages with a larger audience and better track engagement. DCR's SWMP has been updated to reflect this in BMP 1-1.

BMP:1-2: Signs about Not Feeding Gulls

Message Description and Distribution Method:

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

Targeted Audience: Visitors, General Public, Staff

Responsible Department/Parties: Division of Water Supply Protection, Office of Watershed Management

Measurable Goal(s):

Signs are posted in 3 locations in Leominster, 1 in Shrewsbury, 1 in Northborough, 2 in Clinton, 4 in Worcester, 1 in Hudson, 1 in Marlborough, 2 in Fitchburg, 1 in Medway, 1 in Framingham, 1 in Charlton, 1 in Dorchester.

Message Date(s): Ongoing

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

BMP:1-3: Stormwater Posters and Brochures

Message Description and Distribution Method:

DCR displays educational signage and distributed brochures about water quality and stormwater pollution prevention.
Brochures include information about water supply watershed protection, surface water quality, winter salt usage, stormwater pollution and proper disposal of pharmaceuticals.

- Brochures are available at various Water Supply/Reservoir facilities and are distributed to town halls, businesses, car wash fundraisers, firefighters, and others as applicable in water supply watersheds.
- Brochures, signage and educational videos are also available at: https://www.mass.gov/service-details/brochures-fact-sheets-posters-and-reports

The Lakes and Ponds Program has an educational guide available at:
https://www.mass.gov/doc/lakes-ponds-guide-0/download

Targeted Audience: Visitors, Staff

Responsible Department/Parties: External Affairs

Measurable Goal(s):

Educational Signage:
2 signs at Wachusett Reservoir about Direct Discharge Elimination
2 signs at Longfellow Bridge/Charles River Reservation about Clean Water/Green Infrastructure
5 signs at Magazine Beach/Charles River Reservation about watersheds
1 sign at Bajko Rink about the subsurface infiltration system under the parking lot
1 sign at Kings Beach/Stacy Brook/Lynn Shore Reservation about why swimming isn't allowed at the beach
5 signs total at the salt/sand sheds in the 5 watershed towns of the Quabbin Reservoir about "Salt Smarter not

Harder"

Brochures:
DCR Stormwater Brochures ‘Salt Smarter Not Harder’ & ‘Salt Brine Recipe Cards’ were handed out at the Sterling DPW Open House, Leominster EarthFest, the spring & fall Wachusett Dam Day, and the Worcester State University Career Fair. Additionally, 125 "salt smarter not harder" brochures were distributed to towns in the water supply watersheds.
Additional stormwater outreach materials are available at the DCR Leadership Academy for DCR Staff and through the Massachusetts Envirothon program

Message Date(s): Ongoing

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

BMP:1-4: Dog Waste Management

Message Description and Distribution Method:

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

Targeted Audience: Visitors

Responsible Department/Parties: External Affairs/Operations

Measurable Goal(s):

- Maintained Dog Waste Signage at Quabbin Reservoir available at: https://www.mass.gov/doc/quabbin-reservoir-dog-brochure/download
- Maintained Dog Waste Signage at Watershed Protection Areas: Ware River/Wachusett Reservoir/Sudbury Reservoir Facilities - https://www.mass.gov/doc/dog-waste-and-surface-water-quality-0/download
- Maintained mutt-mutt stations and signage at various park facilities (including Lake and Pond watershed locations) - mutt-mitt stations/dogwalking permit information
- Commercial Dog Walker Permits with brochures - 87 permits
- Commercial Dog Walker Application available at: https://www.mass.gov/how-to/apply-for-a-commercial-dog-walking-permit
- DCR Parks Dog Rules and Regulations: https://www.mass.gov/guides/dogs-in-dcr-parks

Message Date(s):
Watershed Protection Facilities signage - ongoing
Park Facility mutt mitt stations/ dog walking permit information - Ongoing
All website locations - Ongoing
Dog Walking Permit Information - permits issued annually

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

BMP:1-5: Stormwater Management Website

Message Description and Distribution Method:

Posted permit documents to DCR Stormwater Management website
https://www.mass.gov/service-details/dcr-stormwater-management

Targeted Audience: Staff, Visitors, General Public, Designers/Contractors

Responsible Department/Parties: Engineering/External Affairs

Measurable Goal(s):

Number of SWMP Page Views - 23 views
SWMP document downloads - 23 downloads
IDDE Plan downloads - 11 downloads
O+M Plan downloads - 9 downloads

Message Date(s): 8/23/2023; Permit Year 6 version updated 6/20/24, posted 7/10/2024

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

BMP:1-6 Project Kick-off Meeting

Message Description and Distribution Method:

DCR will discuss relevant stormwater and permitting requirements at project kick-off meetings with contractors to inform them about relevant stormwater issues. These meetings will highlight expectations related to Illicit Discharge Detection and Elimination (MCM 3), Construction Site Stormwater Runoff Control (MCM 4), and Post-Construction Stormwater Management (MCM 5).

Targeted Audience: Contractors

Responsible Department/Parties: Design and Engineering

Measurable Goal(s):

Number of kick-offs held in permit year: 4

Message Date(s): various dates based on project start dates

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

BMP:1-7 Project Manager Training

Message Description and Distribution Method:

DCR held a training in September for DCR Project Managers to train them on DCR's Stormwater Handbook and its applicability to their projects. Project managers are responsible for conveying the information to design consultants and contractors on their projects (see BMP 1-6). Training provided guidance in the development of cost-effective stormwater management strategies for proposed highway and facility projects to comply with the MS4 Permit, Massachusetts Stormwater Standards/Handbook, and NPDES Construction General Permit.

Targeted Audience: DCR Staff

Responsible Department/Parties: Design and Engineering

Measurable Goal(s):

Project Manager Stormwater Handbook training Date: 9/22/23, Attendees: 56 DCR staff members

Message Date(s): 9/22/2023

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**:

DCR posted the Permit Year 5 version of the SWMP online on 8/23/2023 and the Permit Year 6 version was updated 6/20/2024 and was posted on 7/10/2024

Available at: https://www.mass.gov/service-details/dcr-stormwater-management.

DCR Twitter and Instagram, both @MassDCR, posted about the comment period on 9/1/2023. No comments were received during this period.

Was this opportunity different than what was proposed in your NOI? Yes ○ No ◉

Describe any other public involvement or participation opportunities conducted **during this reporting period**:

DCR has increased efforts to use social media, including Instagram, X (also known as Twitter), and YouTube, to educate the public about water quality and the MS4 permit requirements as well as encourage them to get involved in environmental efforts. Posts include 10 about Park Serve Day to bring attention to the importance of clean parks and recruit as many people as possible to participate in the cleanup, receiving 27,075 total views, 300 likes, & 120 shares. DCR posted 6 times about salt reduction to educate the public about winter roadway salt use, receiving 68,856 total views, 7,044 likes, & 83 shares. Additionally, DCR posted about a variety of topics including climate resiliency, inviting the public to attend a talk to learn how changes in climate affect our resources (2,331 views, 53 likes, 3 shares), drinking water week: encouraging the public to volunteer with a local water conservation organization to learn about the importance of water sustainability (1,371 views, 87 likes, 5 shares), street sweeping: informing the public on the street sweeping schedule and instruction to avoid parking on streets during designated sweeping times, (864 views), World Water Day: encouraging people to use the MA Home Water Use Calculator to understand home water use and ways to make a difference (1,089 views, 5 likes, 4 shares), water value: encouraging the public to value water and help support a water resilient future for everyone, (1,212 views, 54 likes, 2 shares), the Wachusett Dam Walk: bringing attention to the opportunity to walk to the top of the dam and learn about the watershed protection program (2,331 views, 133 likes, 1 share), the Castle Island storm drain cleaning: where the public can learn about the steps of an active project and the various challenges involved (3,924 views, 165 likes, 2 shares), and the Neponset River cleanup where hundreds of BU students participated in a community cleanup to remove trash and complete maintenance (2,747 views, 83 likes).

DCR hosted its 18th Annual Park Serve Day, welcoming more than 2,818 volunteers to 42 DCR properties statewide in each the Boston, Northern, Southern, Central and Western sections of the state, including significant efforts in the Charles and Neponset River watersheds. Volunteers collectively worked to collect over a 1,300 bags of trash and brush and leaves. In addition, trails were cleared, hundreds of flowers were planted, and structures were painted and repaired. DCR also hosted a Malden River Cleanup where over 70 volunteers collected 70 bags of trash and 7 tires from the surrounding area, and partnered with Coastal Zone Management (CZM) and various organizations for the COASTSWEEP initiative to clean DCR beaches Aug-Dec., in 2023; where over 1,000 volunteers collected over 24,500 pounds of trash at 51 DCR sites.
DCR hosted a Project WET Workshop in Jan 2024 focused on watershed and forest health with attendees including educators from Boston, Vermont, and Maine.

DCR has attended multiple events to spread information on the importance of watershed protection including the Worcester State University Career Fair where they gave a talk on Watershed Protection and distributed DCR stormwater brochures (Salt Smarter not Harder + Salt Brine Recipe cards), the City of Leominster EarthFest where they provided DCR stormwater brochures, and Sterling DPW Open House (spring) where DCR gave a Watershed Protection talk & Enviroscape display and distributed DCR stormwater brochures (Salt Smarter not Harder + Salt Brine Recipe cards).

DCR has made efforts to highlight the MS4 program and share best practices at industry events, including DCR Research Symposium – NPDES Phosphorous & Nutrient Control Plan: Target Watersheds & Control Measures Feb. 13, 2024 (60-65 attendees), Environmental Business Council – MS4 Discussion Jan. 25,2024, SNEP Grant Announcement Nov. 1, 2023, SNEP Symposium June 12, 2024, DCR Stormwater Handbook Training Sept. 22, 2023 (56 attendees), Worcester Telegram & Gazette – Wachusett Salt Reduction in Reservoir: Education Efforts/Grants/Salt Brine Feb. 6, 2024, and Friends of Wollaston Beach Annual meeting Nov 18, 2023.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer

*Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period**.*

Number of SSOs identified: 4

Number of SSOs removed: 4

MS4 System Mapping

Percent of Phase II map complete: 97.9

Optional: Provide additional status information regarding your map:

DCR is continuously updating and refining our drainage infrastructure mapping in GIS as we conduct our infrastructure and maintenance program and IDDE investigation work. The percentage above reflects a weighted average of all DCR drainage infrastructure (14,678 structures, 99% complete) and all mapped catchments (454 catchments, 35% complete). Additionally, while DCR generally does not own sewer or combined systems, DCR has collected municipal sanitary sewer systems and combined sewer systems mapped for 13% of municipalities in Massachusetts where DCR has facilities (17 municipalities) to help inform catchment investigations.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

○ No outfalls were inspected

○ The above referenced outfall screening data is attached to the email submission

◉ The above referenced outfall screening data can be found at the following publicly available website:

https://vhb.maps.arcgis.com/apps/webappviewer/index.html?id=87a35a2683aa4478a07ade7ffb7c1b2a

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

Number of outfalls screened: 82

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

Percent of outfalls screened: 94

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

The percent outfalls shown reflects the percent of all regulated outfalls. As DCR continues to update mapping, including defining interconnections, new regulated outfalls have been mapped and therefore the overall number of regulated outfalls has increased each year since the original outfall inventory was finished in Permit Year 3. Newly identified regulated outfalls/ interconnections are the reason why the percent complete is not 100% and slightly decreased from last year's 95%.

The number of outfalls will continue to be updated as new outfalls are located and existing outfalls are further reviewed for ownership/maintenance responsibility, location, outlet discharge type, and drainage infrastructure mapping. DCR will continue to screen newly identified outfalls each year and will screen those that were not addressed in PY6 early in PY7 to try to maintain 100% 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 or absence of System Vulnerability Factors for each catchment.

- ○ No catchment investigations were conducted
- ○ The catchment investigation data is attached to the email submission
- ◉ The catchment investigation data can be found at the following publicly available 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: 208

Below, report on the percent of catchments investigated ***to date.***

Percent of total catchments investigated: 15.3

Optional: Provide any additional information for clarity regarding the catchment investigations below:

As a statewide agency with over 1,400 outfalls in the IDDE program, completion of IDDE catchment investigations is a massive undertaking for DCR. In PY6, DCR focused on further refining catchment watersheds with key junction manholes and identifying those where catchment investigations should be performed to continued focused field work efforts. DCR will continue this work in PY7.

Additionally, DCR has continued refining and reviewing catchments without key junction manholes that may be closed based on screening data. DCR has made significant progress on these effort in PY6, increasing closed catchment investigations from 0.7% to 15.3%.

DCR will continue efforts to close catchments in PY7, focusing on the Problem and Highest catchments that are required to be complete by the end of PY7.

DCR has also focused on field work and collaboration with adjacent municipalities for Problem Outfalls with potential non-stormwater flows, which is time-intensive and requires significant coordination at times.

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- ○ No illicit discharges were found
- ◉ The illicit discharge removal report is attached to the email submission
- ○ The illicit discharge removal report can be found at the following publicly available website:

*Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period.***

Number of illicit discharges identified: 6

Number of illicit discharges removed: 1

Estimated volume of sewage removed: 15 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: 9

Total number of illicit discharges removed: 3

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

Details about each illicit discharge are included in the IDDE Summary Report included as an attachment to this annual report. The 6 illicit discharges identified in PY6 all have planned actions to eliminate the discharges in PY7, which are documented in the summary report and DCR's database. Removal of these discharges is a priority for DCR to reduce pollutants to our waterbodies.

Employee Training

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

DCR has provided annual Stormwater Unit staff training to employees in April 2024 which focused on IDDE investigations, GIS mapping, SWPPP inspections, and BMP inspections.

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: 6

Number of inspections completed: 18

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 erosion and sediment controls for stormwater management through compliance with the NPDES Construction General Permit (CGP). These are completed by another department at DCR currently and the DCR Stormwater Team is working with the other group to get a summary of number of inspections completed for future permit years. DCR includes special provisions in construction documents for projects which meet or exceed the one-acre land disturbance threshold. The special provisions require preparation of a Stormwater Pollution Prevention Plan (SWPPP) and ongoing site inspections in accordance with the CGP.

DCR has began incorporating site plan reviews into our overall project review process - DCR's Green Docket process. This process flags when a project is subject the CGP requirements and that appropriate staff has reviewed the site plans for appropriate controls.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3): Stormwater Handbook draft completed 6/30/2021, updated 6/30/2022

Website of ordinance or regulatory mechanism: https://www.mass.gov/doc/dcr-stormwater-design-handbook/download

As-built Drawings

Below, report on the number of as-built drawings received ***during this reporting period****.*

Number of as-built drawings received: 0

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

DCR's general construction specifications requires as-built drawings at the completion of a project. The Engineering group has been developing a procedure to gather the submitted as-builts and add new or re-constructed drainage infrastructure and treatment to the MS4 GIS database. DCR will continue to work on building out this procedure in PY7.

Street Design and Parking Lots Report

Below, describe any changes made or planned to be made to local regulations and guidelines based on the report completed in Year 4:

DCR does not have the authority to develop ordinances or regulations and relies on master planning and

professional design standard practices, such as MassDOT's Project Design and Development Guide (PDDG) for project designs. DCR's review of Street Design and Parking Lot guidelines concluded that DCR's current approach, using the PDDG and the DCR Stormwater Handbook, along with DCR's focus on facility context and landscape consistency in its parks encourages LID measures. DCR will continue to provide training to project managers on the Handbook and encouraging LID measures as the first step to design. DCR's Stormwater Group will continue using the Green Docket review process to ensure projects are maximizing the use on LID measures.

Green Infrastructure Report

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

Since DCR is a non-traditional MS4, DCR is not subject to the requirements of Section 2.3.6.c of the MS4 Permit and does not have the authority to create regulations. DCR did complete this evaluation in parallel with the evaluation of street design and parking lot guidelines to review if there were improvements DCR can make to best support green infrastructure. DCR's Stormwater Handbook includes an initial review of green infrastructure that can be incorporated into designs. DCR will continue to encourage designers to first consider LID measures and green infrastructure in their designs.

Retrofit Properties Inventory

Below, list remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (must maintain a minimum of 5 sites in inventory until less than 5 sites remain):

1. Chicopee State Park - Chicopee
2. Hammond Pond Parkway - Newton
3. Quincy Shore Drive - Quincy
4. Christian A. Herter Park - Boston
5. Memorial Drive Phase 3 - Cambridge

See attached DCR Retrofit Opportunities Memo summarizing the planned and constructed retrofit BMPs at each location listed above.

Below, list all properties that have been modified or retrofitted with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.d of the permit and the type of BMP(s) implemented. Non-MS4 owned properties that have been modified or retrofitted with BMPs to mitigate impervious area may also be listed, but must be indicated as non-MS4.

The following DCR properties have been retrofitted with BMPs that were constructed in Permit Year 6. All BMPs and their installation dates are available on DCR's MS4 Web Viewer: https://vhb.maps.arcgis.com/apps/webappviewer/index.html?id=1fffa8d7b9e144e793dcffb0445846e2

1. Horgan Skating Arena, Auburn - 2 leaching basins, 1 infiltration basin
2. George Spatcher Swimming Pool, Attleboro - 1 leaching basin
3. McVann - O'Keefe Memorial Skating Rink, Peabody - 1 infiltration trench (this BMP was in construction at the end of the permit year and construction finished Summer 2024)
4. Marsh Post Trail Connection, Cambridge - 1 jellyfish filter, 1 infiltration basin

See attached DCR Retrofit Opportunities Memo summarizing the planned and constructed retrofit BMPs at each location listed above.

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: 3,268

Number of catch basins cleaned: 3,173

Total volume or mass of material removed from all catch basins: 3,577 tons

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

Total number of catch basins: 7,169

If applicable:

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

DCR developed a ranking system to prioritize catch basin inspections and cleaning with the goal to maintain sumps being more than 50 percent full. The rankings recalculate when new inspections records are recorded in GIS. DCR created a ArcGIS dashboard and map to show the catch basins that require cleaning and the frequency at which they need to be cleaned. This process has allowed DCR field staff to focus efforts on catch basins that need immediate attention. If a catch basin sump has been reported as more than 50% full after two annual inspection/cleaning visits, the inspection and cleaning schedule for that catch basin will be changed to twice a year.

Street Sweeping

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

- ○ Number of miles cleaned:
- ○ Volume of material removed: [Select Units]
- ◉ Weight of material removed: 2,000 tons

Stormwater Pollution Prevention Plan (SWPPP)

*Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period**.*

Number of site inspections completed: 48

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

DCR completed 4 rounds of quarterly inspections at each of the 12* regulated facilities. All facilities had a least one inspections completed in wet weather conditions. DCR has developed an ArcGIS dashboard to summarize the activities that require follow-up or maintenance, and to help staff track quarterly inspections. DCR will continue to complete quarterly inspections at each facility and is working to ensure follow-up maintenance actions are completed and documented in the GIS database.

*Note: the number of labor yards requiring SWPPPs decreased from the previously reported 13 based on further evaluation of the Hampton Pond facility. Further review by DCR found this site does not contain sources of pollutants.

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 publicly available website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

N/A

Additional Information

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 PY6, confirming accurate mapping through site inspections, CCTV investigations and collaborating with adjacent municipalities to identify interconnections. DCR has worked with 17 municipalities to share mapped drainage and sewer data, confirm ownership of structures and identify interconnections and is continuing this work in PY7. 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.

Year 7

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

Yes, I agree ☒

- Complete investigations of catchments associated with Problem Outfalls
- Complete investigations of catchments where any information gathered on the outfall/interconnection identifies sewer input

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)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their

inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 7 below:

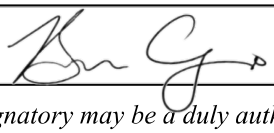
DCR plans to continue meeting the annual requirements of the permit, continue on the progress made in Permit Year 6, and expand the MS4 program to meet Permit Year 7 requirements, as documented in DCR's SWMP.

Part V: Certification of Small MS4 Annual Report 2024

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: Brian Arrigo Title: Commissioner

Signature:  Date: 9/25/24

[Signatory may be a duly authorized representative]

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

Annual Report Submission

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

EPA: MassDEP:

Paper Signature:

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

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

Lock Form