Maine Department of Transportation

Municipal Separate Storm Sewer Systems General Permit

Annual Report PY7

September 15, 2020

Orono roundabout stormwater planter

Permit MER043000
Permittee MER043002

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Introduction and Summary

In accordance with the reporting requirements specified in Part IV. J. 1. of the General Permit for the Discharge of Stormwater from Maine Department of Transportation and Maine Turnpike Authority (MTA) Municipal Separate Storm Sewer Systems (MS4), MaineDOT provides this report for Permit Year 7 (PY7).

MaineDOT continues to achieve the measurable goals identified in the MaineDOT Stormwater Program Management Plan (SPMP), described below in Minimum Control Measures (MCMs) 1 through 6. A copy of the MaineDOT SPMP is on file at the Maine Department of Environmental Protection (DEP) Office in Augusta.

MaineDOT conducted quarterly visual water quality monitoring at both vehicle maintenance facilities located in MS4 urbanized areas (Scarborough and Bangor). Visual Monitoring Forms were completed and are kept on file with the facility's Stormwater Pollution Prevention Plan (SWPPP); digital copies are kept in the MaineDOT Environmental Office, Surface Water Quality Unit, MS4 files in Augusta. No other water quality monitoring was conducted or required.

In the next reporting cycle, MaineDOT will continue to make improvements to its infrastructure maps by verifying outfall locations and direction of flow between catch basins; and will continue confirming the locations of interconnected stormwater infrastructure with other regulated entities.

MaineDOT has not made any changes to the goals identified in the SPMP.

This report includes a description of the actions completed for the measurable goals of each Best Management Practice (BMP) identified in the MaineDOT SPMP for each MCM in the General Permit. BMPs for all the MCMs were completed successfully in PY7 except for MCM 1 where, due to COVID-19, spring training sessions were canceled.

MCM 1. Public Education and Outreach on Stormwater Impacts

Goals

1. Raise awareness among employees and contractors that polluted stormwater runoff is the most significant source of water quality problems for Maine's waters.
2. Motivate staff and contractors to use BMPs to reduce polluted stormwater runoff.
3. Reduce polluted stormwater runoff as a result of increased awareness and use of BMPs.

BMP 1.1 Raise awareness among employees and contractors by providing training on reducing polluted stormwater runoff.

MaineDOT provides erosion and sedimentation and water pollution control training to employees and contractors annually. In PY7, MaineDOT provided only one of two scheduled four-hour Erosion and Sedimentation Control classes for MaineDOT employees. COVID-19 caused the cancelation of all in-person training beginning in the spring of 2020 including the second four-hour E&SC class for employees, the annual spring Project Development Construction Training, and the DEP Nonpoint Source Resource Training Center's Basic and Advanced Erosion and Sedimentation Control Practices training for contractors across the State.

MaineDOT Employees and Contractors: MS4 urbanized areas are located only in MaineDOT Regions 1 and 4 (Portland area, southern Maine, Lewiston-Auburn area, and the greater Bangor area). This training is further described below, and relevant documentation is retained on file.

- *On October 4, 2019 MaineDOT employees attended a 4-hour Erosion and Sedimentation Control training session at the MaineDOT Training Center in Fairfield; of the 31 attendees, 7 employees work on projects in MS4 Urbanized Areas. A test is given at the end of these training sessions; employees are expected to be able to correctly describe sources of stormwater pollution, proper maintenance of BMPs, and why they're important.*

Maine DEP Nonpoint Source Resource Training Center: In the fall of 2019, 477 contractors attended 15 Basic and Advanced Erosion and Sedimentation Control Practices and Continuing Education training sessions at various locations across the State. Some of the contractors who took the training will potentially work on MaineDOT projects in MS4 urbanized areas. One of the MaineDOT Environmental Senior Technician participated in each of these 15 training sessions making two presentations on the fundamentals of erosion and sedimentation control and site planning.

BMP 1.2 Motivate staff and contractors to utilize BMPs that minimize stormwater pollution.

MaineDOT requires employees and contractors to use erosion and sedimentation control BMPs to minimize the effects of stormwater runoff. Regardless of area disturbed, all MaineDOT projects that have soil disturbance are required to have a Soil Erosion and Water Pollution Control Plan (SEWPCP) reviewed and approved by authorized MaineDOT Environmental Office staff specializing in erosion and sedimentation control compliance. These field staff inspect construction projects for compliance with the SEWPCP. MaineDOT's BMPs for Erosion and Sedimentation Control Manual is posted on MaineDOT's webpage.

BMP 1.3 Provide training on reducing polluted stormwater runoff.

MaineDOT provides training on erosion and sedimentation control at least annually to ensure employees and contractors are continually motivated to use the appropriate erosion and sedimentation control BMPs on their projects. See BMP 1.1 and 1.2 above.

MaineDOT is a member of the Maine DEP Nonpoint Source Training and Resource Center Advisory Committee, which meets semi-annually to provide guidance for the Center and provides Erosion and Sedimentation Control specialists to assist DEP in presenting the Basic and Advanced Erosion and Sedimentation Control Practices training.

MCM 2. Public Involvement and Participation

Goals
Involve the MaineDOT community including various Bureaus or facilities in both the planning and implementation process of improving water quality and reducing water quantity via the stormwater program.

BMP 2.1 Public notice requirements.

MaineDOT holds public meetings for construction projects and publishes meeting information, including the location, date, and time of the meeting, in local newspapers serving the project area. Attendance varies greatly; attendance and public comments are recorded and kept on file.

BMP 2.2 Coordinate with regulated communities.

The MaineDOT 2020-2021-2022 Interactive Work Plan was emailed to the MS4 municipal stormwater coordinators on February 25, 2020. That Work Plan covers PY7.

In PY7, MaineDOT maintained regular contact with the regulated MS4 municipalities by participating in the meetings of the Bangor Area Stormwater Working Group, the Southern Maine Stormwater Work Group, and the Interlocal Stormwater Working Group.

MaineDOT continues to provide funding to the various Stormwater Work Groups in support of their education and outreach activities. MaineDOT helped sponsor the 2019 Maine Stormwater conference and volunteered on the planning committee, hosted by the Cumberland County Soil and Water Conservation District. In April 2020 MaineDOT contributed $750 to the Bangor Area Stormwater Working Group for stream cleanup and contributed $1,000 to the Interlocal Stormwater Working Group in support of the permit renewal committee.

MaineDOT reached out to the City of Saco about the Saco Park & Ride Lot Improvements project (WIN#: 023274.00) which will be constructed late summer of 2021. The City Engineer provided feedback on the conceptual stormwater treatment plan proposed by MaineDOT.

MCM 3. Illicit Discharge Detection and Elimination

Goals
Develop, implement, and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges in MaineDOT's stormwater systems.

BMP 3.1 Update the watershed-based mapping of the stormwater system.

In PY7, no new catch basins were added to the MaineDOT catch basin inventory. When new catch basins are added, MaineDOT will update their MS4 outfall maps to reflect that new information.

BMP 3.2 Conduct dry weather inspections of outfalls in urban impaired stream watersheds or other high priority watersheds.

On June 19, 2020 MaineDOT inspected MaineDOT drainage structures and 4 outfalls in the Long Creek watershed in South Portland. No indication of illicit discharge was observed in any of the drainage structures or outfalls.

On June 30, 2020 MaineDOT inspected MaineDOT drainage structures and 7 outfalls in the Penjajawoc Stream watershed in Bangor. No indication of illicit discharge was observed in any of the drainage structures or outfalls.

Dry weather inspection forms were completed during each inspection and will be kept on file for at least five years.

BMP 3.3 Continue to implement MaineDOT's strategy for detecting illicit discharges to open ditch systems within the two highest priority watersheds.

MaineDOT Surface Water Quality staff inspected open ditch systems in one high priority watersheds while conducting dry weather inspections of outfalls during this reporting period, summarized in BMP 3.2.

MaineDOT Maintenance and Operations (M&O) Transportation Workers inspect ditches on a regular basis as part of normal M&O duties; this work is statewide, not limited to high priority watersheds or urbanized areas. Potential illicit discharges are reported up the chain of command for resolution. In PY7, no potential illicit discharges within MS4 urbanized areas located in Regions 1 and 4 were reported during ditch maintenance; this information was verified by personal communication in August 2020.

BMP 3.4 Continue to implement illicit discharge detection and elimination procedure policy.

The MaineDOT Bureau of M&O's Illicit Discharge Detection and Elimination Policy specifies the steps to take upon discovery of an illicit discharge. The policy is implemented statewide, not just in the regulated MS4 urbanized areas.

No illicit discharges were reported in any of the regulated MS4 urbanized areas located in Regions 1 and 4 in PY7. This information was verified by personal communication in August 2020.

BMP 3.5 Continue system of tracking potential illicit discharges.

The MaineDOT Illicit Discharge Detection and Elimination Policy contains a section on tracking potential illicit discharges. Potential illicit discharges are reported up the supervisory chain and to the MaineDOT Environmental Office Surface Water Quality Unit and logged for tracking and reporting purposes.

MCM 4. Construction Site Stormwater Runoff Control

Goals
Continue to implement and enforce MaineDOT's program to reduce pollutants in stormwater runoff from construction activities that result in a land disturbance of one acre or more.

BMP 4.1 Continue to implement soil erosion and water pollution control plan requirements.

MaineDOT continues to implement and enforce an Erosion and Sedimentation Control Program to reduce pollutants in stormwater runoff from all its construction activities. MaineDOT's Standard Specification 656 requires a Soil Erosion and SEWPCP to be

developed by project contractors; the SEWPCPs are reviewed and approved by MaineDOT Surface Water Quality Unit staff specializing in erosion and sedimentation control prior to the start of construction. Inspections are done at various times throughout construction until completion of the project and stabilization of the construction area. As part of MaineDOT's stormwater Memorandum of Agreement with Maine DEP, MaineDOT implements the SEWPCP requirement for all projects that have soil disturbance, regardless of the amount of disturbance.

In PY7, MaineDOT started construction on 77 projects within the MS4 areas. None of these projects had an acre or more of disturbance in an MS4 regulated urbanized area.

Each project has an erosion and sedimentation control plan that was reviewed and approved by MaineDOT Environmental Office, Surface Water Quality Unit staff.

Inspections on this project are documented by the inspector; the inspector's files are digital and are stored both on the inspector's tablet and on a network drive; the files will be retained for at least three years following expiration of the permit.

MCM 5. Post-Construction Stormwater Management in New Development and Redevelopment

Goals

1. Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that have an acre or more of land disturbance.
2. Include a combination of structural and non-structural BMPs.
3. Develop an inspection program including inspection of BMPs at least once during the first year of installation.

BMP 5.1 Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that have an acre or more of land disturbance that discharge into the MS4 or directly into waters of the State other than groundwater.

No new projects were constructed in PY7 that required post-construction stormwater treatment.

BMP 5.2 Include a combination of structural and/or non-structural BMPs.

New development and redevelopment projects located within MS4 urbanized areas that require stormwater treatment in accordance with the permit will include structural and/or non-structural BMPs.

No new projects were constructed in PY7 that required stormwater treatment.

BMP 5.3 Develop an inspection program including inspection of BMPs at least once during the first year of installation.

One construction project that included post-construction stormwater BMPs was completed during PY6: Route 2 Roundabout in Orono. The stormwater BMPs for the Orono Roundabout was inspected by MaineDOT in June 2020.

At the end of PY7, the cumulative number of functioning MaineDOT post construction stormwater BMPs discharging directly into waters of the State other than groundwater or into or from their separate storm sewer system, required by the MS4 permit is 6.

The number of sites that required routine maintenance or remedial action to ensure that the post construction BMP is functioning as intended is zero.

MCM 6. Pollution Prevention and Good Housekeeping in Facility Operations

Goals
MaineDOT's goals are to prevent or reduce pollutant runoff from MaineDOT's roads, other infrastructure, and facilities through the development and implementation of an Operation and Maintenance Program.

BMP 6.1 Continue to inventory potential pollution sources and associated operations conducted in, on, or associated with facilities, buildings, roads, and travelways that have the potential to cause or contribute to stormwater or surface water pollution.

Potential sources of pollutants for MaineDOT operations include roads, maintenance garages, park and ride lots, and vehicle maintenance facilities.

Roads maintained by MaineDOT include the interstate and those sections of State and State Aid roads that are outside State Urban Compact boundaries.

MaineDOT has 9 maintenance camps located in MS4 urbanized areas. Maintenance camps do not conduct vehicle maintenance but do have buildings and parking areas.

MaineDOT is responsible for 11 park and ride lots located in MS4 urbanized areas.

As of PY7, MaineDOT has 2 Vehicle Maintenance Facilities in the regulated MS4 urbanized areas. Vehicle maintenance facilities include storage and use of gasoline and diesel fuel, oil, hydraulic fluids, radiator fluid, brake fluid, and other related vehicle maintenance fluids; vehicle washing operations; sand/salt storage; and stockpiled materials.

BMP 6.2 Continue to implement procedures for maintenance of stormwater controls at maintenance facilities.

MaineDOT M&O staff inspect their facilities on a regular and frequent basis including inspection of erosion and sedimentation control and stormwater BMPs.

BMP 6.3 Continue employee training program to reduce stormwater pollution from facilities.

MaineDOT maintenance facility staff receive Green Book training in November, December, January, and March each year. The Green Book is a MaineDOT environmental practices guidebook for M&O staff which covers the following topics: hazardous chemicals, universal waste, oil and equipment maintenance waste, hazardous waste, materials management, and spill prevention and response. In PY7, 107 employees who work in the MS4 in MaineDOT Region 1 and 102 employees who work in the MS4 in MaineDOT Region 4 attended Green Book training. A copy of the Green Book was included as Appendix B in the PY1 annual report submitted to DEP in September 2009.

Maintenance facility personnel also receive erosion and sedimentation control training annually; see BMP 1.1.

In recent years, both Vehicle Maintenance Facilities had above ground fuel storage tanks installed and were required to have an Oil Spill Prevention Control and Countermeasure (SPCC) Plans. All crew members at the Bangor facility received separate SPCC training in the fall of 2019. The Scarborough facility did not receive training in PY7.

BMP 6.4 Continue parking lot and street sweeping program.

MaineDOT's Bureau of M&Os has a program in place for sweeping roads and parking lots within the MaineDOT areas of responsibility. Each year over 7,500 miles are swept statewide by MaineDOT each spring to remove winter sand/salt deposits; this includes miles that were swept by MaineDOT maintenance crew and by hired contractors.

MaineDOT is responsible for 11 park and ride lots that are located within MS4 urbanized areas. These park and rides were swept in the spring of 2020 to remove winter salt and/or sand and debris. All swept material is disposed of in accordance with all applicable state and federal laws and regulations. This information was verified by personal communication in August 2020.

BMP 6.5 Continue program to clean catch basins and other stormwater structures.

MaineDOT's Bureau of M&Os has a program in place to regularly inspect, clean, maintain, repair, and replace catch basins and other stormwater structures. The M&O catch basin cleaning program is implemented statewide, not limited to MS4 urbanized

areas. In PY7, in the MS4 Urbanized Areas of the State, which are located in Regions 1 and 4, 1175 catch basins were cleaned and 7.5 shoulder miles of roadside ditches received maintenance ditching by excavator or backhoe.

BMP 6.6 Continue program to repair or upgrade stormwater conveyances.

MaineDOT's Bureau of M&Os assesses stormwater infrastructure for maintenance needs including repairs and replacements every other year. In PY7, 6 catch basins in MS4 urbanized areas were repaired or replaced: CB-1032533 in Yarmouth, CB-998403, Hampden, CB-139603 in Hampden, CB-783883 in Hampden, CB- 140585 in Hampden, and CB-139318 in Orono.

BMP 6.7 Continue to implement stormwater pollution prevention plans for vehicle maintenance facilities within the regulated MS4 areas.

MaineDOT has 2 vehicle maintenance facilities located in MS4 urbanized areas: Bangor and Scarborough. Each of these vehicle maintenance facilities has a SWPPP that is updated as changes occur.

In PY7, the Bangor and Scarborough Maintenance Facilities received Quarterly Visual Monitoring and site inspections.

MaineDOT Vehicle Maintenance Facility staff receive erosion and sedimentation control training annually (captured in BMP 1.1), MS4 awareness training bi-annually, and on-site Green Book training at least four months each year.