



Maine Department of Transportation
Municipal Separate Storm Sewer Systems General Permit
Annual Report PY4
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Constructing a Stormwater Infiltration Basin for the Auburn Bus Station project, 2017.

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 Municipal Separate Storm Sewer Systems, MaineDOT provides this report for Permit Year 4 (PY4).

MaineDOT continues to achieve the measurable goals identified in the MaineDOT Stormwater Program Management Plan (SPMP), described below in Minimum Control Measures 1 through 6. A copy of the MaineDOT SPMP is on file at the Maine 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 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 confirming outfall locations and direction of flow between catch basins; anticipates confirming the locations of interconnected stormwater infrastructure with other regulated entities; and will continue to work with DEP on reissuance of the Transportation MS4 GP.

MaineDOT has not made any changes to the goals identified in the Stormwater Program Management Plan.

This report includes a description of the actions completed for the measurable goals of each BMP identified in the MaineDOT SPMP for each Minimum Control Measure in the General Permit. BMPs for all of the MCMs were completed successfully in PY4.

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 control training to employees and contractors annually.

In PY4, MaineDOT provided two four-hour Erosion and Sedimentation Control classes for MaineDOT employees; two two-day Consultant and Contractor Training sessions; and assisted the DEP in conducting Basic and Advanced Erosion and Sedimentation Control Practices training for contractors at twelve sessions across the State. MS4 urbanized areas are located only in MaineDOT Regions 1 and 4 (Portland area, south, and the greater Bangor area). This training is further described below and relevant documentation is retained on file.

On November 15, 2016 and June 7, 2017, a total of 40 MaineDOT employees attended a 4-hour erosion and sedimentation control training session. A test is given at the end of these training sessions and all attendees passed the test. All attendees correctly described sources of stormwater pollution, proper maintenance of BMPs, and why they're important.

In March of 2017 MaineDOT conducted two 2-day Consultant Training sessions to consultants and contractors who work on MaineDOT projects; some MaineDOT employees also attended the training. The training covers several topics including Expectations, Standard Specifications for Earthwork, and Pavement on Day 1 and a 1-hour session on Erosion and Sedimentation Control and MS4 Awareness and Responsibilities on Day 2:

On March 27, 2017, 24 consultants and contractors, and 16 MaineDOT employees attended the Consultant Training on Day 1 in Bangor. On March 28th, 20 consultants and contractors, and 10 MaineDOT employees attended the Day 2 Training in Bangor which includes the 1-hour session on Erosion and Sedimentation Control and MS4 Awareness and Responsibilities.

On March 29 in Portland, 24 consultants and contractors, and 10 MaineDOT employees attended Day 1 training. On March 30th 33 consultants and contractors, and 10 MaineDOT employees attended Day 2 Training in Portland which includes the 1-hour session on Erosion and Sedimentation Control and MS4 Awareness and Responsibilities.

Between January and April, 2017, a total of 651 contractors attended DEPs Basic and Advanced Erosion and Sedimentation Control Practices training sessions at various locations across the State. Only some of the contractors who took the training potentially work on MaineDOT projects in MS4 urbanized areas.

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

MaineDOT projects that are contracted out must comply with the Maine Department of Transportation Standard Specifications. Erosion and Sediment Control is detailed in

Standard Specification 656 which requires contractors to have a Soil Erosion and Water Pollution Control Plan (SEWPCP). The project's SEWPCP identifies contacts and describes the erosion and sedimentation control Best Management Practices (BMPs) the contractor will use on the project. The SEWPCP is reviewed by MaineDOT Environmental Office, Surface Water Quality Unit staff specializing in erosion and sedimentation control compliance prior to the start of the project.

On MaineDOT projects that are constructed by MaineDOT Bureau of Maintenance and Operations, the SEWPCP is written by MaineDOT Regional Environmental Coordinators and inspections are conducted by the MaineDOT Regional Environmental Coordinators.

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 biannually to make decisions on providing training to contractors. MaineDOT provides ESC 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.

On December 23, 2014 the MaineDOT 2014-2015-2016 Capital Work Plan was emailed to the MS4 municipal stormwater coordinators. That Work Plan covers the first half of PY4. The MaineDOT 2017-2018-2019 Interactive Work Plan was emailed to the MS4 municipal stormwater coordinators on August 3, 2017. That Work Plan covers the second half of PY4 (and the following two years). A brief explanation of how to use the Interactive Work Plan and a description of what it includes was given to the members of

Southern Maine Stormwater Work Group at their July 26, 2017 meeting, and to the members of Bangor Area Stormwater Work Group at their August 10, 2017 meeting.

In PY4, MaineDOT maintained regular contact with the regulated MS4 municipalities by participating in the meetings of the Greater Portland Interlocal Stormwater Working Group, the Bangor Area Stormwater Working Group, and the Southern Maine Stormwater Work Group.

In PY4 MaineDOT provided funding to the Bangor Area Stormwater Work Group in support of their education and outreach activities. In April of 2017 MaineDOT contributed \$1000 to BASWG's stream clean-up campaign.

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 PY4, MaineDOT updated its MS4 outfall maps to reflect the following new information. Outfalls from catch basins on a local road in Berwick are the responsibility of MaineDOT through an easement; these have been added to the MS4 Outfall inventory. Outfalls on Stillwater Avenue in Bangor were field checked in June 2017 and found to be located outside the urbanized area; these have been removed from the MS4 Outfall inventory. Catch basins on the Maine Turnpike in Kittery, owned and operated by the Maine Turnpike Authority, have been removed from the MaineDOT catch basin inventory; they are in the MTA's inventory.

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

In PY4, MaineDOT conducted dry weather inspections in urban impaired stream watersheds in Saco and Bangor.

On May 19, 2017 MaineDOT met with the City of Saco Public Works Director and the Maine Turnpike Authority's stormwater consultant and inspected city infrastructure and outfalls, Maine Turnpike Authority infrastructure and outfalls, and MaineDOT infrastructure and outfalls in the Goosefare Brook watershed. There was no indication of any illicit discharges in any of the ditch sections, culverts, or outfalls. Dry weather inspection forms were completed and will be kept on file for at least five years.

On June 8, 2017 MaineDOT conducted dry weather inspections of ditches, catch basins, and outfalls in the Penjajawoc Stream watershed in Bangor. There was no indication of any illicit discharges. Two outfalls were identified as being located outside

the regulated urbanized area and the mapping was updated accordingly. Dry weather inspection forms were completed 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 inspect open ditch systems in high priority watersheds while conducting dry weather inspections of outfalls.

MaineDOT Maintenance & Operations 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 PY4, no potential illicit discharges within MS4 urbanized areas were reported during ditch maintenance; this was verified by personal communication in August 2017.

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

The MaineDOT Bureau of Maintenance and Operation'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 per the policy in PY4; this was verified by personal communication in August 2017.

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.

In PY4 no potential illicit discharges were reported in regulated MS4 urbanized areas.

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 its construction activities. MaineDOT's Standard Specification 656 requires a Soil Erosion and Water Pollution Control Plan (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 PY4, MaineDOT started construction on two projects with an acre or more of disturbance in an MS4 regulated urbanized area: Reconstruction of 1.94 miles of Route 126 in Sabattus and a new bus terminal in Auburn, at the I-95 Washington Avenue interchange, to be operated and maintained by Concord Coach Lines, Inc.

Each project has an erosion and sedimentation control plan that was reviewed and approved by MaineDOT Environmental Office, Surface Water Quality Unit staff who is a Certified Professional in Erosion and Sedimentation Control, and a Certified Erosion, Sediment and Stormwater Inspector.

The Sabattus highway reconstruction project is not completed yet; construction site inspections will continue until the project is complete and the disturbed area has been stabilized. In PY4 the Sabattus project was inspected 3 times for compliance with the project SEWPCP. On one inspection, the contractor was given a schedule to finish a section of stone ditch protection; a follow-up inspection confirmed that this was completed as requested. The inspection files are digital files and will be retained for at least three years.

The Auburn bus terminal project is complete and was inspected 3 times in PY4 for compliance with the project SEWPCP. The project was in compliance with the SEWPCP on each inspection. The Auburn project's post-construction stormwater BMP was also inspected and is functioning as intended. The MaineDOT inspection files are digital files and will be retained for at least three years.

Construction continues on the Sarah Mildred Long Bridge replacement project in Kittery which began in PY2 and is scheduled to be completed in June 2018. In PY4, the construction site was inspected on 36 separate occasions and found in compliance with the project SEWPCP on each occasion; however, on two occasions the contractor was reminded to ensure that truck drivers use the concrete wash pits and the contractor was reminded to clean the concrete wash pits. Each inspection is 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.

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.

MaineDOT's Stormwater Program addresses stormwater runoff from new development and redevelopment projects through a Memorandum of Agreement between the Maine DEP, the MaineDOT, and the Maine Turnpike Authority. All MaineDOT projects with land disturbance, regardless of size or location, are reviewed by MaineDOT Surface Water Quality Unit staff for compliance with the stormwater MOA requirements. The MOA requirements are based on DEP's Stormwater Standards (Chapter 500). Projects located in MS4 urbanized areas are further reviewed to determine if the amount of disturbance will be more or less than one acre. New development or redevelopment projects in an urbanized area with an acre or more of disturbance and a direct discharge of stormwater to the MS4 or to waters of the State other than groundwater have stormwater BMPs incorporated into the project.

In PY4, MaineDOT started construction on two Redevelopment or New Development projects with an acre or more of disturbance in an MS4 regulated urbanized area and having a stormwater discharge to an existing stormwater system or to waters of the State other than groundwater: Reconstruction of 1.94 miles of Route 126 in Sabattus and a new bus terminal in Auburn, at the I-95 Washington Avenue interchange, to be operated and maintained by Concord Coach Lines, Inc.

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.

Reconstruction of 1.94 miles Route 126 in Sabattus included 5,060 sq.ft.of new impervious area. Stormwater BMPs to treat runoff from the new impervious area

consist of 143 linear feet of underdrain ditch soil filter. The Reconstruction project is still under construction and the stormwater BMP has not been constructed yet; see MCM 4.1.

Stormwater BMPs for the bus terminal in Auburn include two infiltration basins. The bus terminal and the property, including the stormwater BMPs, will be operated and maintained by Concord Coach Lines, Inc. through a lease agreement with the State of Maine, Department of Transportation.

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

The stormwater BMP for the Sabattus Route 126 reconstruction project has not been constructed yet; they are scheduled to be constructed this Fall, the beginning of PY5. They will be inspected within the first year of completion and reported in the PY5 Annual Report.

The stormwater BMP for the Auburn bus terminal was inspected in January and February 2017. The stormwater infiltration basin is stable and functioning as intended. Future inspections of the Auburn bus station stormwater BMP is the responsibility of Concord Coach Lines, Inc.'s through a lease agreement with the State Department of Transportation.

Stormwater BMPs for the bridge replacement project in Kittery have not been constructed yet. Project construction, including the stormwater BMPs, is scheduled to be completed in June 2018. The stormwater BMPs will be inspected within the first year after their construction.

The cumulative number of 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 two.

The number of sites with documented functioning post construction BMPs is two.

The number of sites that required routine maintenance or remedial action to ensure that the post construction BMP is function 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 9 park and ride lots located in MS4 urbanized areas.

As of PY4, MaineDOT has 2 Vehicle Maintenance Facilities in the regulated MS4 urbanized areas; one prior Vehicle Maintenance Facility no longer has any vehicle maintenance activities at the facility and has been removed from the list. Vehicle maintenance facilities may 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. In PY4, an oil/water separator was added to the rinse bay at the Bangor Vehicle Maintenance Facility.

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 PY4, an average of 92 employees attended Green Book training in MaineDOT Region 1 and an average of 30 employees attended Green Book training in MaineDOT Region 4. 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.

BMP 6.4 Continue parking lot and street sweeping program.

MaineDOT's Bureau of Maintenance and Operations 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 9 park and ride lots that are located within MS4 urbanized areas. Each lot was swept in 2017 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.

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

MaineDOT's Bureau of Maintenance and Operations 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 PY4, in Regions 1 and 4, which encompass MS4 urbanized areas, 4,964 catch basins and cross culverts were cleaned and 183 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 Maintenance and Operations assesses stormwater infrastructure for maintenance needs including repairs and replacements every other year. In PY4, 11 catch basins in MS4 urbanized areas were repaired or replaced: 5 in Portland, 2 in Eliot, 1 in Scarborough, 1 in Sabattus, 1 in Auburn, and 1 in Milford.

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

In PY4 MaineDOT had three vehicle maintenance facilities located in MS4 urbanized areas: Bangor, Scarborough, and Yarmouth. Each of these vehicle maintenance facilities has a SWPPP that is updated as changes occur. The Yarmouth facility no longer conducts any vehicle maintenance activities and has been removed from that category; the Yarmouth SWPPP including Quarterly Visual Monitoring forms will be kept on file for at least five years.

In PY4, the Bangor and Scarborough Maintenance Facilities received Quarterly Visual Monitoring. The Yarmouth Maintenance Facility has no stormwater outfalls however site inspections and monthly Green Book training still applied and were conducted.

In PY4, the Bangor Maintenance Facility added an oil/water separator to the vehicle rinsing station; the SWPPP was updated accordingly.

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