



MaineDOT

Maine Department of Transportation
Municipal Separate Storm Sewer Systems General Permit 2013
Annual Report – Permit Year 1
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Introduction and Summary

In accordance with Part IV. J. 1. of the General Permit for the Discharge of Stormwater from MaineDOT and MTA Municipal Separate Storm Sewer Systems (MS4) MaineDOT provides this report for Permit Year 1.

MaineDOT continues to be in compliance with the MS4 permit conditions. MaineDOT continues to make progress in achieving measurable goals identified in the MaineDOT Stormwater Program Management Plan (SPMP) and continually researches and reviews new stormwater control BMPs for their potential use in treating stormwater runoff from roads and other transportation systems. A copy of the SPMP is on file at the Maine DEP Office in Augusta.

No monitoring data or other information was required by the MS4 permit during this time period.

Within the next reporting cycle MaineDOT intends to make improvements to its infrastructure maps.

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 (MCM) required in the General Permit. BMPs for all of the MCMs were completed successfully.

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 people 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 continues to provide annual training to employees and contractors on soil erosion and sedimentation control. MaineDOT Regions 1 and 4 have cities and towns that have regulated MS4 areas. In Regions 1 and 4, 56 employees attended training on soil erosion and sedimentation control within the last 12 months. A test is given at the end of training sessions. All attendees passed the test; All attendees correctly described sources of stormwater pollution, proper maintenance of BMPs, and proper spill response. Additionally, MaineDOT provided erosion and sedimentation control training to 975 contractors in 2013.

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. All MaineDOT projects that have soil disturbance are required to have a Soil Erosion and Water Pollution Control Plan (SEWPCP) reviewed and approved by an authorized MaineDOT Environmental Office staff person. MaineDOT's Best Management Practices for Erosion and Sedimentation Control Manual is posted on MaineDOT's webpage. MaineDOT provides training on erosion and sedimentation control at least twice a year to ensure employees and contractors are continually motivated to use the appropriate erosion and sedimentation control BMPs on their projects.

BMP 1.3 Provide training on reducing polluted stormwater runoff.

See BMP 1.1 and 1.2 above. Additionally, MaineDOT is a member of the Nonpoint Source Training and Resource Center Advisory Committee which meets biannually to address stormwater training. MaineDOT also participates as instructors for Maine DEP's Basic and Advanced Erosion Control Practices training sessions for the Volunteer Contractor Certification Program providing training to approximately 900 contractors each year.

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

MaineDOT provides its Capital Work Plan to the regulated MS4 communities by email to the MS4 stormwater coordinators using the list of contacts provided by the Maine DEP MS4 stormwater coordinator. Additionally, MaineDOT maintains regular contact with other MS4 communities by participating in the Greater Portland Interlocal Stormwater Working Group, the Bangor Area Stormwater Working Group, and Urban Impaired Stream Watershed work groups. In Spring 2014 MaineDOT participated in joint efforts and projects with BASWG, specifically donating to 2014 Stream Clean Up activities.

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 comprehensive watershed based map of the storm drain system including all catch basins and outfalls.

MaineDOT's ditch outfalls, catch basins, and cross pipes are mapped in both ArcMap and MaineDOT's Mapviewer. Construction plans showing direction of flow between catch basins and outfall locations are kept on file.

BMP 3.2 Conduct dry weather inspections of outfalls in areas having the greatest threat to the receiving waterbody.

In the summer of 2014 MaineDOT conducted dry weather inspection of outfalls in the Shaw Brook watershed in Bangor, and in non-sensitive watersheds in Hampden, Hermon, and Veazie. No illicit discharges were detected.

MaineDOT petitioned other regulated MS4 communities regarding coordinated dry weather inspections. MaineDOT is a regular attendee at the two largest regional stormwater working groups which results in better communication regarding inquiries or notifications of suspected discharges or illicit connections.

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

MaineDOT inspects open ditch systems in high priority watersheds at the same time as dry weather inspections of catch basin outfalls. MaineDOT continues to implement its IDDE Policy for open ditch systems.

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

MaineDOT'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 areas.

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 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 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. MaineDOT's Erosion and Sedimentation Control BMP Manual requires construction sites in Urban Impaired Stream watersheds to be designated as Sensitive, in the project's SEWPCP, requiring more stringent standards. As part of a stormwater Memorandum of Agreement with Maine DEP, MaineDOT implements the SEWPCP requirement for all applicable construction projects, including those with less than an acre of land disturbance and outside regulated Urbanized Areas.

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.

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 MTA. 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.

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

New Development and redevelopment projects that require stormwater treatment in accordance with the stormwater MOA will include structural and non-structural BMPs when located within regulated MS4 areas.

In the previous 12 months, MaineDOT started construction of 2 new development or redevelopment projects in regulated MS4 areas. Replacement of the I-95/Union Street Bridge in Bangor requires a temporary access road for local residents while the bridge is being replaced. While the bridge replacement is not considered new development or redevelopment, the temporary road has over an acre of impervious area in the regulated MS4 area. Non-structural BMPs for the temporary local road included designing it to promote sheet flow into the surrounding wooded areas, by not constructing any ditches. Structural stormwater BMPs consists of a 2" vegetated compost blanket placed on the inslopes with a continuous erosion control mix berm constructed at the toe of slope. The temporary road will be removed upon completion of the bridge replacement. The second project is a new Park and Ride Lot that was constructed in association with reconfiguration of the I-295 interchange at Exit 15 in Yarmouth. The project has 2.04 acres of new impervious area. Non-structural BMPs include posting an informational sign announcing bioretention cells at the site to treat stormwater and promote protection of Maine's waterways through filtering of pollutants from stormwater. Structural BMPs include three bioretention cells and a water quality ditch, designed to treat 100% of the runoff volume generated from the new Park and Ride lot. Stormwater from the new access ramp is directed to a stone berm level lip spreader that converts the channelized flow into sheet flow that then flows through a heavily wooded buffer located in the I-295 Right of Way.

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

MaineDOT Environmental Office SWQU staff inspected both the Bangor Union Street Bridge replacement project and the Yarmouth Park and Ride lot project several times. The Yarmouth project is complete and the structural post-construction stormwater BMPs have been inspected and the inspection report has been entered into the new stormwater tracking database.

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 Inventory potential pollutant sources. Develop an inventory of 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 maintenance garages, roads, and park and ride lots.

MaineDOT maintenance garages 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.

Roads maintained by MaineDOT include the interstate and those sections of roads that are outside the State Urban Compact boundaries but still within the MS4 Urbanized Area boundaries. These areas are swept in the Spring to remove winter sand/salt deposits. Catch basins are inspected and cleaned on a regular schedule.

There are four Park and Ride lots within the regulated MS4 areas that are maintained by MaineDOT. Each lot was swept this past Spring to remove winter sand.

BMP 6.2 Develop procedures for maintenance of stormwater BMPs.

MaineDOT has procedures in place to inspect stormwater BMPs on an annual basis, or as otherwise noted in individual BMP files. Maintenance is performed as necessary as determined by the inspections. MaineDOT has a new stormwater BMP inspection and maintenance database that includes an inspection form specific to the type of BMP, noting the time of year (Spring or Fall) inspections are due, and a specific list of items to check for each type of BMP.

BMP 6.3 Develop and implement an employee training program to reduce stormwater pollution from facilities.

MaineDOT Maintenance Facilities' staff receive on-site 'Green Book' training on a monthly basis. The Green Book is a MaineDOT environmental practices guidebook for M&O staff and covers topics such as hazardous waste handling, spill response, floor drain management, and management of waste from vehicle and equipment maintenance. Each monthly session focuses on a different Green Book topic. A copy of the Green Book is on file at the Maine DEP Office in Augusta, with MaineDOT's MS4 file. Maintenance facilities' staff also receive erosion and sedimentation control training at least annually (see BMP 1.1).

BMP 6.4 Continue parking lot and street sweeping program.

MaineDOT's Bureau of Maintenance & Operations has a program in place for sweeping roads and parking lots within the MaineDOT areas of responsibility.

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

MaineDOT's Bureau of Maintenance & Operations has a program in place to regularly inspect, clean, maintain, repair, and replace catch basins and other stormwater structures. This data is collected and recorded in MaineDOT's MATS database and is summarized in the annual M&O report.

BMP 6.6 Continue program to repair or upgrade stormwater conveyances.

See BMP 6.5. MaineDOT's Bureau of Maintenance & Operations has a program in place to repair or upgrade MaineDOT infrastructure as needed.

BMP 6.7 Develop and implement a stormwater pollution prevention plan for vehicle maintenance facilities within the regulated MS4 areas.

MaineDOT has three vehicle maintenance facilities located in regulated MS4 areas: Bangor, Scarborough, and Yarmouth. Each of these vehicle maintenance facilities has a SWPPP that was updated in 2013. The Bangor facility has a new contact person and that page of the SWPPP with the new contact information has been replaced; everything else remains the same. The vehicle maintenance facilities in the regulated MS4 areas are among the facilities where monthly Green Book training is performed.