

**TOWN OF CUMBERLAND  
STORMWATER PROGRAM MANAGEMENT PLAN  
PERMIT YEAR 1 ANNUAL REPORT  
JULY 1, 2008 TO JUNE 30, 2009**

Prepared for:

Town of Cumberland  
290 Tuttle Road  
Cumberland, Maine

Prepared by:

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Project 083025  
October 14, 2009

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## 1.0 INTRODUCTION

The Town of Cumberland, Maine currently maintains a General Permit for Discharge of Stormwater from a Small Municipal Separate Storm Sewer System (“General Permit”) for the Urban Area of Cumberland (See Figure 1) that authorizes the direct discharge of stormwater from or associated with a regulated small municipal separate storm sewer system (“MS4”). As part of the General Permit, Cumberland is required to develop, implement and enforce a Stormwater Program Management Plan (“Plan”) that implements six Minimum Control Measures (MCM’s). Besides evaluating the effectiveness of the Plan on a regular basis, the Town must submit an Annual Report to the Maine Department of Environmental Protection (MEDEP) on September 1<sup>st</sup> of each year that provides documentation of the Town’s activities in implementing the Plan.

This document, prepared on behalf of the Town of Cumberland by Oak Engineers, is intended to satisfy the Town of Cumberland’s obligation under the annual reporting requirements for Permit Year One (PY1) for which the reporting period is July 1, 2008 to June 30, 2009. It should also be noted that the Town of Cumberland received a deadline extension for its Annual Report submission from the MEDEP in August, 2009. The deadline for submission of the Town’s PY1 report was extended to October 2, 2009.

It should be noted that PY1 was a challenging year for the Town of Cumberland in regards to stormwater program management. While the Town has an excellent track record during the first General Permit cycle and accomplished a tremendous amount of work in this time frame, the Town suffered a significant impact to the leadership of the program due to reorganization and downsizing. The Town also experienced a change in program leadership as well as other impacts that were outside of its control, such as weather. These changes, in addition to the implementation of a new General Permit, caused a delay to some portions of the Stormwater Program Best Management Practice (BMP) implementation. These deficiencies will be detailed in the body of this report.

One of the biggest challenges to the Town during the PY1 reporting period included the consolidation of the Public Works Department and the Parks Department due to budget constraints. This consolidation precipitated a change in leadership to the Stormwater Program that required a significant learning curve for existing staff that assimilated the work load of the Public Works Department (which was tasked with managing the stormwater program). Another ramification of the departmental consolidation was the loss of the existing institutional knowledge of the program’s first five years of activity. As mentioned before, Cumberland had completed a tremendous amount of work in the first permit cycle, however a change in staff lost this institutional knowledge and required remaining Cumberland staff to come up to speed on the program. This delayed or in some cases, impacted some aspects of the Plan implementation in PY1.

Weather also played an important part in the Stormwater Program implementation of PY1. The winter of 2008-2009 saw early and significant snow cover. Spring conditions in 2009 were unusually wet, with the months of May, June and July being the wettest on record. With weather an important factor in performing inspections and data gathering, it is not unrealistic to expect that some activities in PY1 were delayed or negatively impacted.

However, it should also be noted that the Town has identified any short comings during the first permit year and is on track to complete the required BMP’s identified in the Plan during the remainder of PY2. The Town has also provided the required leadership to ensure its obligations are met under the Plan moving forward.

## **2.0 MINIMUM CONTROL MEASURES (MCM'S) 1 TO 6**

### **2.1 MCM 1 Public Education and Outreach Responsible Party: ISWG Education Coordinator**

The goals of MCM 1 are as follows:

1. To raise awareness that polluted stormwater runoff is the most significant source of water quality problems for Maine's waters;
2. To motivate people to use Best Management Practices (BMPs) which reduce polluted stormwater runoff ; and
3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

#### **2.1.1 BMP 1.1 to BMP 1.6**

The Town of Cumberland, through the Interlocal Stormwater Working Group (ISWG) Education Coordinator, provided public education and outreach to Cumberland residents, businesses and community groups. The work completed during the reporting period is documented in a report forwarded to the MEDEP previously by the ISWG Education Coordinator and is included here by reference. A complete copy is included in Appendix A of this report.

### **2.2 MCM 2 Public Involvement and Participation Responsible Party: ISWG Education Coordinator and the Director of Operations.**

The goals of MCM 2 is to involve the public in both the planning and implementation process of improving water quality and reducing quantity via the stormwater program.

- 2.2.1 BMP 2.1 Public Notice Requirement: Both Cumberland's Permit Year 5 Annual Report and Stormwater Program Management Plan are posted on the MEDEP's website as well as Cumberland's website. Cumberland maintains a record of public meeting minutes on their website as well, and this pertains to stormwater issues as well. These can be reviewed at the Town's website at [www.cumberlandmaine.com](http://www.cumberlandmaine.com). The Town also provides substantial information to the Public via the website that helps the community be involved in stormwater management.

For example, Cumberland's Stormwater tab of the Public Works webpage provides resources for the proper disposal of old pesticides and herbicides, information in the proper use of pesticides and herbicides; the proper disposal of yard waste; options for the proper disposal of House Hold Hazardous Waste and Universal Waste; literature about the care, function and maintenance of septic systems as well as links to yardscaping outreach programs and of course the [www.thinkbluemaine.org](http://www.thinkbluemaine.org) website.

- 2.2.1 BMP 2.2 Host Public Events: Cumberland did not host a public event during the reporting period. Typically Cumberland hosts a House Hold Hazardous Waste collection event for residents at least once per year, which is an excellent opportunity to protect receiving waters from the effects of improperly disposed of household chemicals. Due to budget cutbacks, the Town was unable to fund this service in the FY'09 budget.

As an alternative, the Town attempted to coordinate with Fred Dillion, formerly of FB Environmental to provide a public presentation of the *West Branch Piscataqua River Watershed Survey Report, September 2008* prepared by the Presumpscot River Watch, the Cumberland County Soil and Water Conservation District and the Maine DEP. It was hoped that besides the public event, the presentation could be recorded and aired on the Cumberland public access cable channel. Due to conflicts, this event did not occur in the reporting period. It is anticipated that this event will be scheduled for PY2.

The Town also attempted to coordinate a storm drain stenciling event during the PY1 reporting period to satisfy this BMP. Cumberland has an excellent relationship with Friends of Casco Bay who has worked with the Town for sampling and monitoring efforts as well as storm drain stenciling programs. The Town had several conversations with Friends of Casco Bay, but unfortunately an event was not able to be organized within the reporting year partly due to weather as well as availability of staff with Friends of Casco Bay. It is anticipated that the Town will attempt to organize a stenciling event during PY2.

- 2.3 MCM 3 Illicit Discharge Detection and Elimination Responsible Party: Director of Public Services, Director of Planning and Oak Engineers

The goals of MCM 3 are as follows:

- a. Develop a watershed based storm drain system infrastructure map;
  - b. Implement and enforce a non-stormwater discharge ordinance;
  - c. Develop and implement a prioritized dry weather outfall inspection plan; and
  - d. Develop and implement a strategy to detect any illicit discharges to the open ditch system within each MS4's highest priority watershed.
- 2.3.1 BMP 3.1.1 to 3.1.3 Develop a watershed based storm sewer system infrastructure map: During the previous permit cycle Cumberland embarked on an intensive effort to map the storm drain system in the Urban Area and has essentially completed the required mapping. The mapping system is a GIS based mapping system that geo-references structures and outfalls as well as maintains a database of the pertinent features of the system, such as structure type, size and location, outfall location, size and material type, pipe type, size and flow direction.

However, the mapping must be updated on a regular basis to reflect capital improvements and changes that occur to the system during the reporting period. During the reporting period there were no significant infrastructure improvements or changes required in the Urban Area. However, a significant infrastructure was added to Olivia Lane, Phillips Street, Grove Street, Bea Lane and Karole Lane in the Greely Road Extension area. Although this infrastructure is not in the Urban Area, it discharges to a tributary of the Piscataqua River that flows through North Yarmouth and then back into Cumberland in the Town's Urban Area; hence was added to the mapping accordingly. Other storm drain infrastructure improvements were also added to the Town's mapping as well, such as several projects in the West Cumberland area.

2.3.2 BMP 3.2.1 to 3.2.3 Adopt a Non-Stormwater Discharge Ordinance: The Town of Cumberland adopted the required ordinance on July 27, 2009. A copy of the ordinance is included in Appendix B of this report.

2.3.3 BMP 3.3.1 to 3.3.8 Develop Dry Weather Outfall Inspection Program:

2.3.3.1 As noted in the Town's Stormwater Program Management Plan, Cumberland's priority watershed is the East Branch Piscataqua River (EBPR). Essentially this watershed encompasses the majority of the Urban Area from Main Street (Route 9) to about 600 feet (at Tuttle Road) to about 1,200 feet (at Greeley Road) westerly of Middle Road. The remainder of the Urban Area drains easterly across Middle Road and Interstate 295 to Casco Bay.

2.3.3.2 The Town has delineated the EBPR watershed into manageable sub-watersheds to aid in performing dry weather inspections. The two highest priority sub-watersheds have been determined to be PISC 3: Hedgerow Drive to Greely Road Area (See Figure 2) and PISC 1: Greely High School Area (See Figure 3). The Town has also delineated additional sub watersheds that have been prioritized for inspections in future permit years.

2.3.3.3 The Town has developed a Standard Operating Procedure (SOP) for Dry Weather Outfall Inspections. A copy of this SOP is included in Appendix C. This SOP clearly outlines the process for providing inspections within the Town's Urban Area. The SOP details the proper inspection protocols, required inspection forms, required recordkeeping and more importantly, defines what corrective action and notification is required when deficiencies are discovered. It should be noted that the SOP is also a living document and will be reviewed and updated as required.

2.3.3.4 The Town of Cumberland has opted to utilize Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine, Volume 1: Information for Program Managers; and Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine Volume 2: Standard Operating Procedures and Forms for data collection as stipulated in the Dry Weather Outfall Inspection SOP. The Town has opted to utilize paper forms and a three ring binder system for managing and storing the inspection information.

Considering the size of Cumberland's Urban Area and the number of outfalls that are currently monitored, this type of system is adequate for the next few years. However, it is anticipated that the Town will be exploring utilizing a GIS based database system to track inspections and other salient data for the program as funding comes available.

- 2.3.3.5 The Town of Cumberland retained Oak Engineers to provide training to Town employees who will be assigned the responsibility of performing outfall inspections. On April 8, 2009 seven (7) employees were provided classroom training on the Stormwater Program and the IDDE inspection requirements. This included an overview of the program, a review of the Dry Weather Outfall Inspection SOP, a review of the inspection forms and the process for collecting, reporting and archiving the information as well as the responsible parties for each. On July 13, 2009, a field training exercise was provided to five (5) employees where actual field inspections were conducted in the highest priority watershed such that each employee could gain experience in how to complete the form, what to look for and what to do if a violation is discovered. Originally it was planned that the entire training would be conducted during the April 8<sup>th</sup> training event. However it was determined that field training would be required, and it was desired to perform actual inspections. Due to the unusually wet spring and summer months, a training date with the prerequisite antecedent dry conditions was not realized until after the reporting period. A copy of attendance records and training agenda is included in Appendix D.
- 2.3.3.6 The procedure for addressing a suspected illicit discharge is outlined in the Dry Weather Outfall Inspection SOP. Please see section 2.3.3.3 and Appendix C.
- 2.3.3.7 During the reporting period no dry weather outfall inspections were performed in the priority sub-watershed. As mentioned before, weather was a significant barrier to performing the required inspections. Southern Maine experienced the wettest spring and summer on record with precipitation recorded on most days. While Cumberland staff had received classroom training in April, hands on training, while performing inspections, was dependent on capturing a date with the favorable antecedent conditions, and that fell on a weekday. This was very difficult with several scheduled dates being cancelled due to weather. It should be noted that field inspection were performed on July 18, 2009; just two weeks after the close of the reporting period. It is anticipated that in PY2 the Town will strive to perform additional inspections in the priority sub-watersheds and will also attempt to perform inspections in the late fall during times of low flows and little vegetation cover prior to freezing weather. It should also be noted that Town staff did perform cursory inspections of outfalls from the second priority watershed, Coastal Drainage as part of an ongoing monitoring program for shellfish protection. This work was conducted in conjunction with the Department of Marine Resources as well as the Portland Water District. During the PY1 reporting period the Town of Cumberland and its partners captured two (2) different sets of water quality samples from eight (8) discrete sample points and tested all samples for coliform bacteria.

As part of this sampling effort, the Town and its partners also provided cursory inspections of the shoreline outfalls and documented perceived issues as a result. The Department of Marine Resources (DMR) continued the sampling effort throughout the summer of 2009. The Town of Cumberland is working with the DMR to expand the existing sampling program twofold to provide additional water quality data to help define and mitigate problems in this important watershed. A copy of the Town's monitoring report is included in Appendix L.

2.3.3.8 The Town will conduct addition outfall inspections in the next higher priority watersheds as per the Stormwater Program Management Plan.

2.3.4 BMP 3.4.1 and 3.4.2 Open Ditch Illicit Discharge Detection Program: This BMP is not applicable in the PY1 reporting period.

2.4 MCM 4 Construction Site Stormwater Runoff Control Responsible Party: Code Enforcement Officer, Director of Planning and Oak Engineers

The goal of this MCM is to Develop, implement, and enforce a program, to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. For specific permit requirements and suggestions, refer to MEDEP's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems Part IV(H)(4).

2.4.1 BMP 4.1.1 AND 4.1.2 Developer Notification of Chapter 500 Stormwater Management: The Town of Cumberland provides notification to each developer on permit application form in addition to verbal notification during the application submission. During the PY1 reporting period the Town staff provided zero notifications for projects that occurred in the urban area. Essentially there were no building permits that were received by the Town in the Urban area, hence no notifications provided. The Town evaluated the effectiveness of the current notification system and it was determined that the current procedure provides adequate notification to developers and operators of sites within the Urban Area as well as the remaining areas of the Town. A sample Building Permit has been included in Appendix G. The Town also maintains a library of available information and handouts for contractors and developers as well. Several examples are included in Appendix H.

2.4.2 BMP 4.2.1 Develop and implement a mechanism to annually document every construction activity that disturbs one acre or more of area within the Urbanized Area: The Town of Cumberland has opted to track the documentation of construction activity greater than one acre in the Urban Area via a spreadsheet system. As part of the Town's permitting process, every application that is received is reviewed by staff and the pertinent data entered into the spreadsheet tracking system. As site inspections are performed, the tracking spreadsheet is updated by staff. It is anticipated that there will be relatively few sites that meet the minimum threshold of one acre of disturbed area, hence the spreadsheet tracking method will be adequate for the time being. It is also anticipated that the Town will investigate the possibility of utilizing a GIS database tracking system in the future as funding becomes available. A copy of the Tracking Spreadsheet is included in Appendix I.

2.4.3 BMP 4.3.1 to 4.3.4 Develop and implement a construction site inspection program:

- 2.4.3.1 The Town of Cumberland currently tracks development and construction activities through the Code Enforcement Officer as well as third party engineering firms retained to provide engineering review services and periodic field inspection services. This activity is tracked and managed by the Code Enforcement Officer via the Tracking Spreadsheet. Typically construction sites are inspected on a regular basis by third party engineering firms as well as Town staff. Site inspection are performed prior to significant rain events as well as during milestone events during construction, such as prior to the start of construction activities to ensure erosion control measures and storm water BMP's are in place, during utility construction, and other critical points in the project construction. During the PY1 reporting period there were zero construction sites that disturbed one acre or more within the Urban Area. During the PY1 reporting period there were zero inspections performed within the Urban Area. During the Permit Year 1, there were several large development projects under construction in Cumberland that were outside of the Urban Area. Although not covered by the Town's Stormwater Program Management Plan, these areas were inspected as defined by the plan. During the reporting period fifty two (52) inspections were performed on a large development project that was under construction in West Cumberland; outside the Urban Area.
- 2.4.3.2 The Town of Cumberland developed a standard inspection form to provide documentation of site inspections that are performed within the Urban Area and Town wide. This form is used by Town staff and third party inspectors when conducting construction site inspections within the Town. A sample of this form is included in Appendix E.
- 2.4.3.3 The Town uses the following procedure to track and notify developers and contractors of non-compliance issues and guidance for coming into compliance. Currently the Town uses a spreadsheet to track and notify developers of non-compliance issues. Typically, minor non-compliance issues that are discovered as part of the inspection process are discussed with the Contractor or responsible party immediately and a remediation plan of action developed for immediate implementation. In most cases this is sufficient to address the issue. For significant issues or failure to make the required remediation results in the issuance of a Notice of Violation that is tracked and followed up via spreadsheet. The Town currently issues the standard ten (10) day Notice to Cure as well as "Stop Work" order as required. During the PY1 reporting period the Town issued zero Notice of Violations for projects in the Urban Area. A sample of the Town's tracking spreadsheet is included in Appendix J.

2.4.3.4 The staff that performs site inspections for the Town of Cumberland are the Town's CEO, the Town Manager or professional staff from third party engineering firms. Currently, the Town Manager is a Maine licensed professional engineer experienced in erosion and sedimentation control and the staff of the third party engineering firms are supervised by Maine professional engineers. The Town's CEO, Mr. William Longley, received a Certificate of Completion in Controlling Construction Site Runoff in April of 2006. In the PY1 reporting period and just prior to the reporting period, Mr. Longley completed continuing education in the following topics: "Vernal Pool Workshop"; "Natural Resources Identification and Regulation Workshop – Part 2"; and "Shoreline Survey Basics Course". Copies of Mr. Longley's certificates of completion are included in Appendix K.

2.5 MCM 5 Post Construction Stormwater Management Responsible Party: Code Enforcement Officer and Director of Planning.

The Goals of this Minimum Control Measure are to develop a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the permittee's MS4 as well as implement an ordinance or similar measure to ensure adequate long-term operation and maintenance of post construction BMPs. In addition this MCM is intended to ensure post construction BMPs are functioning as intended and to document and report annually to the MEDEP all applicable post-construction related information.

2.5.1 2BMP 5.1.1 to 5.1.4 Implement Post Construction Stormwater Management Ordinance

2.5.1.1 The Town of Cumberland has determined that it will rely on the State permit process for the installation of post construction BMP's.

2.5.1.2 The Town of Cumberland adapted the Model Ordinance to Town format requirements and cross referenced existing Town Ordinances to provide the required regulation of sites in the Urban Area. The adapted ordinance was not substantially changed from the model ordinance and essentially meets the requirements of BMP 5.1.2.

2.5.1.3 The Town Council adopted the Post Construction Storm Water Management Ordinance on September 14, 2009. A copy of the ordinance is included in Appendix F.

2.5.1.4 The Town will implement the new ordinance during PY2. This BMP is not applicable during the PY1 reporting period.

2.5.2 BMP 5.2.1 and 5.2.2 Develop and implement and inspection program for post construction BMP's for which Owners or Operators have not hired a third party inspector: This BMP does not apply to the Town of Cumberland since the Urban Area does not contain a lake at risk or an urban impaired stream.

2.6 MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations. Responsible Party: Director of Public Services, Oak Engineers

The goals of MCM 6 are as follows:

- Develop an inventory of all municipal operations conducted in, on, or associated with facilities, buildings, golf courses, cemeteries, parks and open space owned or operated by regulated MS4s that have the potential to cause or contribute to stormwater or surface water pollution.
- Develop and implement written operation and maintenance procedures for its highest priority watershed that includes maintenance schedules and inspection procedures to ensure long term operation of structural and non-structural controls that reduce stormwater pollution to the maximum extent practicable.
- Develop and implement operation and maintenance procedures for the remaining watersheds within the Urbanized Area.
- Prevent the accumulation of sediment by developing a program to sweep all publicly accepted paved streets and publicly owned paved parking lots as well as cleaning catch basins and other stormwater structures.
- Develop a SWPPP which will outline sources of potential stormwater pollutants and the methods by which these pollutants will be reduced or prevented from entering Waters of the State.

2.6.1 BMP 6.1.1 to 6.1.4 Operations at Municipally Owned Grounds and Facilities:

2.6.1.1 The Town of Cumberland conducted an inventory of municipal operations within the Urban Area that have the potential to cause or contribute to stormwater pollution. The results of the inventory include the Public Works Garage Facility (including the Town's transfer station operations) on Drowne Road, the SAD 51 Bus Maintenance Facility also on Drowne Road, Twin Brook Maintenance Facility on Tuttle Road and the Valhalla Golf Course Maintenance Facility on Valhalla Road. The inventory list is included in Appendix M.

2.6.1.2 The Town will develop and implement written Operations and Maintenance (O&M) procedures for identified facilities in the EBPR watershed during PY2. No activities were required during the PY1 reporting period.

2.6.1.3 The Town will develop and implement written Operations and Maintenance (O&M) procedures for identified facilities in the Coastal Drainage watershed during PY3. No activities were required during the PY1 reporting period

- 2.6.1.4 As required by the General Permit the O&M procedure plan will address alternative products, automobile maintenance, hazardous materials storage, landscaping and lawn care, parking lot and street cleaning, roadway and bridge maintenance, pest control, road salt application and storage, spill response and prevention, storm drain system cleaning, vehicle washing and vehicle fueling system. No activities were required during the PY1 reporting period
- 2.6.2 BMP 6.2.1 and 6.2.2 Municipal Employee Training:
- 2.6.2.1 During the PY1 reporting period the Town of Cumberland provided several training opportunities to municipal staff including IDDE classroom and hands on training as well as initial program training on the Stormwater Program Management Plan. Although not required until PY3, the Town was able to implement some of this training early. It is anticipated that substantial additional training will be implemented in future Permit Years. Appendix D contains documentation of the training that occurred during PY1.
- 2.6.2.2 Under this BMP no activities were required during the PY1 reporting period
- 2.6.3 BMP 6.3.1 Street Sweeping: Public Services swept all roads within the Town as soon as weather conditions allowed following winter operations. Public Services also swept all municipal parking lots/paved area and the MSAD51 parking/paved areas as soon as weather conditions allowed following winter operations. Sweeping operations recovered 409 cubic yards of sand from road and parking/paved areas. The Town used 210 cubic yards of straight sand and 950 cubic yards of sand/salt mix. The total volume of sand used was 1,160 cubic yards and it appears that approximately one third of the material spread during winter operations was recovered by sweeping operations (409 cubic yards out of 1,160 cubic yards spread). The Town used 578 tons of road salt (approximately 595 cubic yards based on 0.972 US tons/cubic yard). It is obvious that the Town used substantially less material during the winter of 2008-2009 than the previous winter (2007-2008), which is very good from a water resource protection standpoint. More than likely this was a result of the type of winter that occurred rather than a change in snow-fighting operations.
- 2.6.4 BMP 6.4.1 Catch Basin Cleaning: The Town cleaned 248 catch basins Town wide during PY1 reporting period. Residuals collected totaled 9.25 cubic yards. Catch basins added by new construction will be added to the maintenance schedule for next year.
- 2.6.5 BMP 6.5.1 Maintenance and Upgrade of Stormwater Conveyances and Outfalls: The Town of Cumberland maintains a Capital Improvement Program (CIP) that is used to plan for significant capital purchases or upgrades by the Town on a long term basis. The CIP includes programmed funding for road and stormwater projects throughout the Town based on prioritized need and available funding and is updated on a periodic basis. It should be noted that during the PY1 reporting period no capital improvements were scheduled or funded in the Urban Area based in the Town's planning. However, the Town performed the several capital improvements to public infrastructure that were considered a priority Town wide.

The Town installed storm drainage systems in Olivia Lane, Phillips Street, Grove Street, Bea Lane and Karole Lane in the Greely Road Extension area to alleviate local flooding and erosion issues. It should be noted that although these projects were not in the Urban Area, their drainage systems discharge to Piscataqua River tributary upstream of the Urban Area. The Town also completed an update to the Stormwater Management Report for Greely Road Extension, which the Town uses to prioritize and manage stormwater runoff issues in this drainage basin that flows to the Piscataqua River tributary. The Town also constructed significant stormdrain improvements in West Cumberland including storm drainage in Route 100 near Mill Road and Skillin Road as well as new drainage infrastructure in Range Road. The new infrastructure included new catch basins in some cases for sediment control as well as new plunge pools and erosion stabilization BMP's to the new system inlets and outfalls. The Town also embarked on a major planning effort to improve the drainage system in the Route 88 area of Town, which impacts the Coastal Drainage watershed, the Town's second most priority watershed. This planning effort, which is significant, is intended to address both roadway deficiencies as well as drainage and erosion issues along the Route 88 corridor from the Falmouth town line to Schooner Ridge Road. It is anticipated that construction activities for the first phase of the Route 88 project will commence in the spring of 2010 or the PY2 reporting period.

2.6.6 BMP 6.6.1 and 6.6.2 Stormwater Pollution Prevention Plans (SWPPP's):

2.6.6.1 During PY1 the Town of Cumberland inventoried the Public Works Facilities, Transfer Stations and School Bus Maintenance Facilities within the regulated area and determined that none of the regulated facilities currently maintain SWPPP's. The facilities reviewed include the Public Works Facility and Bus Maintenance Facility on Drowne Road and the Town Transfer Station which is also co-located on Drowne Road. It is anticipated that during PY2 the Town, in conjunction with MEDEP staff, will develop a SWPPP for the Drowne Road complex. The Town also reviewed several satellite facilities within the Urban Area that includes the MSAD51 complex, Twin Brooks Recreational Complex and the Val Halla golf course complex. It was also determined that none of these complexes have SWPPP's. It should be pointed out that at these satellite facilities no vehicle or equipment maintenance is performed and no storage of municipal solid waste (MSW) or other type of solid waste is stored or stockpiled. It is anticipated that during PY2 the satellite facilities will be reviewed by Town and MEDEP staff to determine if SWPPP's will be required under this BMP.

2.6.6.2 During PY2 Town staff in conjunction with MEDEP staff will develop the required SWPPP's for municipal facilities in the Urban Area as required by this BMP.

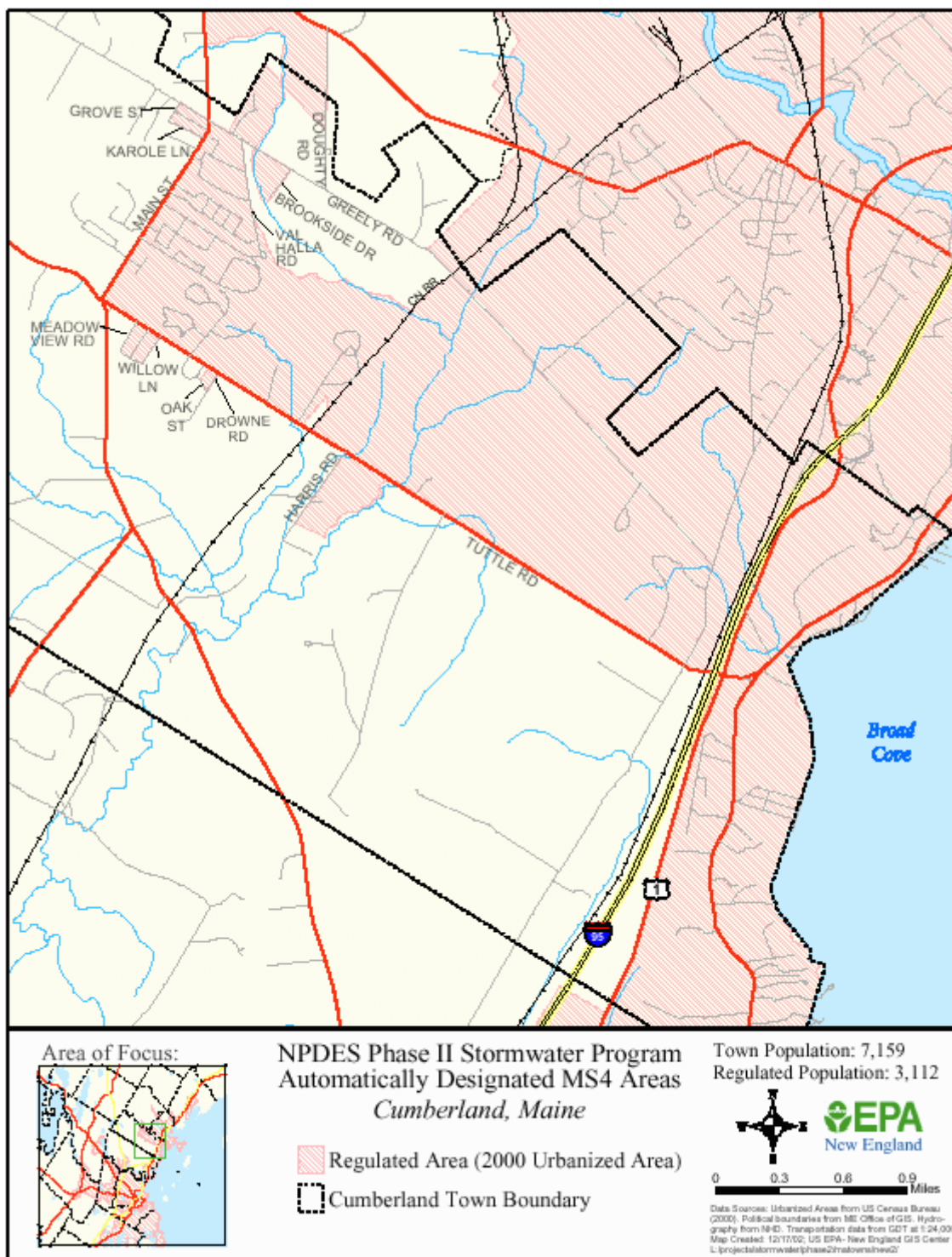



Figure 1: Cumberland, Maine Urbanized Area



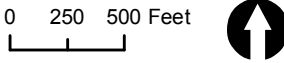
Legend

 Watershed Boundary

Notes

1. Watershed delineations based on 5 foot contour interval mapping provided by the Town of Cumberland
2. Some features are approximate in location and scale
3. This plan has been prepared for the Town of Cumberland. All other uses are not authorized unless written permission is obtained from Oak Engineers

Scale and Orientation



Prepared For

Town of Cumberland  
290 Tuttle Road  
Cumberland, Maine

Site Address


Watershed: PISC03  
Hedgerow Drive to  
Greely Road Area

083025 | Oct 2009

Figure 2



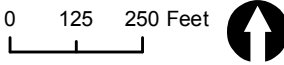
Legend

 Watershed Boundary

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Scale and Orientation



Prepared For

Town of Cumberland  
290 Tuttle Road  
Cumberland, Maine

Site Address

Watershed: PISC01  
Greely High School  
Area

083025 | Oct 2009

Figure 3

## **APPENDIX A**

ISWG Coordinator Report

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

# Permit Year 1 Report: Minimum Control Measure 1

---

## **BMP 1.1 - Continue Awareness Outreach Efforts from the Previous MS4 Permit Cycle.**

Measurable Goal 1.1.1 – In Permit Year 1, the ISWG will continue to provide a [thinkbluemaine.org](http://thinkbluemaine.org) link on their individual municipal websites to raise awareness of stormwater issues.

Measurable Goal 1.1.2 – All YardScaping and stormwater outreach materials proximately feature the Think Blue Maine ducky logo.

Measurable Goal 1.1.3 – In Permit Year 1, the ISWG will continue to provide informational material in municipal buildings to raise awareness of stormwater issues.

Reporting: documentation of available stormwater information on municipal website and list of display materials (fact sheets, brochures and display board) and location(s) for permit year one.

## **BMP 1.2 – Work with existing partners and seek out partners to help raise awareness of stormwater issues.**

Cooperative efforts with Maine YardScaping Partnership (Maine Board of Pesticides Control, Friends of Casco Bay, Casco Bay Estuary Partnership, University of Maine Cooperative Extension, Maine DEP, etc.):

- YardScaping Display at the Portland Flower Show, March 12-15; assisted with booth set up; provided pertinent YardScaping fact sheets(mow better, water wisely, overseed, grubs); staffed the booth. This was an excellent opportunity to work cooperatively to reach a large segment of our target audience. Approximately 1400 YardScaping book marks were distributed at the event, and they provided a good “hook” to draw people into the booth to discuss their lawn care habits. This was also an excellent opportunity to collect some anecdotal information. For example, one gentleman stopped by the booth and said he had attended a YardScaping adult education class. He decided to maintain a portion of his lawn as recommended in the class –aerating, topdressing with compost and overseeding with YardScaping seed mix. He said that portion of his lawn was noticeably improved over the area that was not “YardScaped.” He was so pleased with the results that he decided to continue the process on the remainder of his lawn.
- Back Cove Demonstration Project – Provided assistance with the planning and installation of approximately 300 native perennials, shrubs and trees for the establishment of four demonstration landscapes at Back Cove in Portland. The demonstration landscapes were created in response to the need to provide a publicly accessible demonstration that showcases appropriate plantings for both urban and rural settings in a beautiful, homeowner-doable way in order to convince people that they can reduce their impact on the environment while still retaining a look that is appealing. The implementation phase of this project started in June 2008, and already people are starting incorporate some of the recommendations into their own landscapes. An architect designing a LEED-certified home in Portland contacted the Maine YardScaping Partnership to tell them that his client took him to the demonstration site. The client said he wanted his landscape to be similar to the demonstration site. The project has also generated press coverage both in the *Portland Press Herald* and on television.
- YardScape certification for yard care professionals – Worked with the Maine Board of Pesticides Control, UMCE, Maine Landscape & Nursery Association (MeLNA), and yard care professionals to begin exploring the establishment of a certification program for yard care practitioners. Two meeting were held with partners to discuss potential program structure and administration. Details are still being fleshed out, but preliminary discussions centered on an educational program offered through UMCE and a test and certification administered through MeLNA. There was also discussion of requiring a site visit to ensure certified individuals/companies are following the YardScape principles. Development of this

program will continue into the future.

A database of regional partners has been started. The database includes contact information for conservation commissions, drinking water utilities, non-governmental organizations and school service learning coordinators. The database will be complete during Permit Year 2.

### **BMP 1.3 – Develop and implement Stormwater Awareness Plan.**

#### Plan Development

The Stormwater Awareness Committee, which included representatives from each MS4 area/cluster, Maine Department of Environmental Protection (MDEP), and the University of Maine Cooperative Extension (UMCE) determined that existing assessments of the target audience (statewide Omnibus survey and Bangor Area Stormwater Group's intercept survey) offered sufficient data to determine a baseline level of awareness. Based on the two surveys referenced, 35% of our target audience already understands that stormwater impacts water quality.

ISWG education staff developed the Statewide Awareness Plan in conjunction with the Stormwater Awareness Committee. The plan was submitted to MDEP on March 2, 2009. MDEP's comments were incorporated and the plan was resubmitted on April 30, 2009. The plan was approved by MDEP on May 27, 2009.

#### Plan Implementation

##### *Message Development & Testing*

The ISWG education coordinator, on behalf of the MS4 communities statewide, developed potential messages to convey the following goal of the Statewide Awareness Plan: *Homeowners will understand that water does run off their property, not all is absorbed, and it will carry with it pollutants, such as lawn chemicals, pet waste and oil drops. This polluted water will enter the storm drain system, and discharge, untreated, directly to waterbodies used for drinking, fishing and swimming.*

Two unique messages ("Follow the flow" and "What happens in your yard doesn't stay in your yard") were tested against products from an existing awareness campaign from North Carolina ("Know where it goes"). To aid in testing, MDEP, University of Maine Cooperative Extension (UMCE), and ISWG staff developed standardized message testing forms. The forms asked people to describe, in their own words, the take away message for each of the poster options. They also asked people to rank, on a scale from one to five, the clarity of the message, the anticipated community response to the poster and the overall quality of the message. The forms were distributed to representatives from all of the MS4 communities with instructions to collect feedback from the target audience. The data gathered was entered into a database and analyzed to determine which option best conveyed our message.



*Draft poster for "Follow the flow"*

Analysis showed that North Carolina's "Know where it goes" campaign was slightly favored over the other options, with a mean clarity rating of 4.00. However, because "Follow the flow" was only slightly lower (mean clarity rating of 3.87), and the open answer responses indicated that the message more closely summarized the goal stated in the Statewide Awareness Plan, the final message selection was "Follow the flow."

Feedback associated with the "Follow the flow" option indicated that the original graphic, showing runoff from a residential property entering a local water body, was too busy and difficult to understand. An artist was hired to take the original concept and simplify it. The new image was modified to show a traditional New England-

style home and more potential pollutants. It also more clearly shows the water flowing into a storm drain. The image will be tested with the target audience to ensure it is clearer than the original image.

#### Outreach Materials

##### Website:

The ISWG education coordinator, on behalf of all MS4 communities, began to redesign and update the ThinkBlueMaine.org website. The new design is more user-friendly and better organized, making the information contained on the site easier to find. The new look of the site is cleaner and more appealing. It also prominently features the image of the rubber ducky.

The new website has a new section – the stormwater managers' toolbox. This page serves as a clearinghouse for all educational materials developed. All materials will be available for download to assist in the distribution of materials statewide.



Newly redesigned [www.thinkbluemaine.org](http://www.thinkbluemaine.org) website.

The redesigned site was staged on Cumberland County Soil & Water Conservation District's (CCSWCD) website ([www.cumberlandswcd.org/thinkbluemaine](http://www.cumberlandswcd.org/thinkbluemaine)) in order for MDEP and the MS4 communities to view the site and provide comments before it went live on [www.ThinkBlueMaine.org](http://www.ThinkBlueMaine.org).

##### Ducky Ad:

CCSWCD staff worked with a media buyer to purchase ad space to run the Think Blue Maine ducky ads. Staff secured financial commitments from all MS4 communities/clusters and MDEP to purchase the ad space on local stations statewide. The ads will run the final three weeks in August.

##### Partner Networks:

A database of statewide partners has been started. The database includes contact information for conservation commissions, drinking water utilities, non-governmental organizations and school service learning coordinators.

##### Press:

- August 18, 2008 – *Portland Press Herald*, John Richardson, “Rains wash pollutants into ocean, prompt advisories”
- November 22, 2009 – *Portland Press Herald*, John Richardson, “The scoop on what to do, and not do, with poo”
- June 13, 2009 – *Portland Daily Sun*, Casey Conley, “Grate Expectations”

### **BMP 1.4 - Continue Targeted Best Management Practices Adoption efforts from previous MS4 permit cycle.**

#### Grants Submitted

The ISWG Education Coordinator worked in cooperation with the Bangor Area Stormwater Group and the seven other regulated MS4s to submit a grant proposal to the Maine Outdoor Heritage Fund to support the statewide expansion of the point of sale program. Unfortunately, this grant was not funded.

#### Outreach Materials

- Developed YardScaping four-step brochure – timing of recommendations is aligned with conventional four-step programs. This was developed based on feedback from staff at point of sale stores who suggested a natural four-step program would help the YardScaping program compete with conventional lawn care practices. See more information about the four-step in the point of sale section below.
- Revised fact sheets: aerate, ants, compost tea, fertilizer, grubs, lawn care calendar, mow better,

- overseed, topdressing, water wisely, why YardScape?
- Developed additional fact sheets: common weeds, groundcovers, compost tea instructions, soil test instructions
- Developed visual aids for adult education classes
- Designed posters for point of sale stores to advertise program
- Updated adult education instructor manual
- Established online mailing list
- Updated YardScaping website ([www.cumberlandswcd.org/yardscape](http://www.cumberlandswcd.org/yardscape)). New additions include listing of point of sale stores, fact sheet page, and events calendar

### *Point of Sale*

This permit year straddles the second and third years of the point of sale program. Sixteen stores in 10 communities (nine of which are MS4s) participated in the program these years. At the end of the second pilot year, staff met with representatives from each store individually to solicit feedback on the program and discuss possibilities for the future.



*Point of sale poster*

Feedback from participating stores indicated that additional outreach and advertisement of the program would be beneficial. Large posters were designed for in-store promotion of “ducky approved” items. The posters were distributed to participating stores at the beginning of the third pilot year (which straddles permit years one and two). The stores were asked to display the posters in store windows or near lawn care products. A listing of participating stores was added to the CCSWCD YardScaping website ([www.cumberlandswcd.org/yardscape](http://www.cumberlandswcd.org/yardscape)). Links to store websites were added when available.

Staff began to address the need for a more robust tracking system for the point of sale program. While stores indicated after the end of the second pilot year that they would be willing to offer a coupon on recommended products, each store wanted the coupon to be slightly different. This delayed the coupon tracking system while staff work with stores to develop an acceptable coupon.

Tracking product sales as an indicator of behavior change is also being explored. In preparation of the third pilot year, staff asked stores to provide three years of information on product sales, specifically grass seed, weed and feed and fertilizer. Most stores have a computerized inventory and sales system, which makes it easy for them to provide this

information. The hope is to develop a baseline of sales information and hopefully see a change in sales trends as the program continues.

Feedback from participating stores also indicated the need for a comprehensive list of recommended products. Staff worked in conjunction with the Maine Board of Pesticides Control to review product catalogs and identify preferred products. Staff then inventoried stores to determine what products stores already carry. A database of this information has been created in Access, and the goal is to make this available on the YardScaping website. Currently the database is being provided to stores so they have the information they need when ordering products.

Representatives from many of our partner stores have suggested that a YardScaping four-step program be developed to rival the conventional four-step lawn care systems. They felt that in order for the YardScaping program to be truly successful, a similar program would be needed because most homeowners are familiar with and follow a conventional four-step approach. Staff took the Yard Care Calendar, which was developed during permit year five, and boiled it down to four steps, the timing of which mirrors conventional four step programs.

While the conventional program essentially consists of buying four different products and applying the fertilizer-pesticide combination four times throughout the summer months, the YardScaping four-step consists of the following steps:

1. Spring Greening (April – June)
  - Topdress with compost
  - Seed bare spots
  - Mow at 2-inches to start then increase to 3-inches for the remainder of the season
  - Leave the clippings
2. Water Wisely (June – early August)
  - Water only when needed
  - Apply compost tea (optional)
3. Bugs Out! (August – September 15)
  - Apply beneficial nematodes for grub control
  - Overseed after August 15
  - Fertilize with slow-release nitrogen
4. Simply Soil (September 15 – October 15)
  - Test soil pH
  - Apply calcium rich lime if pH is less than 6.0

<p><b>YardScaping 4-Step</b> Save time, save money and have a beautiful lawn safe for kids and pets!</p> <p><b>Step 1: Spring Greening</b> (April - June)</p> <ul style="list-style-type: none"> <li>• Topdress with compost to add nutrients if needed</li> <li>• Seed bare spots with endophyte enhanced perennial ryegrass</li> <li>• Mow grass at 2" to start, then increase to 3" for the rest of the season</li> <li>• Always leave grass clippings on the lawn for free, natural fertilizer</li> </ul> <p><b>Step 2: Water Wisely</b> (June - early August)</p> <ul style="list-style-type: none"> <li>• Water only when needed; lawns need 1-1.5" of water per week</li> <li>• Apply compost tea to add nutrients and improve soil health (optional)</li> </ul> <p><b>Step 3: Bugs Out!</b> (August - September 15)</p> <ul style="list-style-type: none"> <li>• In early August, apply beneficial nematodes for grub control if needed</li> <li>• After August 15, overseed with endophyte enhanced tall and fine fescue mix</li> <li>• Fertilize with slow-release nitrogen if needed (look for 10-0-0 on the bag)</li> </ul> <p><b>Step 4: Simply Soil</b> (September 15 - October 15)</p> <ul style="list-style-type: none"> <li>• Test soil pH</li> <li>• Apply calcium rich lime if pH is less than 6.0</li> </ul>	<p><b>YardScaping will give you a lush, green lawn safe for kids and pets!</b></p> <ul style="list-style-type: none"> <li>• Children take in more pesticides relative to body weight than adults!</li> <li>• Some studies have found that dogs exposed to lawn pesticides are more likely to be diagnosed with health problems such as bladder cancer?</li> <li>• Weed and insect controls are designed to be toxic. Just because they can be bought at a store doesn't mean they're safe.</li> <li>• Fertilizers are often used unnecessarily. This wastes money and pollutes our waters.</li> <li>• YardScaping will help you reduce the use of fertilizers, insecticides and herbicides.</li> </ul> <p>For more information visit <a href="http://www.cumberlandswcd.org">www.cumberlandswcd.org</a> and click on the ducky!</p> <p><small>Cumberland County Soil &amp; Water Conservation District www.cumberlandswcd.org</small></p> <p><small>© 2009 Cumberland County Soil &amp; Water Conservation District. All rights reserved. No part of this publication may be reproduced without permission in writing from the publisher.</small></p>
Front	Back

*YardScaping four-step*

The four-step information was distributed to point of sale stores in June, and follow up with stores indicates that people are having a positive response to it. According to one store representative, "People seem to be really excited to see a natural four-step option, but because most people bought all four steps of the conventional program in the spring, not many people have been taking the information. I expect more people follow the YardScaping four-step next spring."

Point of sale in-store promotional efforts:

- April 18, 2009 – location: O'Donal's Nursery, Gorham; event: Organic Gardening Day; audience: predominately residents of Gorham, Westbrook and Scarborough, but also included people from neighboring communities. The YardScaping display that was designed by the State YardScaping Partnership was used. All fact sheets were available to attendees. O'Donal's allowed compost tea kits to be sold at the event, which proved to be very popular. This event was very well attended, with staff interacting with approximately 65 people.
- April 25, 2009 – location: Estabrook's Greenhouses, Yarmouth; event: open house; audience: predominately Yarmouth residents. This event was pretty slow; very few people were shopping that day, and even fewer stopped by the YardScaping display (staff interacted with approximately 10 people). There were some good conversations with attendees, but they were few and far between. Staff has a similar experience with this event the previous year, but the low turnout was attributed to the date (it was Easter weekend) and poor weather. This year's event did not coincide with Easter and the weather was sunny and warm, yet there was still a disappointing turn out. Staff will likely research another weekend if this store requests another in-store appearance.

### *Adult/Community Education*

Because of the past success of the adult education classes, they were continued in the fall and spring of permit year one. The following classes were held in the fall: Scarborough – 9/18 (7 students); South Portland – 9/20 (5 students); Gorham – 9/23 (5 students); Cumberland – 9/25 (9 students); Cape Elizabeth – 10/22 (7 students). Additional classes were scheduled in Windham, Biddeford and Yarmouth but had to be cancelled due to low registration. In-store classes offered at point of sale stores have been quite successful in the fall. In recognition of low adult education class registrations in the fall, staff are planning to hold fall classes in partnering stores rather than going through adult education departments. The hope is to get more class attendance and help promote our partner stores by drawing people to the class.

For the spring classes, staff scheduled classes in fewer communities, but advertised them in multiple community education bulletins. This increased the cost effectiveness of the program. The following classes were held in the spring: Scarborough – 3/12 (4 students); Cumberland – 3/26 (5 students); Gorham – 4/1 (3 students); Portland 4/2 – (6 students); Cape Elizabeth – 5/6 (30 students).

The Cape Elizabeth class held on May 6<sup>th</sup> was the best attended class to date. Following this class, the CCSWCD YardScaping website experienced its greatest volume of traffic permit year one. The class evaluation for this course was revised to include an area for participants to indicate if they would be willing to host a YardScaping Social in their neighborhood. Three participants indicated that they would be interested and requested more information. Staff are hopeful the adult education classes will serve as a mechanism for developing the neighborhood social model.

Staff are also exploring other venues for adult education. For example, a National Semiconductor employee visited the YardScaping booth at Windham Summerfest in June 2009. He was very interested in YardScaping and felt many of his co-workers would be as well. Staff have scheduled a “lunch & learn” at National Semiconductor in South Portland for August 2009. This opportunity will allow the program to reach many in our target audience, since National Semiconductor employs people from all over the Greater Portland area. Staff is exploring this opportunity with other large employers in the area.

A number of materials used for adult education classes were revised or created. As mentioned previously, the final class evaluation was revised to include an area for participants to indicate that they would be willing to host a YardScaping social in their neighborhood. In addition, the instructor notes were revised to improve the flow of the class and emphasize practical concepts more. Visual aids were created to better illustrate key concepts presented in the class. Visuals were also created to help participants identify common weeds in their lawns, since this is a question that is frequently discussed in the classes.

Fall 2008 class highlights:

- Eleven of the class participants documented on the evaluation that they use weed and 10 indicated that they were going to stop.
- Most participants (31 of 33 responses) indicated that they thought there was a connection between lawn care and water quality.

Fall 2008 YardScape class statistics from the completed evaluation forms:

<b>Lawn Care Practice</b>	<b>Plan to implement</b>	<b>Currently do not implement</b>	<b>% planning to implement</b>
Set Mower to a height of 3"	18	19	95
Leave grass clippings	10	12	83
Sharpen mower blades	16	20	80
Aerate	30	32	94
Topdress	28	33	85
Overseed	29	29	100
Use low maintenance seed	34	36	94
Get a soil test	31	35	89
Use nitrogen-only fertilizer	26	30	87
Use compost tea	25	34	74

Spring 2009 class highlights:

- Ten of the class participants documented on the evaluation that they use weed and feed and each indicated that they were going to stop.
- Most participants (39 of 44 responses) indicated that they thought there was a connection between lawn care and water quality.

Spring 2009 YardScape class statistics from the completed evaluation forms:

Table 2. Spring 2009 YardScape class statistics			
<b>Lawn Care Practice</b>	<b>Plan to implement</b>	<b>Currently do not implement</b>	<b>% planning to implement</b>
Set Mower to a height of 3"	24	24	100
Leave grass clippings	17	18	94
Sharpen mower blades	19	19	100
Aerate	28	32	88
Topdress	35	38	92
Overseed	34	36	94
Use low maintenance seed	33	34	97
Get a soil test	31	33	94
Use nitrogen-only fertilizer	28	35	80
Use compost tea	22	34	65

Data on the actual number of people who adopted the practices indicated has not yet been collected. Follow up phone calls will be made in the fall of 2009 to allow class participants time to implement the recommended practices.

Fall 2008 follow up:

Based on follow up phone calls from previous rounds of adult education classes, it appeared that many people did not follow through with plans to have their soil tested prior to making lawn care decisions. In the fall of 2008, staff called participants from spring 2008 classes to determine if they had indeed done a soil test. Surprisingly, approximately 71% of people reached stated that they did follow through with having a soil test done for their lawn. When asked what they did with the results of the soil test, an overwhelming majority (80%) stated that they found the recommendations confusing and were not sure how to proceed. This points to the need for resources to assist landowners with interpreting the recommendations from their soil test. Staff will explore resources available or create new materials if none exist.

#### *YardScaping & Natural Lawn Care Press*

- July 24, 2008 – *American Journal*, Leslie Bridges, “Looking at lawns from the ground up, Q&A with Courtney O’Neil”
- September 7, 2009 – *Portland Press Herald*, Tom Atwell, “You can tell it's bugs when there are obvious chew marks”
- February 20, 2009 – Press release publicizing adult education classes submitted to local newspapers
- April 5, 2009 – *Maine Sunday Telegram*, Tom Atwell, “Natives make sense, garden speakers say”
- April 19, 2009 – *Maine Sunday Telegram*, Tom Atwell, “The lawn ranger”
- May 21, 2009 – Press release submitted to *The Forecaster* for their garden and landscaping issue
- May 29, 2009 – *Portland Press Herald*, Tom Atwell, “Gunning for grubs? Here’s what you need to know”
- June 28, 2009 – *Portland Press Herald*, Tom Atwell, “Plot thickens as demonstration garden fills up with plants”
- June 28, 2009 – *Portland Press Herald*, Ray Routhier, “Just add water”

#### **BMP 1.5 – Develop and implement BMP Adoption Plan**

The ISWG Education Coordinator and MDEP determined that data collected through a 2006 phone survey offered sufficient data to determine the target audience’s baseline lawn care practices. Based on this survey, one-third of the target audience is using weed and feed products, and one-quarter of the target audience is over fertilizing (fertilizing more than once per year).

ISWG Education Coordinator developed BMP Adoption Plan as part of the 5-year MS4 municipal permit. The plan includes budget and timeline of activities for March 2008 through June 2013. The plan was submitted to the Maine Department of Environmental Protection (MDEP) on March 2, 2009. MDEP's comments were incorporated and the plan was resubmitted on May 28, 2009. The plan was approved by MDEP on June 23, 2009.

#### **BMP 1.6 –School Outreach**

***Additional language for communities as specified below:***

**Biddeford**

- *Nothing additional through projects I track*

**Cape Elizabeth**

- *Nothing additional through projects I track*

**Cumberland**

- *Nothing additional through projects I track*

**Falmouth**

- October 22, 2009 – Falmouth Green Expo (interacted with approximately 40 attendees)
- February 2, 2009 – Jami Fitch met with the Falmouth Conservation Commission to discuss their role in education and outreach efforts
- May 14, 2009 – 75 storm drains stenciled by Falmouth Middle School in Falmouth Foreside area with “Keep Water Clean, Drains to Casco Bay.”
- May 20, 2009 – 300 door hangers distributed by volunteers and Falmouth High School students throughout Falmouth Foreside.

**Freeport**

- July 9, 2008 – Royal River Youth Conservation Corps stenciled 108 storm drains in downtown Freeport

**Gorham**

- *Nothing additional through projects I track*

**Old Orchard Beach**

- Think Blue Moments during DPW public meetings (I don’t have specific information for these, but I wanted to put it in here as a reminder to take credit for it)

**Portland**

- July 24, 2008 – Cultivating Community’s Boyd Street Bash (interacted with approximately 10 people)
- October 30, 2008 – “Does it Make Sense” workshop with the City of Portland regarding exploration of establishment of a stormwater utility.
- February 8, 2009 – Tu B’shevat Community Day at Deering High School (interacted with approximately 30 attendees)
- Applied for and received funding through the Casco Bay Estuary Partnership’s stormwater grants program to conduct a survey of landowners within the Capisic Brook Watershed. The primary goal of the survey is to gain a better understanding of the needs of the watershed in order to tailor outreach efforts. In addition, it is hoped that the materials and process developed will be able to be replicated in other urban stream watersheds throughout the State.
- Efforts were made to work with Hall Elementary School and Lincoln Middle School to stencil storm drains in the Capisic Brook Watershed. Unfortunately, rain caused the event to be cancelled on both the originally scheduled date and the rain date. The Casco Bay Youth Conservation Corps ultimately completed the stenciling in July 2009.

**Saco**

- *Nothing additional through projects I track*

**Scarborough**

- July 12 & 13, 2008 – YardScaping booth at Scarborough Summerfest (interacted with approximately 70 people). Appearance coincided with a subsequent 600% spike in YardScaping website hits.
- July 16, 2008 – presented at Higgin’s Beach Association weekly breakfast. Information was well received; ~80 in attendance. Good questions, all information packets (20), door hangers (100 total – 50 of each variety) and bookmarks (50) were taken.

#### **South Portland**

- July 18, 2008 – Long Creek Watershed Tour - 28 participants toured the watershed and viewed areas in need of restoration and sites already addressed by progressive landowners.

#### **Westbrook**

- *Nothing additional through projects I track*

#### **Windham**

- July 2008 – Presumpscot River Youth Conservation Corps (YCC) distributed door hangers to 40 households in South Windham while storm drain stenciling
- July 2008 – Presumpscot River and Little Sebago Lake YCCs stenciled 186 storm drains along Routes 115, 202 and 302
- June 27, 2009 – YardScaping booth at Windham Summerfest (interacted with approximately 70 attendees). Appearance coincided with a subsequent 50% spike in YardScaping website hits.

#### **Yarmouth**

- July 15, 2008 – Royal River Youth Conservation Corps stenciled 256 storm drains in downtown Yarmouth.

## **Summary: Stormwater Education Activities for 2008-2009 School Year**

The following is a summary of education activities completed in each ISWG community during the 2008-2009 school year. Activities were provided by the following and are noted by the organization's acronym:

**CCSWCD:** Sarah Plummer, Education Coordinator, Cumberland County Soil & Water Conservation District, sarah-plummer@cumberlandswwcd.org, 207-892-4700 x 107

**YCSWCD:** Melissa Brandt, District Manager, York County Soil & Water Conservation District, melissabrandt@yorkswcd.org, 207-324-0888 x 214

**PWD:** Lynne Richard, Education Coordinator, Camilla Fecteau and Benjamin Davison, Environmental Educators, Portland Water District, lrichard@pwd.org, 207-774-5961 x 3324

### Biddeford

**Total students:** 45

**Total contact hours:** 45

**Lesson topics:** Build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices.

**Schools:** Biddeford Intermediate School

**Educator:** YCSWCD

### Cape Elizabeth

**Total students:** 199

**Total contact hours:** 1,267

**Lesson topics:** Build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices; bioaccumulation from a pesticide runoff in an aquatic food web; drinking water; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change.

**Schools:** Cape Elizabeth Middle School, Pond Cove Elementary School

**Educators:** CCSWCD, PWD

### Cumberland

**Total students:** 196

**Total contact hours:** 1,365

**Lesson topics:** Amount of water in the world, conservation, and the water cycle; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Envirothon\*\*.

**Schools:** Greely Middle School, Greely High School, North Yarmouth Memorial School

**Educators:** CCSWCD, PWD

### Falmouth

**Total students:** 193

**Total contact hours:** 896

**Lesson topics:** Watersheds, contour lines, topographic maps, and water flow; watersheds, nonpoint source pollutants, and water quality parameters; amount of water in the world, conservation, and the water cycle; where rivers begin, how they flow, and watersheds; stormwater sources and effects; build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices; stream walk to assess water flow over land and in river, and to examine pervious/impervious surfaces and their ability to absorb water/pollution; tracing water flow and finding watersheds on local watershed maps; research projects focusing on Presumpscot River Watershed stakeholders and the effects of nonpoint source pollutants – projects culminated in public presentations; field trip to 4 locations in the Presumpscot River Watershed; two month long experiment to test the effects of various nonpoint source pollutants on aquatic ecosystems.

**Schools:** Falmouth Middle School

**Educator:** CCSWCD

### Freeport

**Total students:** 62

**Total contact hours:** 84

**Lesson topics:** Build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices; topography, contour lines, watersheds, water movement and transport of nonpoint source pollutants.

**Schools:** Mast Landing School

**Educator:** CCSWCD

### Gorham

**Total students:** 180

**Total contact hours:** 1,211

**Lesson topics:** Invasive plants; eutrophication/soil lesson and soil testing of garden; assist with planning and design of perennial/shrub garden with focus on low impact development and best management practices; erosion, erosion control laws, history of conservation districts, BMP slideshow and school site walk; vernal pools; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change.

**Schools:** Gorham Middle School, Narragansett Elementary School, Village School

**Educators:** CCSWCD, PWD

### Old Orchard Beach

**Total students:** 65

**Total contact hours:** 260

**Lesson topics:** Build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices; bioaccumulation from a pesticide runoff in an aquatic food web; stormwater sources and effects; wastewater.

**Schools:** Loranger Middle School

**Educator:** YCSWCD

Portland

**Total students:** 650

**Total contact hours:** 1,062

**Lesson topics:** Stormwater pollution lesson and maze game; waste water treatment – history, background, design experiment to treat wastewater; soil components, testing, amendments, and effect on water quality; watersheds; stormwater; wastewater treatment, combined sewer outfalls, nonpoint source pollution; Southern Maine Children’s Water Festival\*.

**Schools:** Lincoln Middle School, Casco Bay High School, Riverton Elementary School, Hall Elementary School, Longfellow Elementary School, King Middle School, Nathan Clifford School, East End Community School

**Educators:** CCSWCD, PWD

Saco

**Total students:** 98

**Total contact hours:** 294

**Lesson topics:** Water quality field day included water quality sampling, macroinvertebrates, bioaccumulation from a pesticide runoff in an aquatic food web, and stormwater runoff.

**Schools:** Saco Middle School

**Educator:** YCSWCD

Scarborough

**Total students:** 163

**Total contact hours:** 596

**Lesson topics:** Nonpoint source pollution overview; water quality testing on local stream; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change.

**Schools:** Scarborough High School, Scarborough Middle School

**Educators:** CCSWCD, PWD

South Portland

**Total students:** 918

**Total contact hours:** 3,332

**Lesson topics:** Amount of water in the world, conservation, and the water cycle; where rivers begin, how they flow and watersheds; stormwater sources and effects; build landscape models to learn about impervious/pervious surfaces, nonpoint source pollution, and best management practices; coastal ecology; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Southern Maine Children’s Water Festival\*.

**Schools:** Skillin Elementary School, Dyer Elementary School, Mahoney Middle School

**Educators:** CCSWCD, PWD

Westbrook

**Total students:** 101

**Total contact hours:** 661

**Lesson topics:** Hydropower stakeholder meeting; in-class water quality testing; water quality testing at local vernal pools; water quality parameters; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Envirothon\*\*.

**Schools:** Wescott Junior High School, Westbrook High School

**Educators:** CCSWCD, PWD

#### Windham

**Total students:** 244

**Total contact hours:** 2,237

**Lesson topics:** Water quality; bioaccumulation of pesticide runoff in an aquatic food chain; local water bodies - current status, concerns, and actions; various lessons included information about nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change, Southern Maine Children's Water Festival\*.

**Schools:** Windham High School, Windham Middle School

**Educators:** CCSWCD, PWD

#### Yarmouth

**Total students:** 3

**Total contact hours:** 2.75

**Lesson topics:** Water quality – helped three students with their research projects of pH, and water quality tests on various water bodies, testing and describing role of phosphorus, nitrogen, eutrophication, and nonpoint source pollution. (Many attempts were made at Yarmouth Elementary and Middle Schools to work in the schools more. Prior contacts initially had time but didn't follow through due to time constraints. New contacts were made at Yarmouth Middle School and will be pursued during the 2009-2010 school year.)

**Schools:** Yarmouth Elementary School

**Educator:** CCSWCD

\* The **Southern Maine Children's Water Festival** is a one-day event occurs that annually each May, drawing about 800 middle school students from all over Southern Maine to learn all about water. Students attend classroom presentations, a water-based stage show, "Dripial Pursuit" competitions, and tour many exhibits in the exhibit hall. Activities focus on non-point source pollution and ways in which students can be part of the solution.

\*\* The **Envirothon** is an environmental competition conducted throughout Maine in the spring. High school students test their knowledge of natural resources and current environmental issues in an outdoor setting. Teams of three to five students are tested at five stations: Wildlife, Aquatics, Forestry, Soils, and a Current Natural Resources Issue. The top three teams at each regional competition compete in the State competition, with the advancement to a national competition for top-placing teams.

## **APPENDIX B**

Non-Stormwater Discharge Ordinance

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

# **STORMWATER DISCHARGE ORDINANCE**

**Town of Cumberland, Maine**

**DRAFT**

**7-6-09**

**STORMWATER DISCHARGE ORDINANCE**  
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# ARTICLE I

**A. PURPOSE:** The purpose of this Storm Water Discharge Ordinance (the “Ordinance”) is to provide for the health, safety, and general welfare of the citizens of the Town of Cumberland through the regulation of Non-Storm Water Discharges to the Town’s Storm Drainage System as required by federal and State law.

This Ordinance establishes methods for controlling the introduction of Pollutants into the Town’s Storm Drainage System in order to comply with requirements of the federal Clean Water Act and State law.

## **B. OBJECTIVES**

The objectives of this Ordinance are:

1. To prohibit un-permitted or un-allowed Storm Water Discharges to the Storm Drainage System; and
2. To set forth the legal authority and procedures to carry out all inspection, monitoring and enforcement activities necessary to ensure compliance with this Ordinance.

**C. APPLICABILITY** This Ordinance shall apply to all Persons discharging Storm Water and/or Non-Storm Water Discharges from any Premises into the Storm Drainage System located within the Urban Area as depicted in Attachment A.

**D. RESPONSIBILITY FOR ADMINISTRATION** The Town Manager or his/her designee is the Code Enforcement Officer who shall administer, implement, and enforce the provisions of this Ordinance.

**E. DEFINITIONS** For the purposes of this Ordinance, the terms listed below are defined as follows:

**Clean Water Act.** “Clean Water Act” means the federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

**Discharge** “Discharge” means any spilling, leaking, pumping, pouring, emptying, dumping, disposing or other addition of Pollutants to “waters of the State.” “direct discharge” or “point source” means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which Pollutants are or may be discharged.

**Exempt Person or Discharge** “Exempt Person or Discharge” means any Person who is subject to a Multi-Sector General Permit for Industrial Activities, a General Permit for Construction Activity, a General Permit for the Discharge of Stormwater from the Maine Department of Transportation and the Maine Turnpike Authority Municipal Separate Storm Sewer Systems, or a General Permit for the Discharge of Stormwater from State or Federally Owned Authority Municipal Separate Storm Sewer System Facilities; and any Non-Storm Water Discharge permitted under a NPDES permit, waiver, or waste discharge license or order issued to the discharger and administered under the authority of the U.S. Environmental Protection Agency (“EPA”) or the Maine Department of Environmental Protection (“DEP”).

**Industrial Activity** “Industrial Activity” means activity or activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

**Municipal Separate Storm Sewer System or MS4.** “Municipal Separate Storm Sewer System” or “MS4,” means conveyances for storm water, including, but not limited to, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels or storm drains (other than publicly owned treatment works and combined sewers) owned or operated by any municipality, town, sewer or sewage district, fire district, State agency or Federal agency or other public entity that discharges directly to surface waters of the State.

**National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit.** “National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit” means a permit issued by the EPA or by the DEP that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

**Non-Storm Water Discharge** “Non-Storm Water Discharge” means any Discharge to an MS4 that is not composed entirely of Storm Water.

**Person** “Person” means any individual, firm, corporation, municipality, town, quasi-municipal corporation, State agency or Federal agency or other legal entity which creates, initiates, originates or maintains a Discharge of Storm Water or a Non-Storm Water Discharge.

**Pollutant** “Pollutant” means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or by-products, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

**Premises** “Premises” means any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips, located within the Town from which Discharges into the Storm Drainage System are or may be created, initiate, originated or maintained.

**Regulated Small MS4** “Regulated Small MS4” means any Small MS4 regulated by the State of Maine “General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems” (“General Permit”), including all those located partially or entirely within an Urbanized Area (UA) and those additional Small MS4s located outside a UA that as of the issuance of the General Permit have been designated by the DEP as Regulated Small MS4s.

**Small Municipal Separate Storm Sewer System or Small MS4** “Small Municipal Separate Storm Sewer System”, or “Small MS4,” means any MS4 that is not already covered by the Phase I MS4 stormwater program including municipally owned or operated storm sewer systems, State or federally-owned systems, such as colleges, universities, prisons, Maine Department of Transportation and Maine Turnpike Authority road systems and facilities, and military bases and facilities.

**Storm Drainage System** “Storm Drainage System” means the Town’s Municipal Separate Storm Sewer System including the Town’s Regulated Small MS4 and areas outside the Town’s Urbanized Area that drain into the Regulated Small MS4.

**Storm Water** “Storm Water” means any Storm Water runoff, snowmelt runoff, and surface runoff and drainage; “Stormwater” has the same meaning as “Storm Water.”

**Town** “Town” means the Town of Cumberland.

**Urbanized Area (“UA”)** “Urbanized Area” or “UA” means the areas of the State of Maine so defined by the latest decennial census by the U.S. Bureau of the Census.

## ARTICLE II

**A. GENERAL PROHIBITION** Except as allowed or exempted herein, no Person shall create, initiate, originate or maintain a Non-Storm Water Discharge to the Storm Drainage System. Such Non-Storm Water Discharges are prohibited notwithstanding the fact that the Town may have approved the connections, drains or conveyances by which a Person Discharges un-allowed Non-Storm Water Discharges to the Storm Drainage System.

### **B. ALLOWED NON-STORM WATER DISCHARGES**

The creation, initiation, origination and maintenance of the following Non-Storm Water Discharges to the Storm Drainage System is allowed:

- 1 Landscape irrigation;
- 2 diverted stream flows;
- 3 rising ground waters;
- 4 uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- 5 uncontaminated pumped ground water;
- 6 uncontaminated flows from foundation drains;
- 7 air conditioning and compressor condensate;
- 8 irrigation water;
- 9 flows from uncontaminated springs;
- 10 uncontaminated water from crawl space pumps;
- 11 uncontaminated flows from footing drains;
- 12 lawn watering runoff;
- 13 flows from riparian habitats and wetlands;
- 14 residual street wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material has been removed and detergents are not used);
- 15 hydrant flushing and fire fighting and fire fighting training activity runoff;
- 16 water line flushing and discharges from potable water sources;
- 17 individual residential car washing;
- 18 de-chlorinated swimming pool discharges; and
- 19 Discharges specified in writing by the Code Enforcement Officer as being necessary to protect public health and safety; and
- 20 Dye testing, with verbal notification to the Code Enforcement Officer prior to the time of the test.

**C. EXEMPT PERSON OR DISCHARGE** This Ordinance shall not apply to an Exempt Person or Discharge, except that the Code Enforcement Officer may request from Exempt Persons and Persons with Exempt Discharges copies of permits, notices of intent, licenses and orders from the EPA or DEP that authorize the Discharge(s).

**D. SUSPENSION OF ACCESS TO THE TOWN'S SMALL MS4** The Code Enforcement Officer may, without prior notice, physically suspend Discharge access to the Storm Drainage System to a Person when such suspension is necessary to stop an actual or threatened Non-Storm Water Discharge to the Storm Drainage System which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the Storm Drainage System, or which may cause the Town to violate the terms of its environmental permits. Such suspension may include, but is not limited to, blocking pipes, constructing dams or taking other measures, on public ways or public property, to physically block the Discharge to prevent or minimize a Non-Storm Water Discharges to the Storm Drainage System.

If the Person fails to comply with a suspension order issued in an emergency, the Code Enforcement Officer may take such steps as deemed necessary to prevent or minimize damage to the Storm Drainage System, or to minimize danger to persons, provided, however, that in taking such steps the Code Enforcement Officer may enter upon the Premises that are the source of the actual or threatened Non-Storm Water Discharge to the Storm Drainage System only with the consent of the Premises' owner, occupant or agent.

**E. MONITORING OF DISCHARGES** In order to determine compliance with this Ordinance, the Code Enforcement Officer may enter upon and inspect Premises subject to this Ordinance at reasonable hours with the consent of the Premises' owner, occupant or agent: to inspect the Premises and connections thereon to the Storm Drainage System; and to conduct monitoring, sampling and testing of the Discharge to the Storm Drainage System.

## **ARTICLE III**

**A. ENFORCMENT** It shall be unlawful for any Person to violate any provision of or to fail to comply with any of the requirements of this Ordinance. Whenever the Code Enforcement Officer believes that a Person has violated this Ordinance, Code Enforcement Officer may enforce this Ordinance in accordance with 30-A M.R.S.A. § 4452.

**B. NOTICE OF VIOLATION** Whenever the Code Enforcement Officer believes that a Person has violated this Ordinance, the Code Enforcement Officer may order compliance with this Ordinance by written notice of violation to that Person indicating the nature of the violation and ordering the action necessary to correct it, including, without limitation:

- 1 The elimination of Non-Storm Water Discharges to the Storm Drainage System, including, but not limited to, disconnection of the Premises from the MS4;
- 2 The cessation of discharges, practices, or operations in violation of this Ordinance;

- 3 At the Person's expense, the abatement or remediation (in accordance with best management practices in DEP rules and regulations) of Non-Storm Water Discharges to the Storm Drainage System and the restoration of any affected property; and/or the payment of fines, of the Town's remediation costs and of the Town's reasonable administrative costs and attorneys' fees and costs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such abatement or restoration must be completed.

**C. PENALTIES, FINES, INJUNCTIVE RELIEF** Any Person who violates this Ordinance shall be subject to fines, penalties and orders for injunctive relief and shall be responsible for the Town's attorney's fees and costs, all in accordance with 30-A M.R.S.A. § 4452. Each day that such violation continues shall constitute a separate violation. Moreover, any Person who violates this Ordinance also shall be responsible for any and all fines, penalties, damages and costs, including, but not limited to attorneys' fees and costs, incurred by the Town for violation of federal and State environmental laws and regulations caused by or related to that Person's violation of this Ordinance; this responsibility shall be in addition to any penalties, fines or injunctive relief imposed under this Ordinance.

**D. CONSENT AGREEMENT** The Code Enforcement Officer may, with the approval of the municipal officers, enter into a written consent agreement with the violator to address timely abatement of the violation(s) of this Ordinance for the purposes of eliminating violations of this Ordinance and of recovering fines, costs and fees without court action.

**E. APPEAL OF NOTICE OF VIOLATION** Any Person receiving a Notice of Violation or suspension notice may appeal the determination of the Code Enforcement Officer to the Board of Adjustment. The notice of appeal must be received within 30 days from the date of receipt of the Notice of Violation.

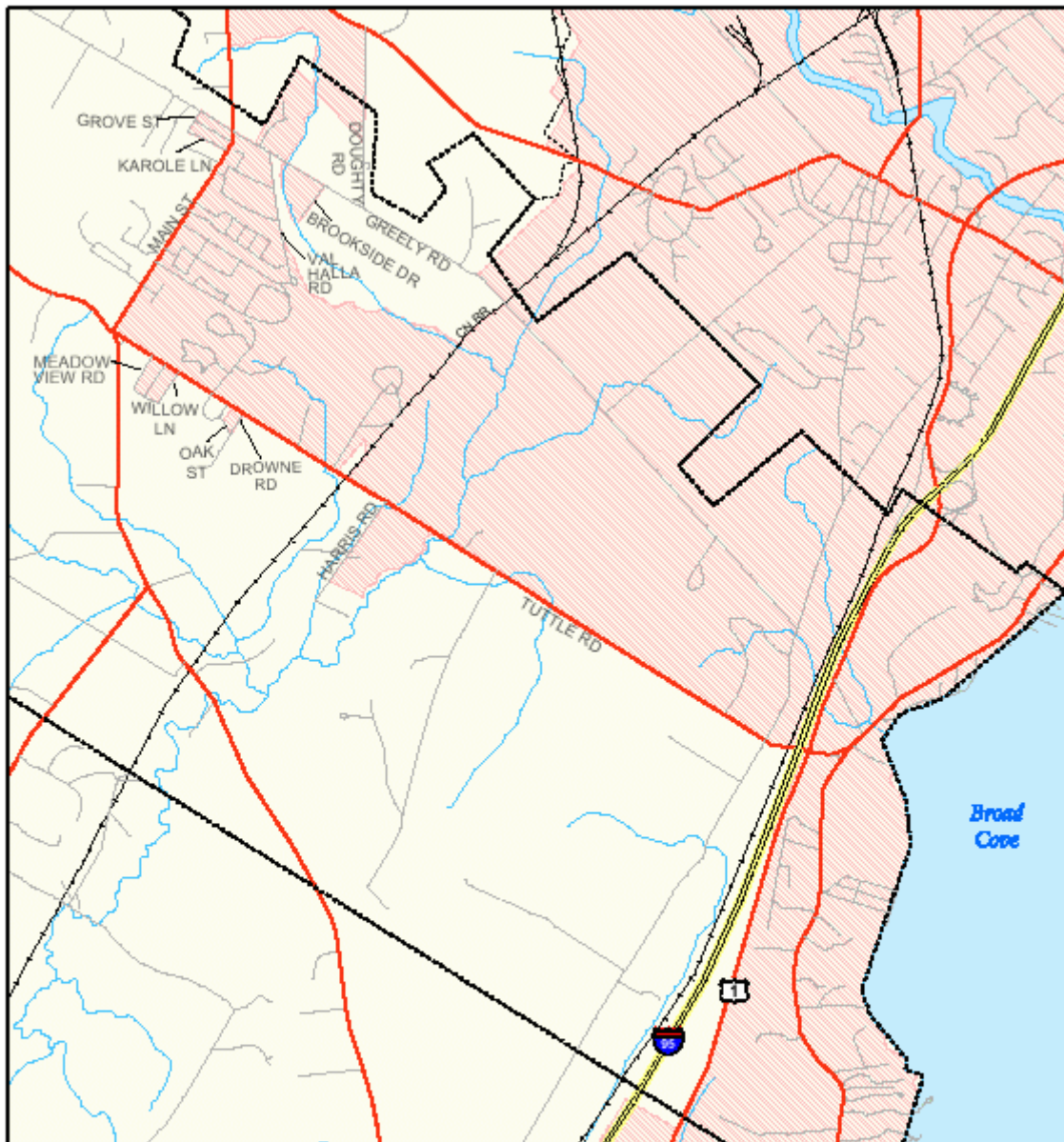
The Board of Appeals shall hold a hearing on the appeal within 30 days from the date of receipt of the notice of appeal. The Board of Appeals may affirm, reverse or modify the decision of the Code Enforcement Officer.

**F. ENFORCEMENT MEASURES** If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal to the Board of Appeals, within 45 days of a decision of the Board of Appeals affirming or modifying the Code Enforcement Officer's decision, then the Code Enforcement Officer may recommend to the municipal officers that the Town's attorney file an enforcement action in a Maine court of competent jurisdiction under Rule 80K of the Maine Rules of Civil Procedure.

Notwithstanding these requirements, in the event of an emergency situation that presents an immediate threat to public health, safety or welfare or that may result in damage to the Town's Storm Drainage System, the Town may seek injunctive relief at any time after learning of such emergency situation.

## ARTICLE IV

- A. ULTIMATE RESPONSIBILITY OF DISCHARGER** The standards set forth herein are minimum standards; therefore this Ordinance does not intend nor imply that compliance by any Person will ensure that there will be no contamination, pollution, nor unauthorized discharge of Pollutants into waters of the U.S. caused by said Person. This Ordinance shall not create liability on the part of the Town, or any officer agent or employee thereof for any damages that result from any Person's reliance on this Ordinance or any administrative decision lawfully made hereunder.
- B. SEVERABILITY** The provisions of this Ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions, clauses, sentences, or paragraphs or application of this Ordinance.
- C. BASIS** The Town of Cumberland enacts this Storm Water Discharge Ordinance (the "Ordinance") pursuant to 30-A M.R.S.A. § 3001 (municipal home rule ordinance authority), 38 M.R.S.A. § 413 (the "Wastewater Discharge Law"), 33 U.S.C. § 1251 et seq. (the "Clean Water Act"), and 40 CFR Part 122 (U.S. Environmental Protection Agency's regulations governing the National Pollutant Discharge Elimination System ("NPDES")). The Maine Department of Environmental Protection, through its promulgation of the "General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems" has listed the Town of Cumberland as having a Regulated Small Municipal Separate Storm Sewer System ("Small MS4"); under this General Permit, listing as a Regulated Small MS4 necessitates enactment of this Ordinance as part of the Town's Storm Water Management Program.



Area of Focus:



**NPDES Phase II Stormwater Program  
Automatically Designated MS4 Areas  
*Cumberland, Maine***

- Regulated Area (2000 Urbanized Area)
- Cumberland Town Boundary

Town Population: 7,159  
Regulated Population: 3,112



0 0.3 0.6 0.9 Miles

Data Sources: Urbanized Areas from US Census Bureau (2000); Political Boundaries from ME Office of GIS; Hydrography from NHD; Transportation data from GDT at 1:24,000.  
Map Created: 12/17/02; US EPA- New England GIS Center  
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## **APPENDIX C**

Dry Weather Outfall Inspection SOP

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

Town of Cumberland  
Stormwater Program Management Plan  
Illicit Discharge Detection and Elimination  
Standard Operating Procedure  
for  
Dry Weather Outfall Inspection Program  
Effective Date: April 7, 2009  
Revision No.: Three  
Last Revision Date: September 29, 2009

**Purpose:** The purpose of this Standard Operating Procedure (SOP) is to provide guidance, monitoring and corrective action as needed for the elimination of illicit discharges to Cumberland's storm drain system and ultimately the receiving waters in the Town as required by the Town's MS4 General Permit and Stormwater Program Management Plan.

**Scope:** This SOP applies in the performance of IDDE dry weather outfall inspection as required by Minimum Control Measure 3 Illicit Discharge Detection and Elimination, Best Management Practice (BMP) 3.3 of the Stormwater Program Management Plan.

**References:** Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine, Volume 1: Information for Program Managers; and Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine Volume 2: Standard Operating Procedures and Forms.

**Responsible Parties:**

- Overall program management: Assistant Town Manager
- Field inspections: Director of Public Services
- Tracking and record keeping: Public Works Secretary
- Review and follow up: Assistant Town Manager
- Corrective action: Director of Public Services
- Enforcement: Code Enforcement Officer

**Inspection Schedule:**

- Field inspection will be performed during periods of dry weather where no significant precipitation has occurred in the preceding 48 hours;
- Inspections will be performed during periods low flow where field inspections may be performed in a safe and efficient manner;
- Each outfall in the highest priority watershed will be inspected at least once in a permit cycle and more frequently as required by field conditions;
- By the end of the permit cycle, all outfalls in at least one sub-watershed of the second highest priority watershed.

**Inspection Priority:** Dry weather inspections will be scheduled and conducted in a prioritized basis and will target specific sub watersheds of the priority watershed based on the highest priority. The sub water shed priority is as follows:

<b>Priority</b>	<b>Watershed ID</b>	<b>Description (See Delineation Maps)</b>
1	PISC 3	Hedgerow Drive to Greely Road Area
2	PISC 1	Greely High School Area
3	PISC 2	Farwell Avenue to Hill Crest Drive Area
4	PISC 4	Meadow Lane to Catalpa Lane
5	PISC 5	Catalpa Lane to Maurice Way

#### **Inspection Procedure:**

- Inspections will be conducted in a safe manner and all required Personal Protective Equipment (PPE) will be used;
- Inspections will be performed as outlined in Section 2.1 and 2.2 of the Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine Volume 2: Standard Operating Procedures and Forms;
- Inspection will be recorded on the Standard Dry Weather Outfall Inspection Form, Page 2-9 of Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine Volume 2: Standard Operating Procedures and Forms;
- Digital photographs will be recorded and attached to each Inspection Form;
- Abnormal conditions, outfall damage, suspected illicit discharges and other issues will be noted in the Inspection Form and will be reported to the Director of Public Services for remedial action as required;
- In the case where an illicit discharge is noted or suspected, an attempt will be made to locate the source of the illicit discharge and will be documented in the Inspection Form for future action;
- Completed Inspection forms will be forwarded to the Public Works Secretary for archiving;
- When possible, opportunistic inspections will be performed by field staff. Following an opportunistic inspection, an Inspection Form will be completed and archived as noted above.

**Corrective Action:** When a suspected illicit discharge is noted, either during the regular inspection procedure, while conducting an opportunistic inspection or when reported by a citizen or third party inspection, the Town will take corrective action that may include, but not be limited to, the following.

- The Director of Public Services and the Code Enforcement Officer will be notified of the potential illicit discharge;
- The source of the illicit discharge will be traced and a mitigation plan to eliminate the illicit discharge will be developed by the Town;
- The illicit discharge will be eliminate as soon as practical;
- The corrective action will be documented by the Director of Public Works and will be forwarded to the Public Works Secretary for archiving;
- Follow up inspections will be scheduled as required.

**Record Keeping and Program Evaluation:** All inspection forms, complaints, Notice of Violations, remedial actions and infrastructure upgrades will be tracked and archived by

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the Public Works Secretary in an appropriate three ring binder system. This system will include the following steps:

- Completed inspection reports and all other pertinent information will be forwarded to the Public Works Secretary for archiving in the binder;
- Inspections that indicated a possible illicit discharge will be flagged and forwarded to the Director of Public Services for the appropriate action;
- On at least an annual basis the inspection forms and related data will be reviewed by the Assistant Town Manager for accuracy and conformance to the SOP and the Stormwater Program Management Plan;
- On an annual basis the inspections shall be tabulated and will be included in the Town's Annual Report to the Maine DEP.

## **APPENDIX D**

### **IDDE Training Attendance Records and Training Agenda**

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

## Interlocal Stormwater Working Group Meeting Attendance - July 2008 - June 2009

Last Name	First Name	Organization/ Municipality	7/17/08	8/21/08	10/16/08	11/20/08	1/15/09	2/19/09	3/19/09	5/21/09
Milligan	Tom	Biddeford		X	X	X	X	X	X	X
Malley	Robert	Cape Elizabeth		X	X		X	X	X	
Morin	Fred	Cape Elizabeth (OEST Associates)		X	X	X	X	X	X	X
Bohlen	Curtis	CBEP					X	X		
Fitch	Jami	CCSWCD							X	
Lee Pinard	Tamara	CCSWCD	X	X	X	X	X	X	X	X
McInnes	Betty	CCSWCD	X							
Williams	Betty	CCSWCD						X		
O'Neill	Courtney	CCSWCD - AmeriCorps	X	X						
Johnson	Steve	Cumberland			X	X	X	X	X	X
Ladd	David	DEP			X	X	X			X
Welch	Barb	DEP		X					X	
Edelstein	Jeff	Facilitator	X	X	X	X	X		X	X
Reynolds	Jay	Falmouth				X				
Presgraves	Albert	Freeport		X	X	X				X
Burns	Robert	Gorham		X			X	X	X	X
Beard	Jennifer	GZA							X	
Branscom	John	Maine Turnpike Authority					X		X	X
Saunders	Robyn	Maine Turnpike Authority	X		X	X	X	X		
Clannon	Lamarr	NEMO							X	
Conroy	Mary Ann	Old Orchard Beach		X	X	X	X			
Lamb	Gary	Old Orchard Beach			X	X		X	X	X
Rinehart	Christine	OOB (Wright-Pierce)	X	X	X	X	X	X	X	X
Bobinski	Mike	Portland			X					
Costigan	Mary	Portland			X					
Earley	Kathi	Portland	X	X		X	X	X	X	X
Roncarati	Doug	Portland	X		X	X	X	X	X	X
Blanchette	Angela	Saco				X	X			X
Wojcoski	Sarah	Saco/Scarborough	X	X	X	X	X	X	X	X
Shaw	Michael	Scarborough		X		X		X		X
Thomes	David	South Portland				X	X		X	X
Weeks	Brad	South Portland	X		X	X	X			
Rabasca	Kristie	Southern Maine MS4s		X						
Gallup	Mark	Southern ME Community College		X	X	X			X	X
Dudley	Eric	Westbrook		X				X		
Fortier	Doug	Windham						X		
Timmons	Roger	Windham		X	X	X			X	
Henderson	Zach	Woodard & Curran	X							
Jellis	Dan	Yarmouth		X		X		X	X	X
Anderson	Joe	YCSWCD						X		
Bolduc	Chris								X	
Burns	Tom					X				

**Staff IDDE Field Training: Public Services  
RECORD OF ATTENDANCE**

**Town of Cumberland, Maine**

**July 13, 2009**

Name	Organization	Phone	FAX	Cell Phone	E-Mail Address
Steve Johnson	Oak Engineers	772-2004			<a href="mailto:steven.johnson@oakengineers.com">steven.johnson@oakengineers.com</a>
Danny Burr	Town of Cumberland				
Steve Googins	Town of Cumberland				
Chris Bolduc	Town of Cumberland				
Bill Landis	Town of Cumberland				
Chris Logan	Town of Cumberland				

**Staff Introductory Training: Public Services  
RECORD OF ATTENDANCE**

**Town of Cumberland, Maine**

**April 8, 2009**

Name	Organization	Phone	FAX	Cell Phone	E-Mail Address
Steve Johnson	Oak Engineers	772-2004			steven.johnson@oakengineers.com
Cindy Stennett	TOC	829-2220	829-2114		cstennett@cumberlandmaine.com
Chris Logan	TOC	829-2208			clogan@cumberlandmaine.com
Chris Bolduc	TOC	829-2205			cbolduc@cumberlandmaine.com
Toby S. Young	TOC	829-2226 ext. 3			TOBYSYOUNG@GMAIL.COM
Bill Landis	TOC	829-2208			blandis@cumberlandmaine.com
Steve Googins	TOC	829-2220			Sgoogins@cumberlandmaine.com
Dan Burr	TOC	829-2223			dwburr@maine.RR.com

**Cumberland Stormwater Management Plan  
Staff Introductory Training Meeting Agenda  
Public Services  
April 8, 2009  
2:00 PM  
Cumberland Town Hall**

1. Introductions
2. Program Background
  - A. General Permit for Discharge of Stormwater (MS4)
  - B. Notice of Intent (NOI) to be covered under the General Permit
  - C. Stormwater Program Management Plan
3. Stormwater Management Plan Implementation
  - A. Program Implementation Plan
  - B. Program Lead
  - C. Responsible Parties
  - D. Technical support
  - E. Training
  - F. Schedule
  - G. Record Keeping
4. Stormwater Plan Review (MCM Table)
  - A. MCM 3 Illicit Discharge Detection and Elimination
  - B. MCM 6 Pollution Prevention and Good Housekeeping
5. Questions and next steps
6. Schedule follow up meetings
7. Adjourn

## **APPENDIX E**

### **Construction Site Erosion Control Inspection Form**

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009



# TOWN OF CUMBERLAND CONSTRUCTION SITE EROSION CONTROL INSPECTION FORM

<b>General Information:</b>			
Site Name:		Date:	Inspected by:
Address/Landmark:			
Reason for Inspection: <input type="checkbox"/> <b>Scheduled</b> <input type="checkbox"/> <b>ESC Inspection</b> <input type="checkbox"/> <b>Random</b> <input type="checkbox"/> <b>Complaint</b>			
Owner:		Contractor:	
ID #:	Last Rain Date:	Amount	(inches)
<b>1. Erosion Control Practices During Construction</b>			
a) Are all disturbed areas dormant > 21 Days Stabilized?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Are stockpiles and hillsides stabilized?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are stabilized areas in good condition and not eroding?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are silt fence/mulch berm installed correctly and according to plan?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Are inlet protection measures installed correctly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Have all areas at final grade > 7 days permanently stabilized?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
g) Have all riprap outlet protection measures been installed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments/Violations:			
<b>2. Sedimentary Control Practices During Construction</b>			
a) Construction entrance missing or inadequate?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Sedimentation basins/traps installed correctly and functioning?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Perimeter controls installed prior to disturbing soil?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Check dams installed correctly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments/Violations:			
<b>3. Maintenance</b>			
a) Erosion and Sedimentation Controls need repair, replacement, enhancement?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Sedimentation basin maintenance required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Sedimentation in ditches require removal?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Sediment trackout on paved surfaces at exits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments/Violations:			
<b>4. Inspections</b>			
a) Stormwater pollution prevention plan (SWPP)	<input type="checkbox"/> Onsite	<input type="checkbox"/> Not Onsite	<input type="checkbox"/> N/A
b) Inspection/Maintenance forms/logs complete?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments/Violations:			
<b>Violation, Corrective Actions, Recommendations</b>			
Site compliant with permit and town ordinances?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Sediment discharged from site?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Corrective action required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Notice of violation issued?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Stop work order issued?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Comments/Corrective Action Required:			

Revised July 1, 2009

## **APPENDIX F**

### **Post Construction Stormwater Management Ordinance**

**Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009**

# **POST-CONSTRUCTION STORMWATER MANAGEMENT ORDINANCE**

Town of Cumberland, Maine  
Adopted: \_\_\_\_\_

DRAFT dated: August 19, 2009

# POST-CONSTRUCTION STORMWATER DISCHARGE ORDINANCE

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# **ARTICLE I**

## **General**

### **A. PURPOSE**

The purpose of this “Post-Construction Stormwater Management Ordinance” (the “Ordinance”) is to provide for the health, safety, and general welfare of the citizens of the Town of Cumberland through review and approval of post-construction stormwater management plans and monitoring and enforcement of compliance with such plans as required by federal and State law.

This Ordinance establishes methods for post-construction stormwater management in order to comply with minimum control measures requirements of the federal Clean Water Act, of federal regulations and of Maine’s Small Municipal Separate Storm Sewer Systems General Permit.

### **B. OBJECTIVES**

The objectives of this Ordinance are:

1. To reduce the impact of post-construction discharge of stormwater on receiving waters; and
2. To reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through use of Best Management Practices as promulgated by the Maine Department of Environmental Protection pursuant to its Chapters 500 and 502 Rules, and ensure that these management controls are properly maintained and pose no threat to public safety.

### **C. APPLICABILITY**

1. This Ordinance applies to all New Development and Redevelopment within the Town that Discharges Stormwater to the Town’s Municipal Separate Storm Sewer System (MS-4) and to associated Stormwater Management Facilities.
2. Exception: This Ordinance does not apply to New Development or Redevelopment on a lot, tract or parcel where that lot, tract or parcel is part of a subdivision that is approved under this Ordinance. Said lot, tract or parcel shall not require separate review under this Ordinance, but shall comply with the Post-Construction Stormwater Management Plan requirements for that approved subdivision.

### **D. DEFINITIONS**

For the purposes of this Ordinance, the terms listed below are defined as follows:

**Applicant** means a Person with requisite right, title or interest or an agent for such Person who has filed an application for New Development or Redevelopment that requires a Post-Construction Stormwater Management Plan under this Ordinance.

**Best Management Practices (“BMP”)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Clean Water Act** means the federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*, also known as the “Clean Water Act”), and any subsequent amendments thereto.

**Construction Activity** means Construction Activity including one acre or more of Disturbed Area. Construction Activity also included activity with less than one acre of total land Disturbed Area if that area is part of a subdivision that will ultimately disturb an area equal to or greater than one acre.

**Discharge** means any spilling, leaking, pumping, pouring, emptying, dumping, disposing or other addition of Pollutants to “waters of the State.” “Direct discharge” or “point source” means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which Pollutants are or may be discharged.

**Disturbed Area** means clearing, grading and excavation. Mere cutting of trees, without grubbing, stump removal, disturbance or exposure of soil is not considered “Disturbed Area.” “Disturbed area” does not include routine maintenance but does include Redevelopment. “Routine maintenance” is maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of land or improvements thereon.

**Enforcement Authority** means the Town Manager or his/her designee who is the person(s) or department authorized by the Town to administer and enforce this Ordinance.

**Town** means the Town of Cumberland.

**Municipal Permitting Authority** means the municipal official or body that has jurisdiction over the land use approval or permit required for a New Development or Redevelopment.

**Municipal Separate Storm Sewer System, or MS4** means conveyances for stormwater, including, but not limited to, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels or storm drains (other than publicly owned treatment works and combined sewers) owned or operated by any municipality, sewer or sewage district, fire district, State agency or Federal agency or other public entity that discharges directly to surface waters of the State.

**National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit** means a permit issued by the U.S. Environmental Protection Agency (“EPA”) or by the Maine Department of Environmental Protection (“DEP”) that authorizes the

discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

**New Development** means any Construction Activity on unimproved Premises and for purposes of this ordinance includes “Redevelopment” defined below.

**Person** means any individual, firm, corporation, municipality, town, Quasi-municipal Corporation, State agency or Federal agency or other legal entity.

**Pollutant** means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or by-products, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

**Post-Construction Stormwater Management Plan** means BMPs and associated inspection and maintenance procedures for the Stormwater Management Facilities employed by a New Development or Redevelopment to meet the standards of this Ordinance and approved by the Municipal Permitting Authority.

**Premises** means any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips, located within the Town from which Discharges into the Storm Drainage System are or may be created, initiated, originated or maintained.

**Qualified Post-Construction Stormwater Inspector** means a person who conducts post-construction inspections of Stormwater Management Facilities for compensation and who has received the appropriate training for the same from DEP.

**Redevelopment** means Construction Activity on Premises already improved with buildings, structures or activities or uses, but does not include such activities as exterior remodeling of structures.

**Regulated Small MS4** means any Small MS4 regulated by the State of Maine “General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems” (“General Permit”), including all those located partially or entirely within an Urbanized Area (UA) and those additional Small MS4s located outside a UA that as of the issuance of the General Permit have been designated by the DEP as Regulated Small MS4s.

**Small Municipal Separate Storm Sewer System, or Small MS4** means any MS4 that is not already covered by the Phase I MS4 stormwater program including municipally owned or operated storm sewer systems, State or federally-owned systems, such as colleges, universities, prisons, Maine Department of Transportation and Maine Turnpike Authority road systems and facilities, and military bases and facilities.

**Storm Drainage System** means the Town's Municipal Separate Storm Sewer System including the Town's Regulated Small MS4 and areas outside the Town's Urbanized Area that drain into the Regulated Small MS4.

**Stormwater** means any Stormwater runoff, snowmelt runoff, and surface runoff and drainage; "Stormwater" has the same meaning as "Storm Water."

**Stormwater Management Facilities** means any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures that are part of the Post-Construction Stormwater Management Plan for a New Development or Redevelopment.

**Urbanized Area ("UA")** means the areas of the State of Maine so defined by the latest decennial census by the U.S. Bureau of the Census.

## **ARTICLE II MANAGEMENT PLAN**

### **A. GENERAL REQUIREMENT**

1. Except as provided in Section I.C.2 above, no Applicant for a building permit, subdivision approval, site plan approval or other zoning, planning or other land use approval for New Development to which this Ordinance is applicable shall receive such permit or approval for that New Development unless the Municipal Permitting Authority for that New Development also determines that the Applicant's Post-Construction Stormwater Management Plan for that New Development meets the requirements of this Ordinance.
2. At the time of application, the Applicant shall notify the Municipal Permitting Authority if its Post-Construction Stormwater Management Plan includes any BMP(s) that will discharge to the Town's MS4 and shall include in this notification a listing of which BMP(s) will so discharge.

### **B. PERFORMANCE STANDARDS**

1. The Applicant shall make adequate provision for the management of the quantity and quality of all stormwater generated by a New Development through a Post-Construction Stormwater Management Plan. This Post-Construction Stormwater Management Plan shall be designed to meet the standards contained in the Maine Department of Environmental Protection's Chapters 500 and 502 Rules and shall comply with the practices described in the manual *Stormwater Management for Maine*, published by the Maine Department of Environmental Protection, January 2006, which hereby are incorporated by reference pursuant to 30-A M.R.S.A. § 3003.
2. The Applicant shall meet the quantity and quality standards above either on-site or off-site. Where off-site facilities are used, the applicant must submit to the Town documentation, approved as to legal sufficiency by the Town's attorney, that the

Applicant has a sufficient property interest in the property where the off-site facilities are located -- by easement, covenant or other appropriate legal instrument -- to ensure that the facilities will be able to provide post-construction stormwater management for the New Development and that the property will not be altered in a way that interferes with the off-site facilities.

3. Where the Applicant proposes to retain ownership of the Stormwater Management Facilities shown in its Post-Construction Stormwater Management Plan, the Applicant shall submit to the Town documentation, approved as to legal sufficiency by the Town's attorney that the Applicant, its successors, heirs and assigns shall have the legal obligation and the resources available to operate, repair, maintain and replace the stormwater management facilities. Applications for New Development or Redevelopment requiring Stormwater Management Facilities that will not be dedicated to the Town shall enter into a Maintenance Agreement with the Town. A sample of this Maintenance Agreement is attached as Appendix 1 to this Ordinance.

4. Whenever elements of the Stormwater Management Facilities are not within the right-of-way of a public street and the facilities will not be offered to the Town for acceptance as public facilities, the Municipal Permitting Authority may require that perpetual easements not less than thirty (30) feet in width, conforming substantially with the lines of existing natural drainage, and in a form acceptable to the Town's attorney, shall be provided to the Town allowing access for maintenance, repair, replacement and improvement of the Stormwater Management Facilities. When an offer of dedication is required by the Municipal Permitting Authority, the Applicant shall be responsible for the maintenance of these Stormwater Management Facilities under this Ordinance until such time (if ever) as they are accepted by the Town.

5. In addition to any other applicable requirements of this Ordinance and the Town's Municipal Code, any New Development which also requires a stormwater management permit from the Maine Department of Environmental Protection (DEP) under 38 M.R.S.A. 420-D shall comply with the rules adopted by DEP under 38 M.R.S.A. 420-D(1), as the same may be amended from time to time, and the applicant shall document such compliance to the Municipal Permitting Authority. Where the standards or other provisions of such stormwater rules conflict with municipal ordinances, the stricter (more protective) standard shall apply.

### **ARTICLE III**

## **POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN COMPLIANCE**

### **A. GENERAL REQUIREMENTS**

Any Person owning, operating, leasing or having control over Stormwater Management Facilities required by a Post-Construction Stormwater Management Plan approved under this Ordinance shall demonstrate compliance with that Plan as follows.

1. That Person or a Qualified Post-Construction Stormwater Inspector hired by that Person, shall, at least annually, inspect the Stormwater Management Facilities, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved Post-Construction Stormwater Management Plan.
2. If the Stormwater Management Facilities require maintenance to function as intended by the approved Post-Construction Stormwater Management Plan, that Person shall take corrective action(s) to address the deficiency or deficiencies.
3. That Person shall employ a Qualified Post-Construction Stormwater Inspector to provide, on or by March 1 of each year , a completed and signed certification to the Enforcement Authority in a form identical to that attached as Appendix 1 to this Ordinance, certifying that the Stormwater Management Facilities have been inspected, and that they are adequately maintained and functioning as intended by the approved Post-Construction Stormwater Management Plan, or that they require maintenance or repair, describing any required maintenance and any deficiencies found during inspection of the Stormwater Management Facilities, and, if the Stormwater Management Facilities require maintenance or repair of deficiencies in order to function as intended by the approved Post-Construction Stormwater Management Plan, the Person shall provide a record of the required maintenance or deficiency and corrective action(s) taken.

## **B. RIGHT OF ENTRY**

In order to determine compliance with this Ordinance and with the Post-Construction Stormwater Management Plan, the Enforcement Authority may enter upon property at reasonable hours with the consent of the owner, occupant or agent to inspect the Stormwater Management Facilities.

## **C. ANNUAL REPORT**

Beginning July 1, 2009 and each year thereafter, the Town shall include the following in its Annual Report to the Maine Department of Environmental Protection:

1. The cumulative number of sites that have Stormwater Management Facilities discharging into their MS4;
2. A summary of the number of sites that have Stormwater Management Facilities discharging into their MS4 that were reported to the Town;
3. The number of sites with documented functioning Stormwater Management Facilities; and
4. The number of sites that required routine maintenance or remedial action to ensure that Stormwater Management Facilities are functioning as intended.

## **ARTICLE IV**

### **A. ENFORCEMENT**

It shall be unlawful for any Person to violate any provision of or to fail to comply with any of the requirements of this Ordinance or of the Post-Construction Stormwater Management Plan. Whenever the Enforcement Authority believes that a Person has violated this Ordinance or the Post-Construction Stormwater Management Plan, the Enforcement Authority may enforce this Ordinance in accordance with 30-A M.R.S.A. § 4452.

### **B. NOTICE OF VIOLATION**

Whenever the Enforcement Authority believes that a Person has violated this Ordinance or the Post-Construction Stormwater Management Plan, the Enforcement Authority may order compliance with this Ordinance or with the Post-Construction Stormwater Management Plan by written notice of violation to that Person indicating the nature of the violation and ordering the action necessary to correct it, including, without limitation:

1. The abatement of violations, and the cessation of practices, or operations in violation of this Ordinance or of the Post-Construction Stormwater Management Plan;
2. At the Person's expense, compliance with BMPs required as a condition of approval of the New Development, the repair of Stormwater Management Facilities and/or the restoration of any affected property; and/or
3. The payment of fines, of the Town's remediation costs and of the Town's reasonable administrative costs and attorneys' fees and costs.

If abatement of a violation, compliance with BMPs, repair of Stormwater Management Facilities and/or restoration of affected property is required, the notice shall set forth a deadline within which such abatement, compliance, repair and/or restoration must be completed.

### **C. PENALTIES/FINES/INJUNCTIVE RELIEF**

Any Person who violates this Ordinance or the Post-Construction Stormwater Management Plan shall be subject to fines, penalties and orders for injunctive relief and shall be responsible for the Town's attorney's fees and costs, all in accordance with 30-A M.R.S.A. § 4452. Each day that such violation continues shall constitute a separate violation. Moreover, any Person who violates this Ordinance or the Post-Construction Stormwater Management Plan also shall be responsible for any and all fines, penalties, damages and costs, including, but not limited to attorneys' fees and costs, incurred by the Town for violation of federal and State environmental laws and regulations caused by or related to that Person's violation of this Ordinance or of the Post-Construction Stormwater Management Plan; this responsibility shall be in addition to any penalties, fines or injunctive relief imposed under this Chapter.

### **D. CONSENT AGREEMENT**

The Enforcement Authority may, with the approval of the municipal officers, enter into a written consent agreement with the violator to address timely abatement of the violation(s) of this Ordinance or of the Post-Construction Stormwater Management Plan for the purposes of eliminating violations of this Ordinance or of the Post-Construction Stormwater Management Plan and of recovering fines, costs and fees without court action.

#### **E. APPEAL OF NOTICE OF VIOLATION**

Any Person receiving a Notice of Violation or suspension notice may appeal the determination of the Enforcement Authority to the Board of Appeals in accordance with the provisions of Section 603.4 of the Town's Zoning Ordinance. The notice of appeal must be received within 30 days from the date of receipt of the Notice of Violation.

The Board of Appeals shall hold a *de novo* hearing on the appeal within 30 days from the date of receipt of the notice of appeal. The Board of Appeals may affirm, reverse or modify the decision of the Enforcement Authority. A party aggrieved by the decision of the Board of Appeals may appeal that decision to the Maine Superior Court within 45 days of the date of the Board of Appeals decision pursuant to Rule 80B of the Maine Rules of Civil Procedure.

#### **F. ENFORCEMENT MEASURES**

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal to the Board of Appeals, within 45 days of a decision of the Board of Appeals affirming or modifying the Enforcement Authority's decision, then the Enforcement Authority may recommend to the municipal officers that the Town's attorney file an enforcement action in a Maine court of competent jurisdiction under Rule 80K of the Maine Rules of Civil Procedure.

### **ARTICLE V**

#### **A. SEVERABILITY**

The provisions of this Ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions, clauses, sentences, or paragraphs or application of this Ordinance.

#### **B. BASIS**

The Town of Cumberland enacts this Post-Construction Stormwater Management Control Ordinance (the "Ordinance") pursuant to 30-A M.R.S.A. § 3001 (municipal home rule ordinance authority), 38 M.R.S.A. § 413 (the "Wastewater Discharge Law"), 33 U.S.C. § 1251 *et seq.* (the "Clean Water Act"), and 40 CFR Part 122 (U.S. Environmental Protection Agency's regulations governing the National Pollutant Discharge Elimination System ("NPDES")). The Maine Department of Environmental Protection, through its promulgation of the "General Permit for the Discharge of

Stormwater from Small Municipal Separate Storm Sewer Systems,” has listed the Town of Cumberland as having a Regulated Small Municipal Separate Storm Sewer System (“Small MS4”); under this General Permit, listing as a Regulated Small MS4 necessitates enactment of this Ordinance as part of the Town’s Stormwater Management Program in order to satisfy the minimum control measures required by Part IV D 5 (“Post-construction stormwater management in new development and redevelopment”).

## APPENDIX 1

### **Maintenance Agreement for Stormwater Management Facilities**

This Maintenance Agreement is made this \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ by and between \_\_\_\_\_ and the Town of Cumberland, Maine.

The project name is \_\_\_\_\_.

The location is: \_\_\_\_\_, Cumberland, Maine.

The project's Tax Map and Lot Numbers are Tax Map \_\_\_\_\_ Lot \_\_\_\_\_

The project is shown on a plan entitled " \_\_\_\_\_ " dated \_\_\_\_\_ and most recently revised on \_\_\_\_\_, approved by the \_\_\_\_\_ [Municipal Permitting Board] on \_\_\_\_\_ and recorded in the \_\_\_\_\_ County Registry of Deeds in Plan Book \_\_\_\_\_ Page \_\_\_\_\_ (the "Project").

WHEREAS, the approval of the Project includes Stormwater Management Facilities which requires periodic maintenance; and

WHEREAS, in consideration of the approval of the Project the Town of Cumberland requires that periodic maintenance be performed on the Stormwater Management Facilities;

NOW, THEREFORE, in consideration of the mutual benefits accruing from the approval of the Project by the Town and the agreement of \_\_\_\_\_ to maintain the Stormwater Management Facilities, the parties hereby agree as follows:

1. \_\_\_\_\_, for itself, and its successors and assigns, agrees to the following:

(a) To inspect, clean, maintain, and repair the Stormwater Management Facilities, which includes, to the extent they exist, parking areas, catch basins, detention basins or ponds, drainage swales, pipes and related structures, at least annually, to prevent the build up and storage of sediment and debris in the system;

(b) To repair any deficiencies in the Stormwater Management Facilities noted during the annual inspection;

(c) To provide a summary report on the inspection, maintenance, and repair activities performed annually on the Stormwater Management Facilities to the Town Enforcement Authority;

(d) To allow access by Town personnel or the Town's designee for inspecting the Stormwater Management Facilities for conformance with these requirements.

(e) To create a homeowners' association for the purpose of maintaining the Stormwater Management Facilities.

2. Upon creation of the homeowners' association, the homeowners' association shall become responsible for compliance with the terms of this Agreement.

3. This Agreement shall constitute a covenant running with the land, and \_\_\_\_\_ shall reference this Agreement in all deeds to lots and/or units within the Project.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
By: \_\_\_\_\_  
Its:

TOWN OF CUMBERLAND

\_\_\_\_\_  
Witness

By: \_\_\_\_\_  
Its:

STATE OF MAINE

\_\_\_\_\_, ss.

\_\_\_\_\_, 20\_\_

Personally appeared the above-named \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_, and acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

Before me,

\_\_\_\_\_  
Notary Public / Attorney at Law

Print Name:

\_\_\_\_\_

STATE OF MAINE

\_\_\_\_\_, ss.

\_\_\_\_\_, 20\_\_

Personally appeared the above-named \_\_\_\_\_, the  
\_\_\_\_\_ of the Town of Cumberland, and acknowledged the foregoing  
Agreement to be said his/her free act and deed in said capacity.

Before me,

\_\_\_\_\_  
Notary Public / Attorney at Law

Print Name:

\_\_\_\_\_

## APPENDIX 2

### **Annual Stormwater Management Facilities Certification (to be sent to Town's Enforcement Authority)**

I, \_\_\_\_\_ (print or type name), certify the following:

1. I am making this Annual Stormwater Management Facilities Certification for the following property: \_\_\_\_\_

(print or type name of subdivision, condominium or other development) located at \_\_\_\_\_ (print or type address), (the "Property");

2. The owner, operator, tenant, lessee or homeowners' association of the Property is: \_\_\_\_\_ (name(s) of owner, operator, tenant, lessee, homeowners' association or other party having control over the Property);

3. I am the owner, operator, tenant, lessee or president of the homeowners' association, or am a Qualified Post-Construction Stormwater Inspector hired by the same (circle one);

4. I have knowledge of erosion and stormwater control and have reviewed the approved Post-Construction Stormwater Management Plan for the Property;

5. On \_\_\_\_\_, 20\_\_, I inspected or had inspected by \_\_\_\_\_, a Qualified Post-Construction Stormwater Inspector, the Stormwater Management Facilities, including but not limited to parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures required by the approved Post-Construction Stormwater Management Plan for the Property;

6. At the time of my inspection of the Stormwater Management Facilities on the Property, I or the Qualified Post-Construction Stormwater Inspector identified the following need(s) for routine maintenance or deficiencies in the Stormwater Management Facilities:

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7. On \_\_\_\_\_, 20\_\_, I took or had taken the following routine maintenance or the following corrective action(s) to address the deficiencies in the Stormwater Management Facilities stated in 6. above:

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8. As of the date of this certification, the Stormwater Management Facilities are functioning as intended by the approved Post-Construction Stormwater Management Plan for the Property.

Date: \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

STATE OF MAINE

\_\_\_\_\_, ss.

\_\_\_\_\_, 20\_\_

Personally appeared the above-named \_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_, and acknowledged the foregoing Annual Certification to be said person's free act and deed in said capacity.

Before me,

\_\_\_\_\_  
Notary Public/Attorney at Law

Print Name:

\_\_\_\_\_

**Mail this certification to the Town's Enforcement Authority at the following address:**

Code Enforcement Office

Town of Cumberland

290 Tuttle Road

Cumberland, ME 04021

K:\M\Maine Municipal Association (12009)\Municipal Stormwater Ordinances (0003)\Revised Post-Const. Stormwater Ord. No Program 12-10-2008.doc

## **APPENDIX G**

Sample Building Permit

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

# BUILDING PERMIT

Town of Cumberland, Maine

MAP \_\_\_\_\_ LOT \_\_\_\_\_  
Zoning District \_\_\_\_\_ Setback Overlay \_\_\_\_\_

PERMIT # \_\_\_\_\_

DATE APPLICATION RECEIVED \_\_\_\_\_

## APPLICANT

NAME: \_\_\_\_\_ PHONE NO: \_\_\_\_\_  
MAILING \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

## OWNER (other than applicant)

NAME: \_\_\_\_\_ PHONE NO: \_\_\_\_\_  
MAILING \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

## CONTRACTOR

NAME: \_\_\_\_\_ PHONE NO: \_\_\_\_\_  
MAILING \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

PROPERTY LOCATION: \_\_\_\_\_

LOT DIMENSIONS: \_\_\_\_\_ x \_\_\_\_\_ Area: \_\_\_\_\_ Number of dwelling units: \_\_\_\_\_

PLUMBING: SEWER PERMIT ISSUED: yes no n/a - SEPTIC PERMIT ISSUED - yes no n/a

STREET OPENING: yes no n/a - PRIVATE WAY: yes no n/a - DRIVEWAY ENTRANCE - yes no n/a

PLANS FILED: SCALED PLOT PLAN - yes FULL CONSTRUCTION DRAWINGS - yes

DESCRIPTION OF PROPOSED CONSTRUCTION: \_\_\_\_\_

SETBACK: FRONT YARD \_\_\_\_\_ SIDE YARD \_\_\_\_\_ OTHER SIDE YARD \_\_\_\_\_ REAR YARD \_\_\_\_\_

BUILDING: Length: \_\_\_\_\_ ft. Width: \_\_\_\_\_ ft. Height: \_\_\_\_\_ ft. Area: \_\_\_\_\_ sq. ft.

SHORELAND OVERLAY DISTRICT: yes no RESOURCE PROTECTION DISTRICT: yes no

FLOODPLAIN PERMIT \_\_\_\_\_ NOTICE OF INTENT (DEP) ME CONST. GENERAL PERMIT \_\_\_\_\_

ESTIMATED COST OF CONSTRUCTION : \$ \_\_\_\_\_ PERMIT FEE: \$ \_\_\_\_\_

Owner/Agent signature: \_\_\_\_\_ Date signed: \_\_\_\_\_

Office use only: TYPE OF CONSTRUCTION: \_\_\_\_\_ USE GROUP \_\_\_\_\_

CONDITIONS OF APPROVAL: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date Permit Issued: \_\_\_\_\_

CODE ENFORCEMENT OFFICER

Original-File -Photo copy to Applicant

rev.4/06

**Building Permit Application Checklist**  
**\*\* All building plans must meet or exceed**  
**Building Codes - IRC-2003 and IBC – 2003\*\***

- **New Home:**
- **Growth Permit \$100.00**
- **Impact Fee Application - \$1.36 per sq. ft. minus first 500 sq. ft.**
- **BUILDING PERMIT APPLICATION and FEE (Finished Areas .25 / per sq. ft. – Unfinished areas .10 / per sq. ft.)**
- **Septic Permit - 3 SIGNED COPIES OF HHE-200 Plans and Fee (non-engineered (\$150.00) or Sewer permit and fee (\$50.00))**
- **Deed for the Property**
- **2 copies of construction plans (full size for mark up, 11x17 to be kept by the office)**
- **Plans must include:**
- **4 elevations**
- **Framing cross-section (including sizes of structural members)**
- **Foundation Plan**
- **Floor plan (each room's use labeled)**
- **Structural steel, ridges, beams involving LVL's, or Paralam's, (stamped by engineer)**
- **Plot Plan; lot size and accurate locations of all existing and proposed structures with set-backs (PER SCALE NOTED ON PLOT PLAN), and drainage.**

\* Please be aware that structurally complicated buildings must be reviewed by an Engineer.

\* Additional trade permits will be necessary (electrical, plumbing etc.)

**Renovations & Additions:** **\$10.00 per \$1,000.00 of Renovation Cost**

<b><u>New Construction: Residential</u></b>	<b><u>Minimum Fee</u></b>	<b><u>\$50.00</u></b>
	<b><u>Finished areas</u></b>	<b><u>.25 / per sq. ft.</u></b>
	<b><u>Unfinished areas</u></b>	<b><u>.10 / per sq. ft.</u></b>

<b><u>New Construction Commercial</u></b>	<b><u>Minimum Fee</u></b>	<b><u>\$100.00</u></b>
	<b><u>Finished Areas</u></b>	<b><u>.30 / per sq. ft.</u></b>
	<b><u>Unfinished Areas</u></b>	<b><u>.10 / per sq. ft.</u></b>

- **Floor plans showing existing structure and proposed changes**
- **Framing cross sections (including sizes of structural members)**
- **Plot Plan; lot size and accurate locations of all existing and proposed structures with set-backs (PER SCALE ON PLOT PLAN), and drainage.**
- **Completed building permit APPLICATION (other side) \$10.00 per \$1,000.00**

**Sheds & Decks** **\$25.00**

**(up to 400 sq. ft. then .10 per sq. ft. additional)**

**Demolition Permits** **\$25.00 (10-day waiting period)**

**Shoreland Permits:** The Shoreland Overlay District (SOD) is generally 250 feet from rivers, streams or saltwater bodies and their associated wetlands where shown on the official Zoning Map, also 75 feet from certain streams - See Zoning Ordinance. All requests for Building Permits in the SOD require a Shoreland Permit prior to issuance of the Building Permit.

**Maine Construction General Permit:**

Effective 2-17-03 a "NOTICE OF INTENT" maybe required if your construction will result in disturbance of greater than or equal to one acre.( To be filed with the DEP)

## **APPENDIX H**

### **Sample Literature**

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

# Maine Erosion and Sedimentation Control Law

Did you know that the number one pollutant in Maine's rivers, streams, brooks, ponds and wetlands is soil from nearby eroding sites?

Under this law, landowners are required to repair their eroding areas to prevent any soil loss and sediment discharge into a nearby natural resource.

The full text of the Maine Erosion and Sediment Control Law (Title 38 M.R.S.A. Section 420-C) may be seen at:  
<http://www.maine.gov/dep/blwq/docstand/stormwater/stormstat.pdf>

## Do you Need Help?

Assistance and guidance on how erosion may be prevented or stopped may be obtained from:

- Your nearest office of the Maine Department of Environmental Protection. Or call (207) 287-3901;
- Your county's Soil and Water Conservation District;
- Your Lake Watershed Association; and
- Contractors certified by DEP in erosion and sediment control practices (list available from the DEP).

## Comply with the Maine Erosion and Sediment Control Law

Stabilize your bare soils

Protect Maine's water for future enjoyment

**IT'S THE LAW !**

Department of  
Environmental  
Protection  
Deplw0652-2004



# What is Soil Erosion?

Every time mineral soil is exposed, it is subject to movement from wind and rain erosion.

Because most runoff reaches a stream, river, lake or coastal water, eroded soils and other pollutants can get transported and deposited into these resources.

The visible impacts from eroded soils include rills, gullies, and muddy water.

The invisible impact from eroded soils is the change or loss of habitat used by fish or other creatures, impaired recreational opportunities and fouling of a drinking water source.

A 2003 study showed that

- Almost half (43%) of all construction sites did not use erosion or sedimentation control measures,
- And more than half (60%) of the chronic erosion problems are from public and private roads.



# Erosion from Construction

In 1997, the Erosion and Sedimentation Control Law came into effect. It was designed to prevent Maine's waterbodies from further degradation due to soil erosion.

Since July 1997, construction projects of any size must have:

- Sediment control measures, such as silt fence or hay bales, placed at the down gradient side of the construction site before work begins.
- Erosion control measures, such as mulch and vegetation, placed as soon as feasible to permanently stabilize the site when construction is completed.

Preventing the loss of soil from a construction site saves money that would otherwise be needed to rework eroded areas and replace lost soil. It also prevents soil from impacting the quality of our water resources.



# Chronic Erosion

As of July 1, 2005, an important change will occur in the law. From that time on, all existing chronic erosion problems in watersheds most-at-risk (as defined in the DEP rules) will be regulated.

See: [www.maine.gov/sos/cec/rcn/apa/06/096/096c502.doc](http://www.maine.gov/sos/cec/rcn/apa/06/096/096c502.doc).

On July 1, 2010, the law will apply to all organized areas in the state of Maine and landowners will have to fix their erosion problems.

Examples of chronic erosion problems include:

- Camp roads that wash out every spring;
- Culverts that are washing out around their inlets and outlets;
- Ditches and embankments that are not stabilized with vegetation or riprap and show major rills and gullies; and
- Washouts in areas downgradient from any point of concentrated stormwater runoff.



*Maine's Department of Environmental Protection is committed to providing Maine citizens with complete information about, and opportunities to express their opinions regarding, decisions on applications for environmental licenses. The different ways that people can participate described here are specified in Maine statutes and rules that govern the Department's operations.*

The information provided in this brochure briefly summarizes rules and guidance that are more specifically detailed in "Rules Concerning the Processing of Applications and Other Administrative Matters," Chapter 2 of the Department's rules, and as such should not be considered complete or authoritative. All Maine DEP rules and laws are available via the internet by following the links provided at:

[www.maine.gov/dep/permits.htm](http://www.maine.gov/dep/permits.htm)



**If you have questions or need additional information, contact the Department at 287-7688, or toll-free 1-800-452-1942**

17 State House Station  
Augusta, Maine 04333-0017  
E-mail: [infoDEP@maine.gov](mailto:infoDEP@maine.gov)

State of Maine  
**Department of  
Environmental  
Protection**



## **STATE ENVIRONMENTAL LICENSING**

### ***A Citizen's Guide to Participation***

If you have questions or need additional information, contact the Department at 287-7688, or toll-free 1-800-452-1942

## ***What does the DEP license?***

The Maine Department of Environmental Protection reviews a wide variety of activities having the potential to impact Maine's environment. Businesses, institutions, organizations, and individuals all are possible applicants for a license (also referred to as a permit, approval, certification, etc.). Some licenses define the limits under which land development may take place, particularly near protected resources. Other licenses serve to control the management, discharge, transportation, and storage of potential pollutants. These include oil and hazardous materials, solid waste, sewage, air pollutants, and stormwater, among others.

## ***How are licenses issued?***

DEP provides application forms for the activities regulated under State law. Application information and public notice requirements, including notification of abutting property owners, vary with the nature of the proposed activity.

Once the DEP receives an application, it must accept it for processing or return it as incomplete within 15 working days. If accepted as complete, DEP staff review the application and all comments submitted by outside parties, to assess potential impacts on the environment. They further evaluate the applicant's ability to build and operate

the proposed project in compliance with environmental laws and rules. When review is complete, the Commissioner of the DEP or the Board of Environmental Protection makes the final license decision (approval or denial). Approved licenses frequently include specific conditions with which the licensee must comply.



## ***How can I take part in the process?***

Interested members of the public can

- ♦ Review the application materials submitted by the applicant at the DEP or in some cases at the local town office;
- ♦ Attend public informational meetings, if held, at which they may ask questions;
- ♦ Submit written comments at any point during the time when the application is being reviewed;
- ♦ Ask to receive a draft license, and provide comments prior to final action;
- ♦ Request a public hearing; and/or
- ♦ Request that the Board take over evaluation of the application from the Department. [Deadlines apply] See guidance at [www.maine.gov/dep/bep](http://www.maine.gov/dep/bep).

## ***Do all applications get a public hearing?***

No. Most applications are issued without a public hearing. A "public hearing" is a formal proceeding, governed by strict rules, during which the DEP accepts testimony and evidence from the applicant, parties who support or oppose the project, and the general public. State law requires a public hearing for certain applications, such as a commercial hazardous waste facility; however, anyone may request a public hearing regarding other types of applications. The Commissioner or the Board then decides whether one will be held.

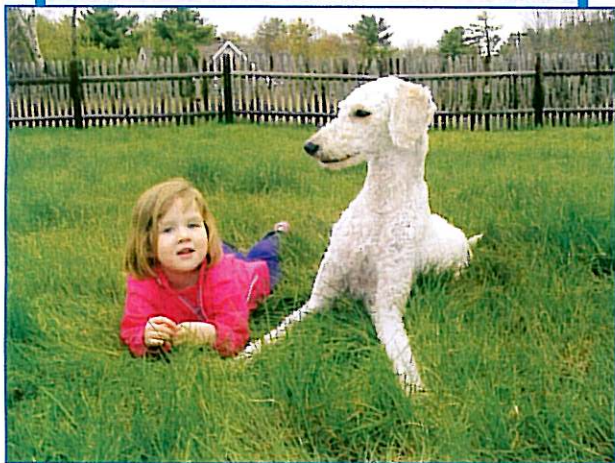
Many applications that aren't required by law to have a public hearing are required to have a "public informational meeting" at which the applicant explains the project and the public may ask questions. At this type of meeting, the DEP may invite the public to discuss the application; however, comments must be provided in writing in order to be considered in the application review process. Applications that require informational meetings include, among others, new Site Location of Development permits; major new air emissions permits; and new or expanded waste disposal facility licenses.

## ***May licenses be appealed?***

Yes, but certain criteria must be met for an appeal to proceed. Also, there is a limited time during which an appeal may be filed. See Chapter 2, section 24(B) of the DEP's rules.

## Why should you YardScape?

- ✓ Saves money.
- ✓ Saves time.
- ✓ Protects you, your family and the environment.



A healthy, natural  
lawn is more  
resistant to weeds,  
bugs, disease and  
drought!

Call the Conservation  
District for  
YardScaping info:  
892-4700

Check out:  
[www.cumberlandswcd.org](http://www.cumberlandswcd.org)  
Click on the ducky!

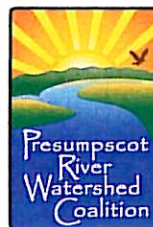


*The Maine  
YardScaping  
Partnership was  
formed out of the  
rising concern  
over the pollution caused by yard  
care chemicals washing away  
into water bodies, as well as the  
risks of pesticide exposure to  
people, pets and wildlife.*

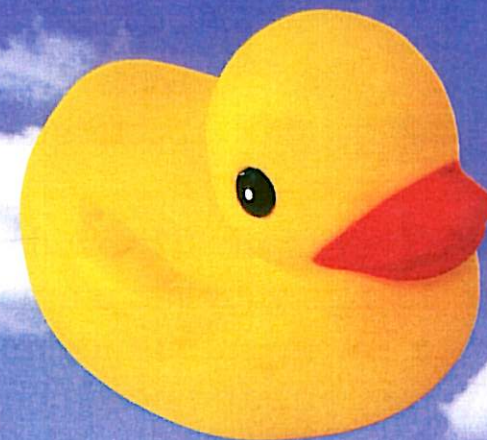


  
Cumberland County  
Soil & Water Conservation District

  
Casco Bay Estuary  
PARTNERSHIP



Do you want  
a lush  
green lawn  
safe for kids  
and pets?



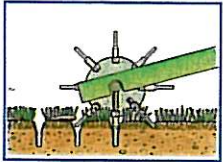
Let the ducky  
point you in  
the right  
direction!

## What is YardScaping?

YardScaping is a statewide effort to inspire Maine people to maintain their yards for the safety of kids, pets and the environment by reducing the use of fertilizers, pesticides and herbicides.

### YardScaping Tips!

- ✓ **Mow High:** Three inches is the rule! Longer grass strengthens roots, retains more moisture and makes it difficult for weeds to germinate.
- ✓ **Aerate:** An aerator loosens up the soil and gets the air, water and nutrients more readily to the roots. Rent one with a neighbor or hire a professional.



- ✓ **Overseed:** Throw down more grass seed to give your lawn a natural boost. Ask for a low maintenance mix that is drought tolerant and needs no fertilizer.

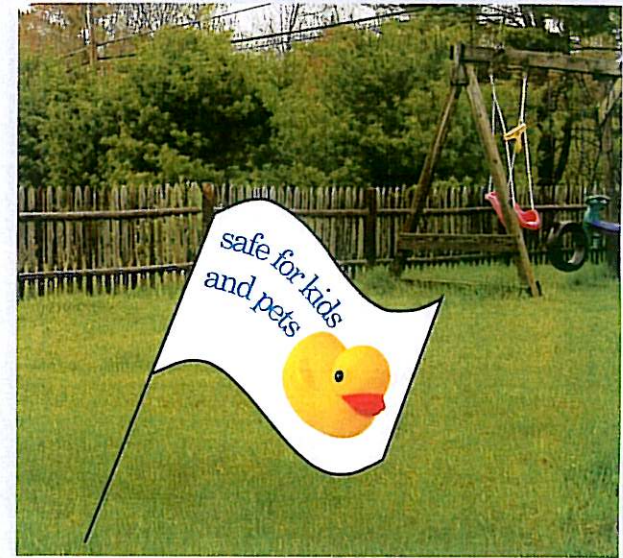


- ✓ **Test the Soil:** A soil test analyzes soil fertility and pH and recommends exactly what your soil needs for growing healthy grass. Test kits available from the Cumberland County Soil and Water Conservation District. Call 892-4700.

More YardScaping Tips Online!

[www.cumberlandswcd.org](http://www.cumberlandswcd.org)

Click on the ducky!



## What do YOU do?

- ✓ Start YardScaping today!
- ✓ Visit our website for upcoming events and giveaways.
- ✓ Call the Conservation District for lawn care advice: 892-4700.
- ✓ Proudly display your free ducky lawn flag so friends and family know you have a safe, healthy lawn. Sign our lawn care pledge online or call 892-4700.

## **APPENDIX I**

Sample Tracking Spreadsheet for Disturbed Areas  
Greater Than One Acre

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

## TOWN OF CUMBERLAND

# STORMWATER LOG FOR ALL PROJECTS SITE PLAN / SUBDIVISION

[illegible]

## **APPENDIX J**

Sample Tracking Spreadsheet for Notice of  
Violation (NOV's)

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

[illegible]

## **APPENDIX K**

William Longley Training Certificates

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009



# Maine Nonpoint Source Training News

Fall 2009

Volume 11 Issue 2



## Center Announces Fall 2009 Training Schedule

**A** number of courses highlight the Nonpoint Source Training and Resource Center's 2009 Fall Training Schedule.

**Course offerings for contractors** interested in certification include six basic and advanced sessions in erosion control best management practices. These will be held in various locations throughout the state. Preference will be given to local contractors and municipal personnel since the sessions are being co-sponsored by the municipality where they are being held.

**Of interest to consultants, engineers and municipal officials**, the Center will be offering a course on long term maintenance and inspection of Stormwater Best Management Practices (BMPs). The program will be held in three locations around the state and will feature a voluntary "take home exam" to become an approved stormwater BMP inspector. For engineers the course will provide Professional Development Hours (PDHs) to fulfill continuing education requirements to maintain professional licensure.

**For architects, consultants, engineers and local and state officials** the Center will be co-sponsoring a workshop on Low Impact Development (LID).



*The proper functioning of Stormwater Best Management Practices is critically dependent on regular inspection and maintenance. Learn more about inspection and maintenance of these BMPs and become an inspector by attending this Fall's training sessions. See page 2 to register.*

This is a hands-on program to assist participants in designing these type of developments.

**For certified contractors in need of re-certification credits**, the Center will again be offering a 4-hour continuing education program. This year's program is scheduled for four locations throughout the state. The session will provide a summary of regulatory changes and will focus on Spill Prevention and Hydraulic Mulches.

As an alternative to attending a continuing education program, re-certification can now also be

obtained by viewing a videotaped version of the session on DVD. Participants then complete a short quiz that is sent to the Center, where re-certification is issued.

***The listing on the next page outlines all of the courses being offered. Please register for as many as you'd like by using the registration form on the bottom of the page.***

### inside...

2009 Fall Training Schedule

New Law Changes Facilitate Maintenance and Repair of Gravel Roads

New Focus Anticipates Greater Participation in the Certification Program

New Guide to Forming Road Association Now Available

Page 2

Page 3

Page 4

Page 4

**1) Basic & Advanced Erosion Control Practices***Hours: 8:00 A.M. To 4:30 P.M.*

Session #NPS1050 Skowhegan, October 15, 2009,  
Skowhegan Community Center  
Registration Deadline: 10/07/09

Session #NPS1051 Boothbay, October 22, 2009,  
Boothbay Fire Station  
Registration Deadline: 10/14/09

Session #NPS1054 Ellsworth, November 20, 2009,  
Ellsworth City Hall  
Registration Deadline: 11/12/09

Session #NPS1055 Blue Hill, December 1, 2009,  
Blue Hill Town Hall  
Registration Deadline: 11/23/09

Session #NPS1057 Bangor, December 3, 2009,  
Spectacular Events  
Registration Deadline: 11/25/09

Session #NPS1059 Bangor, December 7, 2009,  
Spectacular Events  
Registration Deadline: 11/29/09

**2) Continuing Education for Certified Contractors***Hours: 8:00 A.M. To 12:30 P.M.*

Session #NPS1058 Presque Isle, December 4, 2009,  
Presque Isle Inn and Convention Center  
Registration Deadline: 11/26/09

Session #NPS1060 Brewer, December 8, 2009,  
Jeff's Catering  
Registration Deadline: 11/30/09

Session #NPS1061 Augusta, December 10, 2009,  
The Ground Round  
Registration Deadline: 12/02/09

Session #NPS1062 Portland, December 15, 2009, Verrillo's  
Registration Deadline: 12/07/09

Session #NPS1064 Continuing Education Course on DVD

**3) Maintenance and Inspection of Stormwater BMPs***Hours: 8:00 A.M. To 4:30 P.M.*

Session #NPS1052 Brewer, November 12, 2009,  
Jeff's Catering  
Registration Deadline: 11/04/09

Session #NPS1053 Augusta, November 18, 2009,  
Augusta Civic Center  
Registration Deadline: 11/10/09

Session #NPS1063 Portland, December 17, 2009, Verrillo's  
Registration Deadline: 12/09/09

**4) LID Workshop***Hours: 8:00 A.M. To 4:30 P.M.*

Session #NPS1056 Portland, December 2, 2009, Verrillo's  
Registration Deadline: 11/24/09

### Maine Nonpoint Source Training and Resource Center Course Registration Form

Name: \_\_\_\_\_ Tel: \_\_\_\_\_

E-mail address: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

The Course(s) I would like to attend are:

Course # \_\_\_\_\_ Session # \_\_\_\_\_ to be held in \_\_\_\_\_ Course Fee: \_\_\_\_\_  
(City or Town)

Course # \_\_\_\_\_ Session # \_\_\_\_\_ to be held in \_\_\_\_\_ Course Fee: \_\_\_\_\_  
(City or Town)

Course fees can be paid by either check or credit card, if paying by check, please make payable to: J.E.T.C.C. For credit card payments, please complete the following: Credit card (check one) ☐ Visa ☐ MC ☐ Disc Card Number \_\_\_\_\_  
(3 digit code located on back of card (Visa only) \_\_\_\_\_ Expiration \_\_\_\_\_

Name on Card \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Please note that an additional \$15 late fee will be assessed on all course registrations received after the registration deadline date.

**Course Fees:**

- 1) Basic Erosion Control Practices - \$25 (Lunch Not Included)
- 2) Continuing Education Course - \$30 / DVD Course- \$30
- 3) Maintenance and Inspection of Stormwater BMPs - \$70
- 4) LID Workshop- Fee varies, contact JETCC for more information

*Send this form along with appropriate fee(s) to:*

J.E.T.C.C. P.O. Box 487 Scarborough, Maine 04070-0487  
Tel. 207-253-8020 Fax: 207-771-9028

## New Law Changes Assist in Improving Maintenance and Repair of Gravel (Camp) Roads



**N**ew legislation that was recently passed could assist landowners in obtaining required resources to conduct proper road maintenance and repair.

Many years ago, the Legislature enacted the Private Ways Law. This allowed the owners of 3 or more parcels of land on a private road to call a meeting to address road repair and maintenance issues. It further allowed the assessment of fees on landowners using the road, to fund the repair and

maintenance work. The law has enabled many associations to be formed and has resulted in an overall increase in the quality of roads.

This year, the Legislature amended the law to clarify the purpose and permanence of an association and to allow an association to negotiate easements for road repairs. It also has provided immunity from lawsuits to association road commissioners and board members for organizational activities to encourage more of these organizations to be formed.

Other new legislation of benefit to gravel road owners allows municipalities the ability to utilize public resources on private roads to help to protect the quality of certain lakes and ponds in town. For the roads to qualify, the waterbodies must be threatened or impaired, the road must be found to be contributing to degradation of water quality based on an evaluation of the road, and the repairs must be maintained by an organized road association.

The legislation takes effect on September 12, 2009, and it is hoped that it will encourage many more road associations to be formed and more gravel roads to be properly maintained. For more information on this legislation, please call the Center at: 287-7726.

## 2009 Winter/Spring Training Season Hosts 1135 Participants



**T**he Nonpoint Source Training and Resource Center's 2008 Winter/ Spring Training was successful in reaching a number of groups. Training was held for contractors, engineers, consultants, site evaluators, state and municipal officials, landscapers and landowners.

Training in erosion control was again provided to contractors and others throughout the state. Twelve courses in erosion control best management practices, were held. A total of **410** people attended these programs.

Contractors, site evaluators and others interested in instruction on subsurface sewage disposal rules, septic system design installation and inspection were provided with nine training sessions encompassing these topics. As usual, turnout was excellent with **417** participants attending.

For landscape contractors, participating members of the State's Soil & Water Conservation Districts, as well as consultants and lake group members, the Center sponsored workshops on the LakeSmart Awards Program. The workshops provided instruction on LakeSmart principles and the use of the newly revised evaluation form. A total of **96** participants attended these programs. In addition, in August, Center staff conducted a LakeSmart "Walk and Talk" program on Worthley Pond in Peru with **12** property owners attending.

In May, Center staff participated in putting together the 2009 NPS Conference held in Portland. This

three day conference hosted participants from several New England states and explored a number of NPS related topic areas. A total of **148** people attended the conference.

Gravel road problems and their evaluation and treatment were featured topics for 4 training sessions held throughout the state. The sessions provided instruction on diagnosing and repairing road problems to prevent impacts to water quality. A total of **52** participants attended these sessions

***The Center would again like to thank the Advisory Committee members, instructors, sponsors, J.E.T.C.C. , and other organizations who made the Winter/Spring 2009 training season so successful!***

## New Focus in Reaching Contractors Anticipates Greater Program Participation



**A**s a result of the need to improve participation in the certification process, the Center has changed its focus from utilizing mass mailings to advertise training sessions to the state's contractors, to working with local Code Enforcement Officers (CEOs) in recruiting program participants. In addition, the Center has also started contacting larger construction companies to offer sessions for personnel at the company's facility.

The use of mass mailings has worked for a number of years in recruiting participants, however it appears that the majority on the mailing list who want to participate have done so and the list itself does not include a lot of the small local contractors who do business in a number of Maine's communities. Local CEOs are the best source of information on who the local contractors are in their area and have regular contact with them.

For larger companies it is sometimes difficult and expensive to send individual employees to training sessions, and holding a session in-house may make more sense. It is also an opportunity to get a number of personnel eligible for certification at one time.

So if you are a local CEO and would like to assist the Center in getting the word out to local contractors on certification training, or if you are the owner of a large construction company and would like to schedule a training session for your staff at your facility, please contact the Center at 287-7726. Your assistance and/or participation will be greatly appreciated.

examples of actions property owners can take on their own to protect the water quality of their lakes. Each property owner was awarded a framed certificate for his or her home and LakeSmart Award signs to display on his or her property. This brings the total number of award recipients statewide to 228.

The Center truly appreciates the work that these landowners have completed to make their properties more lake friendly.

## LakeSmart Awards Given to 13 Lakefront Property Owners



**T**he Center would like to congratulate the following landowners for their recent LakeSmart awards: **Joe and Suzanne Bruno, John and Shirley Hammon, Nathan and Sarah Kimble and Greg Naylor** for properties on Crescent Lake in Raymond; **Bernard and Judith Elfring** for property on Worthley Pond in Peru; **Hal and Carol Taylor and David and Penny Littell** for properties on Farrington Pond in Lovell; **Sherwood and Mary Elizabeth Anderson and Millard S. Parlin Jr.** for properties on Porter Lake in New Vineyard; **Marty and Betty Welt** for their property on Damariscotta Lake in Nobleboro; and **Robert and Melanie Pullo, Ruth and Glen Evans and Wayne Smith Jr.** for properties on Wilson Lake in Wilton.

The landscaping and management of these properties are excellent

## New "Guide to Forming Road Associations" Available Soon



**A**s part of an effort to promote the formation of Road Associations to encourage proper maintenance of gravel roads throughout the state, the Department in cooperation with the Maine Alliance of Road Associations, (MARA) the Congress of Lake Associations (COLA) and others has put together a revised version of "A Guide To Forming Road Associations".

The new guide coincides with all of the provisions of the legislation that was recently passed concerning the Private Ways Law. It features a section on types of Road Associations and includes step by step instructions to be followed in developing a legal association. The Guide also contains sample forms and by-laws to assist organizers in ensuring that the association meets all statutory requirements.

From holding the Informational and Organizational meetings to developing and implementing a maintenance plan, this publication will be very helpful to those interested in taking action to improve and maintain their gravel road.

For more information or to receive a copy of the "Guide", contact the Center at: 287-7726.

*The Nonpoint Source Training and Resource Center is funded under Section 319 of the Clean Water Act and is a program of the Department of Environmental Protection's Division of Watershed Management. The Center is located at the Department's Ray Building Headquarters in Augusta, and can be reached at 287-7726. Visit our Internet Web site at <http://www.maine.gov/dep/bhwq/training/index.htm>*

**DEPLW2000-123**



## Certificate of Attendance

This certifies that

Bill Longley

Attended the Maine Association of Wetland Scientists  
VERNAL POOL WORKSHOP

On February 6, 2009

And is eligible to receive 1 CEU credit under the New Hampshire Certified Wetland Scientist accreditation and 3 CEU credits in the area of Land Use for Code Enforcement Officers by the State Planning Office.

Jennifer West

Jennifer West  
Program Chair  
Maine Association of Wetland Scientists

# Certificate of Attendance

This Certifies that

William Longley Jr.

Participated in

***"Natural Resources Identification and Regulation  
Workshop - Part 2"***

***On September 3, 2008***

***At Reid State Park, Georgetown, Maine***

Sponsored by the Maine Association of Professional Soil Scientists in  
conjunction with the Maine Association of Site Evaluators and the Maine  
Association of Wetland Scientists

*The focus of the workshop was to identify a number of state protected natural resources  
and interpret various rules and regulations pertaining to development activities adja-  
cent to them.*

Full day attendance at this workshop provides 2.0 CEU's to New  
Hampshire Certified Wetland Scientists and 6.0 Professional Develop-  
ment Hours to Maine Licensed Site Evaluators.



Johanna Gully

09/03/2008



# Certificate of Completion

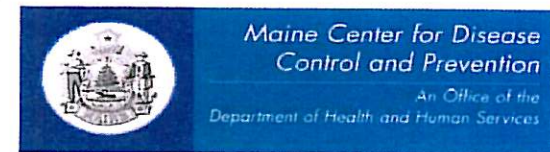
This certificate recognizes that

*William Longley*

successfully completed the

## Shoreline Survey Basics Course

Portland, Maine  
March 25 & 26, 2008

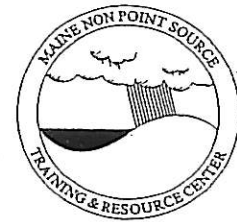


John E. Baldacci, Governor

Branda M. Harvey, Commissioner



## Maine Nonpoint Source Training & Resource Center



### Certificate of Completion

Presented to

**William C. Longley Jr.**

For successful completion of training in a 7 hour course entitled

Controlling Construction Site Runoff

April 13th 2006  
Date

*William LaFlamme*  
Coordinator, Nonpoint Source Training & Resource Center

## **APPENDIX L**

Ocean Outfall Monitoring Report

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

The Town of Cumberland has a variety of marine resources, including approximately four miles of coastline on the mainland and two small islands. Key resources along the coastline include shellfish and worm harvesting areas, dense eel Grass beds, tidal waterfowl and wading bird habitats, and seabird nesting area's. The town's shoreline is also home to a large number of horseshoe crabs.

The town has typically issued 11 (10 resident and 1 non-resident commercial shellfish harvesting permits and 280 recreational licenses, 50 of which were reserved for after June 1st.

In July 2007 The Town of Cumberland and Chebeague Island split, Chebeague Island becoming their own town. This change significantly altered our marine resources of the town. Virtually all commercial fishing and lobstering in Cumberland, and most marine related business, has been based on Chebeague. Mainland Cumberland has no publicly owned areas for a pier and no deep water access for a harbor. Cumberland also has no direct access to a public beach. There are many boats registered in the town that have to be moored elsewhere.

The Cumberland Police Department along with The Department of Marine resources has been involved in the testing of our shoreline waters for many years. Beginning in the fall of 2008 we were informed that our water quality for the continuing of harvesting of shellfish was beginning to show an increase of bacteria. The testing that was being done by DMR indicated an increase of fecal coliform. Fecal coliform can come from a variety of sources, including but not limited to animal waste. We were also told that water drainage systems including catch basins could be washing pollutants into our areas.

During the winter of 2008/2009 members of our department along with our IT director Mike Crosby attended classes to certify us thru DMR to become volunteer water samplers. These classes consisted of classroom time as well as site survey and the actual taking of samples for the direct purpose of fecal coliform testing. During the winter we contacted Friends of Casco Bay, Maine's Healthy Beach program, The University of Southern Maine and also Southern Maine Community College in hopes that one of these three groups could assist us in attempting to locate the source of the increased pollution. Members attended training at Southern Maine Community College where they learned how to perform shoreline surveys. Shoreline surveys are used to determine where and how pollutants may be entering our bay area thru either public means, culverts, catch basins etc. or private entities, overboard discharge units, residential sump pumps or grey water type devices. During this training we were put in touch with Portland Water District, in an effort to utilize their testing services and expertise on the fecal coliform issue. When contacted we met on several occasions and showed them our results to date as supplied by DMR. During our discussions we mapped out a sampling strategy based on what we felt were problem areas along our shoreline. Our goal was to mirror the testing that DMR performs but also we wanted to get more sampling done on our own to attempt to isolate those areas where we showed increase in fecal coliform.

During the spring of 2009 along with Portland Water District did two sets of water quality testing. samples were taken at approximately 8 pre determined sites and turned over to PWD for their lab to analyze. During our survey work we discovered several areas of concern. There were locations where unknown pipes were coming out of the ground and actual flow of water was running onto either rocky ledges or directly onto the sand. We determined by attempting to

follow these pipes that these were private homes and not public use pipes. We even found a plastic trash can with lid, when we opened the trash can inside were wet plastic bags of what appeared to be dog waste. Our shoreline walk also noted a alarming amount of deer feces in the area, this could also add to our water quality problem. Our most alarming find was the amount of ducks, and geese located in the waters known as Broad Cove, this area lies on the border of Yarmouth and has historically been a problem site with DMR water quality testing and the presence of fecal coliform. In looking at the area and the lack of tidal movement this appears to be a problem that we can't even begin to fathom. The area is prime feeding ground for waterfowl and is privately owned. There is a stream that runs from a farm area and the entire area is surrounded by tall eel grass and woods.

During the summer of 2009 we have continued to monitor the water quality with sampling done by us and turned over to DMR for their lab. These sampling results have shown an increase in fecal coliform to the point where our shellfish flats will be closed for the remainder of 2009 and quite possibly into 2010. Cumberland has 2 sampling points recognized by DMR. Our long term goal is to get DMR to add two more sampling points to our area. Our hope is by adding more points we could put the Broad Cove area and its continued bad water quality out of the equation and have the rest of Cumberland open to shellfish harvesting. I am in the process of researching grant monies to assist in either additional water quality, mitigation strategies or even educational materials to better educate the general public on our water quality. The Town of Cumberland also purchased an incubation unit for our use. We have performed our own testing looking for e-coli bacteria and other coliforms. Testing was done at Cumberland Town landing, Long Meadow, Seacove, Payson Point and at the head of Broad Cove adjacent to the Yarmouth pump station.

## PHOTO KEY FOR WATER QUALITY SAMPLING

1. Runoff of unknown origin Wildwood Beach
2. Extended runoff on Wildwood Beach
3. Members along with Portland Water District taking water samples
4. Plastic garbage can with dog waste inside Wildwood Beach
5. Cumberland Town Landing culvert from Route 88
6. Runoff from unknown source north of Town Landing Road
7. Close-up of unknown runoff north of Town Landing Road
8. Mike Crosby taking sample from Fells Brook, North of Town Landing Road
9. Sample being taken from unknown pipe located adjacent to old Town landing road
10. Close-up of sample location 9
11. Culvert of unknown origin leeching out into Broad cove from the Ferne Lane area
12. Cobblestone pipe system located off Ferne Lane
13. Pipe coming from the banking into Broad Cove from Broad Cove Meadows area



























## **APPENDIX M**

### **List of Municipal Operations in the Urban Area**

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 1 Annual Report  
July 1, 2008 to June 30, 2009

<p align="center"><b>Town of Cumberland</b>  <b>Municipal Operations in the Urban Area</b></p>
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<u>Facility</u>	<u>Location</u>	<u>Size</u>	<u>Scope of Work</u>
Public Works Garage	Drowne Road	8000 sq ft	Vehicle Maintenance, Painting, Welding Salt Storage, Vehicle Storage
SAD 51 Bus Maintenance Facility	Drowne Road	3200 sq ft	Bus Maintenance, Vehicle Storage
Twin Brook Maintenance Facility	Tuttle Road	2500 sq ft	Lawn Mower and Fertilizer Storage
Valhalla Golf Course Maintenance Facility	Valhalla Road	1500 sq ft	Light Mower maintenance, Fertilizer Storage Pesticide Storage