

**TOWN OF CUMBERLAND  
STORMWATER PROGRAM MANAGEMENT PLAN  
PERMIT YEAR 4 ANNUAL REPORT  
JULY 1, 2011 TO JUNE 30, 2012**

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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 Ransom Consulting, Inc. (Ransom), is intended to satisfy the Town of Cumberland’s obligation under the annual reporting requirements for Permit Year Four (PY4) for which the reporting period is July 1, 2011 to June 30, 2012. It should also be noted that on behalf of the Town of Cumberland, Ransom verbally requested a deadline extension for its Annual Report submission from the MEDEP. The deadline for submission of the Town’s PY4 report was requested to be prior to the end of December, 2012.

In PY4 Cumberland continued to improve their ongoing good compliance in regards to stormwater program management. As mentioned in previous annual reports, the Town has an excellent track record during the first General Permit cycle and accomplished a tremendous amount of work in that time frame. In the second General Permit cycle, the Town continued to meet their permit requirements by and large while still suffering budget cuts and staff downsizing, particularly in operational staff. In Permit Year 4, Cumberland continued to suffer staff cuts in Public Works that made compliance challenging. However, the Town’s Director of Operations, who serves as the storm water program manager, continued to make the storm water program a priority and worked diligently to provide staffing resources as much as possible to meet the Town’s obligations. While challenged from both a budgetary and staffing standpoint, the Town still strove to meet its obligations under their Stormwater Program Management Plan with good success in PY 4 as in previous years.

As in previous reporting years and during the Permit Year 4 reporting period, the Town of Cumberland was able to perform a significant number of IDDE outfall inspections in not only their priority watershed, (both their highest and the next three highest prioritized sub-watersheds), but also on several outfalls in their coastal watershed, which is the Town’s second highest prioritized watershed. The work in the coastal watershed included water quality sampling in addition to outfall inspections on at least seven dates in the PY4 reporting period. The Town’s sampling efforts, being conducted in conjunction with the Department of Marine Resources (DMR), is ongoing in the PY 5 as well.

It should be noted that the work performed in the coastal watershed is supported not only by Town staff, but also by a citizen committee or the Shellfish Conservation Commission, made up of Town staff, elected officials and area residents. Although the Committee’s prime focus is to address impacts to the shellfish beds in the Town, the Committee Team members recognize the importance of a watershed approach on a Town wide basis. As such, in PY 3 the Committee tasked a sub-committee to work on stakeholder outreach throughout the Town to address non-point source pollution and raise awareness of this issue. Town staff has been fully engaged in supporting the committee both in some financial capacity as well as the use of staff resources. In PY 4 these efforts continued and augmented the work the Town is doing on the Stormwater Program Management Plan, especially in MCM 2, Public Involvement and Participation. These efforts culminated in a community outreach event that included a large catch basin

stenciling event in the Coastal Watershed area of Cumberland. On May 24<sup>th</sup>, 2012 approximately 30 volunteer students from Greeley High School (MSAD 51), the Shellfish Commission, Cumberland Fire and Police Department staff and the Public Works Department stenciled catch basins on Route 88 and local roads from Falmouth to Yarmouth with the warning “Do Not Dump/Drains to Casco Bay”. Additionally informational flyers regarding stormwater were distributed to all households in the stencil area.

During the reporting period, the Town of Cumberland continued to assign specific personnel the responsibility for performing stormwater tasks at their respective work site facilities. While the Director of Operations maintains overall responsibility for the program as stipulated in the Stormwater Program Management Plan, specific field tasks are assigned to individuals with the goal being ownership of those action items. By instilling a sense of ownership by individual employees and ensuring staff continuity for the tasks, the Town has an easier time scheduling and ultimately performing each required task in the appropriate time frame. This also provides for uniformity of each work task ensuring that things are done the same and with the required detail throughout the reporting period.

The Town also provided employee training during the reporting period, especially for those folks assigned specific stormwater program work tasks. This training included ISWG MS4 Training sponsored by the CCSWCD and tailored staff training provided by Ransom. Additionally, the Town’s Code Enforcement Officer was provided continuing training as part of his normal duties.

## **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:** Cumberland's Permit Year 1, 2 and 3 Annual Reports and Stormwater Program Management Plan are posted on the MEDEP's website as well as Cumberland's website. Cumberland's PY 4 Annual Report will also be posted on the website. Additionally, Permit Year 4 and Permit Year 5 from the previous General Permit are posted for reference. Cumberland maintains a record of public meeting minutes on their website, 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 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 Household 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. Additionally, Cumberland, in conjunction with other area communities, provides options to residents for safe disposal of expired or unwanted medication.

- 2.2.2 BMP 2.2 Host Public Events: During Permit Year 4, Cumberland successfully implemented this BMP through a regional event with the Cumberland County Soil and Water Conservation Service (CCSWCS) and the Inter-local Stormwater Working Group (ISWG) stakeholders in the form of a 5k road race, the Urban Runoff 5k. Held in Portland on April 21, 2012, the event was extremely successful and provided a tremendous opportunity to bring stormwater runoff pollution to the forefront of participant's and attendee's awareness. Cumberland provided two volunteers to staff the event. A full report of the event is included in Appendix A.

In May of the Permit year, the Town, in conjunction with MSAD 51 and the Shellfish Commission conducted a large catch basin stenciling event in the Route 88 area of Cumberland. This area serves the Coastal Watershed and stormwater runoff from this area affects Casco Bay and Cumberland shellfish beds. Approximately 30 Greeley High School students in addition to Cumberland Fire, Police and Public Works department staff volunteered to stencil all catch basins from the Falmouth town line to the Yarmouth town line. Additionally, a door to door literature drop was conducted to educate residents regarding the group's efforts and the impacts of stormwater non-source point pollution.

In late September of the Permit Year, the Town in conjunction with the Cumberland Shellfish Conservation Commission staffed a static display at the annual Cumberland Fair. This event provided an opportunity to reach out to a large segment of folks and provide information on stormwater runoff pollution prevention.

Between September 23 and October 1 of 2011, the Town, Commission and several volunteers staffed a booth at the Cumberland Fair. This booth included a static display obtained on loan from the CCSWCD and volunteers had several different handouts and informational literature available for folks. Additionally, staffers were able to talk with fair attendees about stormwater and land use impacts on water quality and how folks can make a difference. The booth was located in one of the vendor buildings and received the same foot traffic as the other vendors. While no record of one on one interaction was logged during the event or the number of promotional materials handed out noted, it is estimated that several thousand people passed by the vendor booth during the Fair's duration.

- 2.3 MCM 3 Illicit Discharge Detection and Elimination Responsible Party: Director of Public Services, Director of Planning and Ransom Consulting, Inc.

The goals of MCM 3 are as follows:

1. Develop a watershed based storm drain system infrastructure map;
2. Implement and enforce a non-stormwater discharge ordinance;
3. Develop and implement a prioritized dry weather outfall inspection plan; and
4. 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's primary watershed. There were minor infrastructure repairs and some re-development that occurred in areas outside of the Urban Area. This infrastructure will be added to the mapping system once the infrastructure is accepted by the Town.

It should also be noted that once the new storm drain infrastructure is accepted by the Town, the data is added to the Town's cleaning and maintenance schedule for catch basin cleaning as part of the spring cleanup operations.

- 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) and 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 Greeley Road Area (See Figure 2) and PISC 1: Greeley High School Area (See Figure 3). The next highest priority watersheds delineated are PISC 2 (Farwell Avenue to Hill Crest Drive Area); PISC 4 (Meadow Lane to Catalpa Lane) and PISC 5 (Catalpa Lane to Maurice Way). The remainder of the EBPR watershed subarea delineation is underway to ensure field inspections of outfalls occur during PY5.

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 still 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 through Ransom Consulting, Inc. provided training to Town employees who were assigned the responsibility of performing outfall inspections. 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. A copy of attendance records and training agenda is included in Appendix D. Additionally, Ransom continued to support Town inspection staff for IDDE inspections acting as a technical resource for mapping delineation, inspection protocols and inspection scheduling. Additionally, during Permit Year 4 Ransom provided refresher training to all Public Works staff to ensure existing employees and new employees are aware of the requirements under the Town's Storm Water Management Plan. This refresher training was conducted on April 3, 2012. A copy of the agenda outlining topics covered and an attendance list is also 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 the Town of Cumberland conducted 33 dry weather outfall inspections in both the first, second and third priority sub-watersheds of the EBPR watershed. Inspections were conducted between July, 2011 and June 2012. As part of these inspections no illicit discharges were found. As part of the IDDE inspections five (5) locations required repair and two (2) locations required follow up regarding leaf and yard waste disposal. Additionally, it should also be noted that Town staff did perform field inspections of outfalls in 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 Cumberland Shellfish Conservation Commission. During the PY4 reporting period the Town of Cumberland and its partners captured at least seven (7) different sets of water quality samples from five (5) discrete sample outfall points and tested all samples for fecal coliform bacteria.

These sample dates were July 12, 2011, July 26, 2011, August 10, 2011, August 24, 2011, September 27, 2011, October 12, 2011 and November 1, 2011.

As part of this ongoing sampling effort, the Town and its partners also provided inspections of the shoreline outfalls and documented perceived issues as a result. It is anticipated that the Department of Marine Resources (DMR) and the Town will continue the sampling effort throughout the summer of 2012 and 2013. The Town of Cumberland is working with the DMR to expand the existing sampling program twofold to provide additional water quality data sets to help define and mitigate problems in this important watershed. Data results obtained during PY4 reporting period is included in Appendix L.

2.3.3.8 The Town will conduct additional outfall inspections in the next higher priority watersheds as per the Stormwater Program Management Plan. It is anticipated that the Town will conduct IDDE inspections in the rest of the sub-watersheds in the EBPR watershed in PY5 reporting period.

2.3.4 BMP 3.4.1 and 3.4.2 Open Ditch Illicit Discharge Detection Program: In the PY 3 reporting period, the Town, in conjunction with Ransom, developed an Illicit Discharge Detection and Elimination Standard Operating Procedure (SOP) for ditches in the Urban Area. This SOP was developed in early spring of 2011 and became effective July 1, 2011. The implementation of the SOP began in PY4 and will be fully implemented by the end of PY5 (June 30, 2013).

2.3.4.1 The Town has developed a Standard Operating Procedure (SOP) for Ditch Inspections. A copy of this SOP is included in Appendix D. 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.

2.3.4.2 In Permit Year 4 the Town of Cumberland implemented the ditch inspection program developed in PY 3. On April 3, 2012 Ransom provided Town staff training on the new SOP for ditch inspections. During the reporting period the Town performed 49 ditch inspections in the priority watershed. As part of the inspections no illicit discharges were discovered, however several culverts were found to be inadequate, clogged or had failed. As a result of these inspections fourteen culverts were replaced and twelve culverts were cleaned. Additionally, the ditch inspections resulted in 21 ditch segments being cleaned and/or reshaped. In addition to this work, the Town performed ditch maintenance activities on approximately 2 miles of Greely Road, .25 mile on Middle Road, .25 mile on Orchard Road, 640 linear feet on Whitney Road and approximately 500 linear feet on Val Halla Road. As required in the Stormwater Management Plan, the ditch inspection program will continue in Permit Year 5 and it is anticipated that inspections will occur throughout the primary watershed.

2.4 MCM 4 Construction Site Stormwater Runoff Control Responsible Party: Code Enforcement Officer, Director of Planning and Ransom Consulting, Inc.

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 the permit application form in addition to verbal notification during the application submission. During the PY4 reporting period the Town staff provided seven notifications for projects that occurred in the urban area or adjacent to it. The Town continued to evaluate 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.

During the PY 3 reporting period the Town staff documented one project meeting the threshold of one acre of disturbance that occurred in the urban area, which is still ongoing during the entirety of PY 4. This specific project was the Raven Farm Sub Station Project; which is in the Coastal Watershed of the Urban Area. The Town's third party peer review consultant in addition to a Maine DEP third party peer review consultant provided frequent erosion and sedimentation control inspections for the project in addition to Town staff oversight. The Town ensured that appropriate erosion and sedimentation control measures were installed and maintained as appropriate by the Contractor performing the construction.

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 inspections 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 PY4 reporting period there was one construction site that disturbed one acre or more within the Urban Area. During the PY4 reporting period there were nine (9) inspections performed within the Urban Area for the Central Maine Power (CMP) Raven Farm Substation Project. Sample Site Inspection Reports are included in Appendix I.

Additionally, during the Permit Year 4, 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.

- 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 PY4 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 is 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 several training modules during the reporting period. While most of the training was tailored for building code type issues, it should be noted that this extensive training exemplifies and reinforces the Town's commitment to staff training for many issues. In past years, Mr. Longley attended several training sessions that were pertinent to stormwater issues, and is currently fluent in the requirements of state

and local stormwater regulations. 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 implemented the new ordinance during PY2. During PY3 there was one development in the Urban Area that triggered this MCM and the project was under construction for the duration of PY 4, hence there were no inspections or reporting required.

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, Ransom Consulting, Inc.

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 the Town's 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 developed and implemented written Operations and Maintenance (O&M) procedures for identified facilities in the EBPR watershed during PY2. Each O&M procedure was distributed to the respective facility staff as required. Copies of the O&M procedures for each facility are included in Appendix O. During PY4 the Town continued to rely upon the written Operations and Maintenance Plans for each facility developed during PY2.

As part of the O&M Procedures continued implementation during PY 4, the Town conducted monthly walkthroughs at each facility to ensure ongoing compliance with the operational plans. Initially a walk through was conducted with the Town's insurance carrier representative and was performed as part of required safety training, but since the initial walkthrough, this work has been conducted by specific Town staff in conjunction with the scheduled safety inspections.

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. There are no municipal facilities identified in the Coastal Drainage Watershed.

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.

2.6.2 BMP 6.2.1 and 6.2.2 Municipal Employee Training:

2.6.2.1 During the PY4 reporting period the Town of Cumberland' Public Works Department attended refresher training provided by Ransom Consulting. Besides an overview of the stormwater program, the training covered IDDE inspection training for both outfalls and ditches as well as an overview of the O&M plans for Twin Brook Recreational Area and Val Halla golf course. The training also included refresher training on the facility SWPPP's as required.

Additionally, it is anticipated that additional training will be implemented in Permit Year 5, including IDDE Outfall Inspection refresher training, IDDE Ditch Inspection training, SWPPP refresher training and refresher O&M training as required. It is anticipated this training will be obtained in conjunction with ISWG training opportunities as well as focused training from third party trainers as required. Appendix P contains documentation of the training that occurred during PY2, PY3 and PY 4.

2.6.2.2 Under this BMP no activities were required during the PY4 reporting period, however it is anticipated that during PY5 Cumberland will provide additional training segments to staff that will include, but not limited to, IDDE Outfall Inspection refresher training, IDDE Ditch Inspection training, SWPPP refresher training and refresher O&M training as required.

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 approximately 121 cubic yards of sand from road and parking/paved areas. The Town used both straight sand and sand/salt mix. In addition, the Town also applied rock salt in some areas of high traffic volume.

It should also be noted that sweeping operations started as soon as possible in the spring of 2012. By collecting this material as early as possible after snowmelt, less sand is deposited in the Town's storm drain and ditch system; and ultimately the receiving waters. The Town's aggressive approach to sweeping is providing very good implementation of this BMP.

Additionally in PY4 the Town spread approximately 658 cubic yards of sand and 933 cubic yards of rock salt during winter snow operations. During the spring of 2012, the Town recovered about 121 cubic yards of sand from their sweeping operations and about 12 cubic yards of sand from their catch basin cleaning operations. This represents a recovery rate of about 20.2%.

- 2.6.4 BMP 6.4.1 Catch Basin Cleaning: The Town cleaned 401 catch basins Town wide during PY4 reporting period. Residuals collected totaled 12 cubic yards. Catch basins installed during new construction will be added to the maintenance schedule for the 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 PY4 reporting period the Town continued its ongoing maintenance and upgrade of the storm drainage system town wide. In the Urban Area, the Town replaced approximately fourteen culverts in the Urban Area and two under drain systems. This work included the repair, replacement and/or slip lining of culverts, replacement of storm drain and repair or replacement of catch basins.

Additionally, during the upcoming fiscal year the Town has scheduled the rehabilitation of Hemlock and Balsam Lane's drainage systems. The existing infrastructure has failed and requires replacement. This work will include culvert replacement, catch basin upgrade and the installation/maintenance of an infiltration basin.

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

- 2.6.6.1 During PY 2 additional copies of Town's existing SWPPP's were fabricated and distributed to each facility and staff person to ensure the plan was available and implemented. Additionally, Cumberland staff attended SWPPP training in PY 2 sponsored by ISWG and the MDEP. PY 4 saw Cumberland continue with normal facility operations under the guidance of their respective SWPPP's.
- 2.6.6.2 As noted above, during PY2 the existing SWPPP files were fabricated and redistributed to their respective facilities as required. It should also be noted that Town staff from each facility attended refresher training sponsored by the MDEP regarding the implementation of SWPPP's. Again, as noted above, PY 4 saw Cumberland continue with normal facility operations under the guidance of their respective SWPPP's.

As noted previously, Cumberland's SWPPP's are somewhat dated; having been developed in 2003. It is anticipated that during the PY5 reporting period, and subject to available funding, the existing SWPPP's will be reviewed and updated as needed to ensure that the existing plans remain effective in mitigating any potential stormwater pollution from the sites as per their intent.

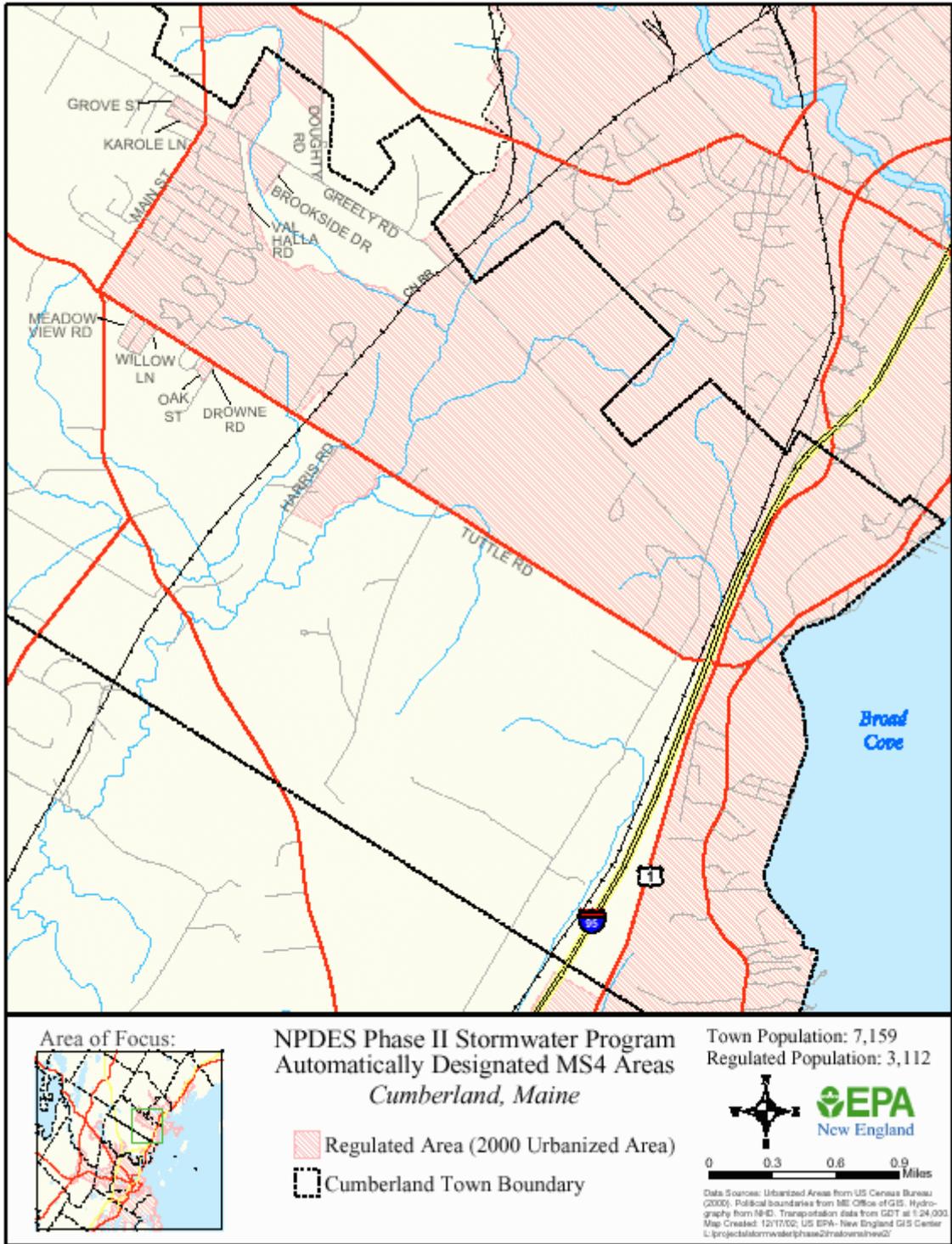


Figure 1: Cumberland, Maine Urbanized Area

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





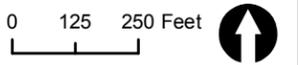
Legend

 Watershed Boundary

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
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Scale and Orientation



Prepared For

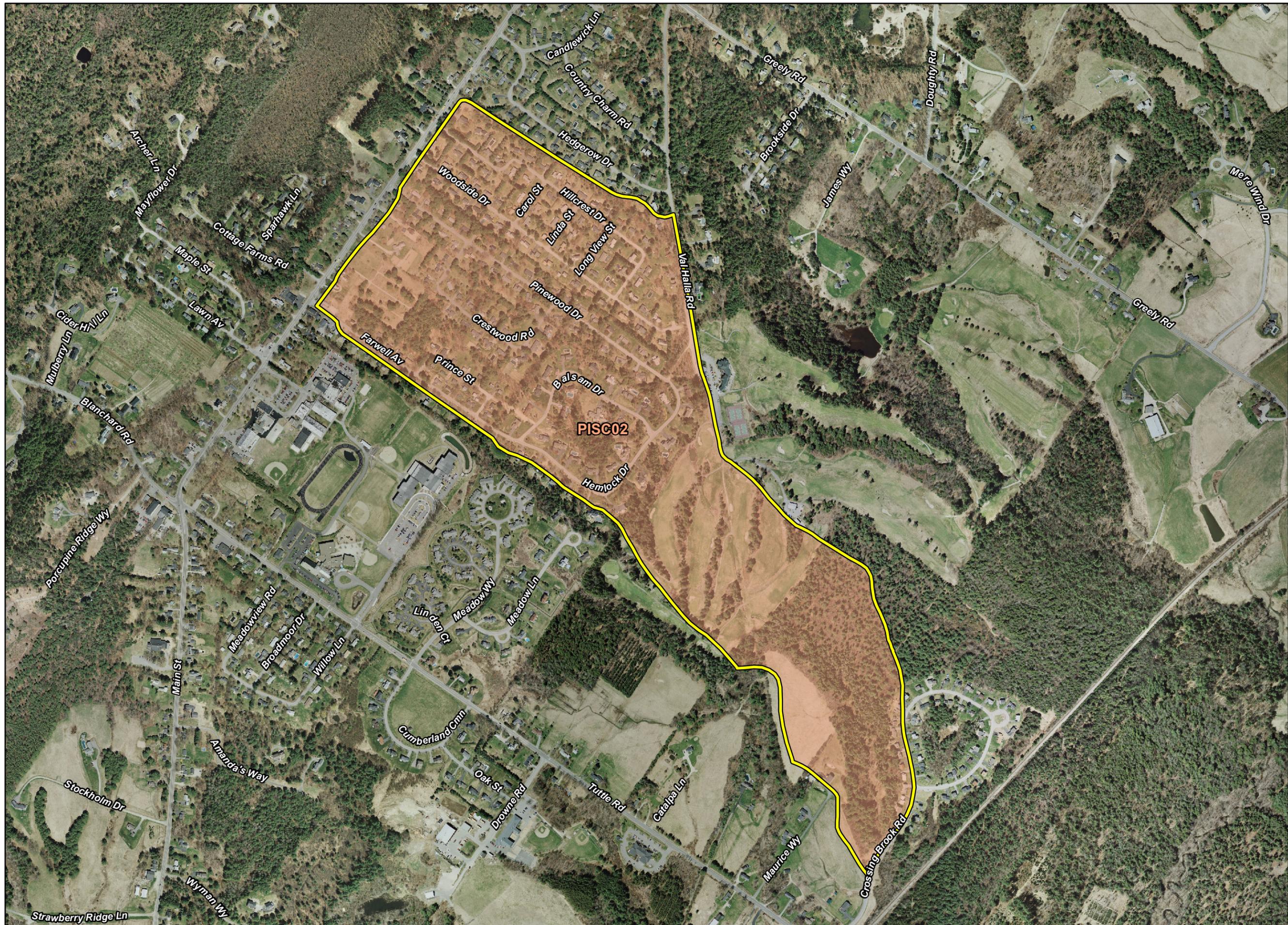
Town of Cumberland  
290 Tuttle Road  
Cumberland, Maine

Site Address

Watershed: PISC01  
Greely High School  
Area

083025 | Oct 2009

Figure 3



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: PISC02  
Farwell Avenue to Hill  
Crest Drive Area

083025 | Oct 2011

Figure 4



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: PISC04  
Meadow Lane to  
Catalpa Lane

083025 | Oct 2011

Figure 5



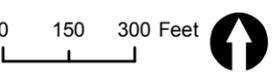
Legend

 Watershed Boundary

Notes

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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: PISC05  
Catalpa Lane to  
Maurice Way

083025 | Oct 2011

Figure 6

**APPENDIX A**

ISWG Coordinator Report

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 4 Annual Report  
July 1, 2011 to June 30, 2012

## APPENDIX A: Permit Year 4 Summary of Minimum Control Measure 1

### Stormwater Awareness Plan Implementation

Outreach Tool	Status	Details	
<b>Exposure</b> - to be in compliance, implement A1 and one additional activity (A2, A3, A4 or A6).			
A1 - Run the Ducky II ad for 3 weeks	incomplete	This task was completed in PY3, as previously approved by Maine DEP.	
A2 - Distribute posters at municipal offices, libraries, local hotspots (coffee/sandwich shops)	complete	A total of 275 stormwater-related posters were displayed in local establishments in the 14 ISWG communities.	
A5 - Ducky ad + <i>After the Storm</i> , a video co-produced by EPA & the Weather Channel on local cable access stations	complete	Each ISWG community's public access television station was provided with a copy of the Ducky II ad as well as a copy of <i>After the Storm</i> . The following information was received from the stations regarding air play:	
		Biddeford	No data provided
		Cape Elizabeth	<i>After the Storm</i> aired daily at 12:00 p.m. and 6:00 p.m. in April and May.
		Cumberland	No data provided
		Falmouth	No data provided
		Freeport	No data provided
		Gorham	<i>After the Storm</i> and the Ducky ad aired; unable to provide estimate of frequency.
		Old Orchard Beach	<i>After the Storm</i> and the Ducky ad aired; unable to provide estimate of frequency.
		Portland	<i>After the Storm</i> was aired three times per week in April and May; the Ducky ad plays frequently between programming.
		Saco	No data provided
		Scarborough	No data provided
		South Portland	<i>After the Storm</i> and the Ducky ad ran frequently between programs.
		Westbrook	<i>After the Storm</i> and the Ducky ad aired; unable to provide estimate of frequency.
		Windham	No data provided
Yarmouth	<i>After the Storm</i> and the Ducky ad played frequently throughout the day		

<b>Retention</b> - to be in compliance, implement B1 & B4 and one additional activity (B2, B3 or B5).		
B1 - Prominent links established on municipal and partner websites	complete	All websites for ISWG communities feature a link to <a href="http://www.thinkblumaine.org">www.thinkblumaine.org</a> .
B2 - Article in local newspaper and/or town newsletter	complete	A press release about stormwater and the <i>Urban Runoff</i> 5k was submitted to the following publications: <i>Forecaster</i> (all editions; covers Cape Elizabeth, Cumberland, Falmouth, Freeport, Portland, Scarborough, South Portland & Yarmouth), <i>Portland Daily Sun</i> (Portland), <i>Independent</i> (Windham), <i>American Journal</i> (Gorham & Westbrook), <i>Courier</i> (Biddeford, Saco & OOB), <i>Portland Press Herald</i> The article ran in all editions of the <i>Forecaster</i> (April 11, 2012)
		<i>Portland Press Herald</i> : Maine Voices: Rainy days bring gloomy thoughts about impact on Casco Bay (May 8, 2012)

<p>B4 - Purchased ad space - 3 week duration</p>	<p>complete with modification</p>	<p>With approval from Maine DEP, ISWG chose to utilize online advertising in lieu of print ads. Online ads that directed viewers to <a href="http://www.thinkblumaine.org">www.thinkblumaine.org</a> ran on news and outdoor-focused websites in all ISWG communities for the months of March, April and May.</p> <p>Using Time Warner Cable’s online ad service, ISWG was able to specifically market to our specific target audience (homeowners, aged 35-55) primarily within the ISWG communities (residents of outlying communities potentially saw the ads as well).</p> <p>According to the summary report provided by Time Warner Cable, the ads were seen by our target audience more than 600,000 times and had a “click through rate” (the number of times the ads were clicked) of 0.06%. ISWG’s click through rate was higher than the industry average of 0.04%.</p> <p>While the ads reportedly reached the target audience, and our audience clicked on the ads, the Think Blue Maine website did not experience a noticeable increase in hits. The tracking software used on <a href="http://www.thinkblumaine.org">www.thinkblumaine.org</a> allows us to track where the web hits originate. Information from the tracking software indicates that the audience visiting the website during the months of March through May was made up of primarily homeowners and “regular” citizens. In the months preceding the web ad campaign, those viewing the website were typically stormwater managers from Maine and elsewhere.</p>
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<p><b>Acceptance</b> - to be in compliance, implement C1 and one additional activity (C2, C3, C4 or C5).</p>																
<p>C1 - Email newsletter/blurb to municipal employees (including school department), university employees, etc.</p>	<p>complete</p>	<p>An email promoting the <i>Urban Runoff and Green Neighbor Family Fest</i> was sent to all employees<sup>1</sup> in ISWG. The email included information about stormwater, as well as promoting the events.</p>														
<p>C2 – Informational materials developed as part of awareness tool distributed in each ISWG community.</p>	<p>complete</p>	<p>General stormwater information was distributed throughout priority neighborhoods in each ISWG community. The following number of households received information:</p> <table border="1" data-bbox="747 1312 1503 1795"> <tr><td>Biddeford: 122</td></tr> <tr><td>Cape Elizabeth: 79</td></tr> <tr><td>Cumberland: 112</td></tr> <tr><td>Falmouth: 95</td></tr> <tr><td>Freeport: 64</td></tr> <tr><td>Gorham: 68</td></tr> <tr><td>Old Orchard Beach: 79</td></tr> <tr><td>Portland: 1297</td></tr> <tr><td>Saco: 111</td></tr> <tr><td>Scarborough: 110</td></tr> <tr><td>South Portland: 86</td></tr> <tr><td>Westbrook: 111</td></tr> <tr><td>Windham: 96</td></tr> <tr><td>Yarmouth: 61</td></tr> </table>	Biddeford: 122	Cape Elizabeth: 79	Cumberland: 112	Falmouth: 95	Freeport: 64	Gorham: 68	Old Orchard Beach: 79	Portland: 1297	Saco: 111	Scarborough: 110	South Portland: 86	Westbrook: 111	Windham: 96	Yarmouth: 61
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South Portland: 86																
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Windham: 96																
Yarmouth: 61																

<sup>1</sup> The City of South Portland was unable to distribute the email to all municipal staff. A stormwater-related article was included in a municipal newsletter.

## Best Management Practices Adoption Plan Implementation

Task	Status	Details
<b>Reporting</b>		
Summarize plan implementation to date	complete	

### Point of Sale

Retain 19 Point of Sale locations in the ISWG communities.	complete	Two additional Point of Sale locations joined the program in the spring of 2012 (one in Old Orchard Beach and one in Windham), bringing the total number of stores participating in the program to 21. The distribution of the stores is as follows:
		Biddeford: 0
		Cape Elizabeth: 0
		Cumberland: 1
		Falmouth: 2
		Freeport: 1
		Gorham: 2
		Old Orchard Beach: 1
		Portland: 2
		Saco: 1
		Scarborough: 2
		South Portland: 3
		Westbrook: 1
		Windham: 2
Yarmouth: 3		

### Adult Education

Offer a minimum of six adult education classes per year	complete	Windham: 8/24/2011, 3 participants
		Portland: 9/8/2011, 7 participants
		Gorham: 9/15/2011, YardScaping class offered by Cooperative Extension, 13 participants
		Windham: 10/12/2011, Youth YardScaping teacher training, 4 participants
		Falmouth: 4/14/2012, 49 participants
		Windham: 5/5/2012, Blue Seal open house 25 participants
		Falmouth: 6/17/2012, Falmouth Middle School Youth YardScaping presentation, 42 participants
Promote adult education classes	complete	Press releases publicizing the available classes were submitted to local publications, additional information was published in local adult education brochures, via direct mail, using social network websites, and through host locations.
Track behavior change	complete	CCSWCD staff documented class evaluations and contacted past adult education class participants to determine which YardScaping practices were implemented. Please see summary of behavior change reported by participants of PY3 classes, as well as those practices participants of PY4 classes intend to implement, below.

**Targeted Information Distribution**

Distribute information to priority neighborhoods (minimum of 50-100 households in size) in each ISWG community.	complete	YardScaping information was distributed throughout priority neighborhoods in each ISWG community. The following number of households received information:
		Biddeford: 122
		Cape Elizabeth: 79
		Cumberland: 112
		Falmouth: 95
		Freeport: 64
		Gorham: 68
		Old Orchard Beach: 79
		Portland: 1297
		Saco: 111
		Scarborough: 110
		South Portland: 86
		Westbrook: 111
		Windham: 96
Yarmouth: 61		
Distribute YardScaping information to local establishments (e.g. pet stores, veterinarian offices, pediatrician offices)	incomplete	With approval from Maine DEP, this task was removed from ISWG's BMP Adoption Plan.

**Websites & Free Media**

Maintain CCSWCD YardScaping website	complete	CCSWCD maintained the YardScaping website and tracked hits. Increased hits were seen after targeted neighborhood outreach efforts, public events, and adult education presentations.
Newspaper coverage of YardScaping activities and healthy lawn care	complete	<i>Portland Press Herald</i> : Give them an inch, they'll take your yard (July 24, 2011)
		<i>Portland Press Herald</i> : Maine Gardener: Gorgeous and hardy: The garden of the future? (October 23, 2011)
		<i>Portland Press Herald</i> : Maine Gardener: Reviving a lawn requires more than good seed and frequent watering (May 13, 2012)
		<i>Portland Press Herald</i> : Earth-friendly demo gardens to open on Back Cove (June 5, 2012)
		<i>Portland Press Herald</i> : Portland gardens show how to nurture nature naturally (June 11, 2012)

**Neighborhood YardScape Socials**

Hold a minimum of zero neighborhood socials in the ISWG communities	complete	One neighborhood social was held in Windham. Three people participated.
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**Adult Education – Behavior Change Tracking**

During the fall of 2011, CCSWCD staff made follow up phone calls with participants of YardScaping adult education classes held in the fall of 2010 and spring of 2011 (PY3 who provided their contact information on class evaluations in order to determine the level of follow through of the YardScaping practices class participants intended to use). As expected, it was difficult to reach people, but the information gleaned from those who were reached provided an anticipated rate of compliance for the YardScaping practices that class participants intended to implement.

<b>Follow up phone calls from Permit Year 3 YardScaping Classes</b>			
<b>Lawn Care Practice</b>	<b>Plan to implement</b>	<b>Implemented practice</b>	<b>% behavior change</b>
Set Mower to a height of 3"	6	6	100%
Leave grass clippings	6	6	100%
Sharpen mower blades	4	2	50.0%
Aerate	15	10	66.7%
Topdress	17	10	58.8%
Overseed	13	10	76.9%
Use low maintenance seed	14	10	71.4%
Get a soil test	13	8	61.5%
Use nitrogen-only fertilizer	13	10	76.9%
Use compost tea	14	6	42.8%

Follow up phone calls are made six months to a year after the class to allow participants a growing season to implement the recommended practices. Below are the results of the Permit Year 4 post-class evaluations completed by the YardScaping class participants.

<b>Permit Year 4 YardScaping Post-Class Evaluations</b>			
<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"	17	17	100.0%
Leave grass clippings	3	4	75.0%
Sharpen mower blades	12	13	92.3%
Aerate	21	25	84.0%
Topdress	20	22	90.9%
Overseed	19	22	86.4%
Use low maintenance seed	21	24	87.5%
Get a soil test	18	23	78.3%
Use nitrogen-only fertilizer	11	19	57.9%
Use compost tea	18	24	75.0%

CCSWCD staff will contact the class participants from the Permit Year 4 classes in the fall of 2012 to determine which behaviors have been adopted.

## **Summary: ISWG Youth Education Activities**

### **Cape Elizabeth**

Total students: 135

Total contact hours: 127

Lesson topics: Nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; tour of Portland Water District facilities.

Schools: Pond Cove Elementary School, Cape Elizabeth High School

Educator: PWD

### **Cumberland**

Total students: 153

Total contact hours: 409.5

Lesson topics: Nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Envirothon\*\*.

Schools: Greely Middle School, Greely High School

Educator: PWD, CCSWCD

Note: CCSWCD worked with the Cumberland Shellfish Conservation Commission to provide guidance about stormdrain stenciling projects.

### **Falmouth**

Total students: 169

Total contact hours: 2,087

Lesson topics: Youth YardScaping program (see description below); Forestry & connection to water; topography, watershed characteristics, stormwater pollution, water quality testing, and cumulative impact; water cycle and water conservation; nonpoint source pollution and behavior change; long-term experiments and independent research projects about watersheds, nonpoint source pollution, and environmentally responsible lawn care, and students presented their research to a public audience.

Schools: Falmouth Middle School

Educator: CCSWCD, PWD

### **Gorham**

Total students: 178

Total contact hours: 359

Lesson topics: Nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; water quality and macroinvertebrate sampling; soil characteristics and testing, how soil pollutes water and best management practices.

Schools: Gorham Middle School

Educator: CCSWCD, PWD

### **Portland**

Total students: 277

Total contact hours: 350

Lesson topics: Nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Southern Maine Children's Water Festival\*; Envirothon\*\*.

Schools: Lincoln Middle School, Waynflete School, St. Brigid's School, East End School, King Middle School, Casco Bay High School, Lyseth Elementary School

Educator: PWD, CCSWCD

### **Scarborough**

Total students: 134

Total contact hours: 252

Lesson topics: Nonpoint source pollution, human impact, stormwater; Southern Maine Children's Water Festival\*.

School: Scarborough High School, Scarborough Middle school

Educator: PWD, CCSWCD

### **South Portland**

Total students: 659

Total contact hours: 1,328

Lesson topics: Pond Study Field Day to study pond life and water quality, including macroinvertebrate sampling and identification (bioassessment); nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Southern Maine Children's Water Festival\*.

Schools: Small Elementary School, Dyer Elementary School, Mahoney Middle School, Greater Portland Christian School, Skillin Elementary School, Kaler Elementary School, Southern Maine Community College

Educator: CCSWCD, PWD

### **Westbrook**

Total students: 59

Total contact hours: 92

Lesson topics: Nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change; Envirothon\*\*.

Schools: Westbrook Middle School, Westbrook High School

Educator: PWD, CCSWCD

### **Windham**

Total students: 304

Total contact hours: 1,643

Lesson topics: Third year of "Ecocentricity" event where high school students taught in-field lessons to middle school students about water, including stormwater, water cycle, watersheds, wastewater, soil/geology, water quality parameters & testing, wastewater, and ecology; nonpoint source pollution, human impact, watershed characteristics, stormwater, low impact development, and behavior change.

Schools: Windham High School, Windham Middle School, Windham Adult Education

Educator: CCSWCD, PWD

### **Yarmouth**

Total students: 21

Total contact hours: 63

Lesson topics: Stormwater, water flow, and storm drain information as introduction to storm drain stenciling event

Group: Yarmouth Teen Trek Camp

Educator: CCSWCD

\* The **Southern Maine Children's Water Festival** is a one-day event occurs that annually each May, drawing about 600 middle school students from all over Southern Maine to learn about different aspects of water. Students participate in classroom presentations, a stage show about ecology, "Dripal Pursuit" competitions, and exhibit hall activities. The Festival's focus is on water, ecosystems, nonpoint source pollution, and ways that students can be part of the solution.

\*\* The **Envirothon** is an environmental competition conducted throughout Maine each 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.

### **Educator contact information**

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

**PWD:** Lynne Richard, Education Coordinator, Portland Water District, lrichard@pwd.org, 207-774-5961 x 3324

## Youth YardScaping Program

This year marked the third year of Falmouth Middle School's participation in the Youth YardScaping program, which has proven effective at increasing awareness of local stormwater issues and changing lawn care behaviors.

In this program, clean water lessons are interwoven throughout the year-long science curriculum of two sixth grade classes. Lessons begin with the basics: the water cycle, water movement and watershed characteristics. Students then receive reinforcement of these concepts and begin learning about runoff, nonpoint source pollutants and their impact on water quality.

In the early spring, the program intensifies to focus on one of the largest threats to local water quality: pesticides and fertilizers from lawn care products. Students form a lawn care company and split into groups that research various lawn care techniques and implement the practices on the school's courtyard, including mowing, aerating, topdressing, overseeding, watering, soil testing, fertilizing, brewing and applying compost tea and controlling weeds and bugs. Other groups are dedicated to researching background topics like the soil food web, watersheds and nonpoint source pollution. Both classes also participate in long-term experiments to test the effects of different fertilizers and pesticides on a water quality ecosystem and use the experiment as part of their research.

Students present their research and demonstrate their practices at a public presentation, which has been attended by approximately 40 to 50 people annually, including parents, members of Falmouth's Conservation Commission and University of Maine Cooperative Extension's Master Gardener Program, as well as school administrators. In 2012, both the Superintendent and Principal of Falmouth Middle School attended the presentations and endorsed the program afterwards. In 2012, a public exhibit component was added after the presentation. Students set up their displays in the school library, giving the audience an opportunity to look at their visual displays and ask questions of the lawn care "experts." This was also well attended, and many attendees also discussed healthy lawn care techniques with CCSWCD staff and took YardScaping fact sheets provided by CCSWCD.

Both anecdotal evidence and written surveys completed by the students demonstrate the success of the Youth YardScaping program at increasing awareness of stormwater, runoff and water quality, and changing lawn care behaviors of the students' parents (part of the target audience laid out in ISWG's BMP adoption plan). In addition, the program is successful at imparting other transferrable life skills, such as public speaking, working both in groups and independently, completing self-directed research projects, preparing displays and notecards and seeking and preparing research from various sources.

Several parents of children who participated in the program two years ago had children participate again in 2012. Some shared they had changed their lawn care practices as a result of their first child's participation. One family decided to stop using a popular lawn care service, while another changed their practices out of concern for the health impacts to their dog.

Students have completed written surveys each year of the program, at the beginning and end of the school year. These surveys demonstrate increased awareness of nonpoint source pollutants, stormwater, runoff and ways to improve water quality. Surveys also indicate students are learning a great deal about how lawn care products and practices relate to water quality, and are thinking critically about environmental issues and their ability to make an impact.

Below are some responses to student survey questions. These responses have only been edited for spelling; otherwise, these responses are verbatim. One student response from an open-ended question sums the experience up well:

*... I thought it [the Youth YardScaping Program] was valuable because now we know what we can do to stop polluting our local bodies of water. We can also stop putting bad chemicals in the water and our lawns. I thought that it was one of the most valuable things we learned in this school year.*

The most telling question on the survey is "What was the most important thing you learned?" The responses to this question, below, have been organized into topics.

## The "Big Picture"

- ...that your every day practices (like using synthetic herbicides) can harm the environment. We need to be more aware.
- ... that just one little thing can make a big impact on our environment whether it be good or bad.
- I learned that what we put on our lawns really effects our environment. Like with eutrophication. And that if your dog rolls around in our lawn when you have stuff on it, they can get sick.
- ...demonstrating how other people can have great lawns while helping the environment.
- ...was to think about what you're doing before you do it because it could really harm other things.
- ... was how to care for our lawn. All about mowing, watering, fertilizing, pesticides, etc... Also about nonpoint source pollution (cumulative impact) and how I can help.
- ...about nonpoint source pollution and cumulative impact.

### **Fertilizer**

- ...that every fertilizer has an effect on the environment.
- ...was how easy it is to buy way too much fertilizer.
- ...you should only fertilized if you have to (it is a last resort).
- ...that fertilizer is a last resort. There are a lot of other options before fertilizing like using compost tea, leaving your grass clippings on your lawn, and you can also aerate.
- That using pesticides and fertilizers on your lawn can harm a lot around the environment.

### **Pesticides**

- ... that pesticides are bad for the environment. I thought this was important because pesticides kill more than just the pests they also kill more important things.
- ...that pesticides are bad for you and the environment. Kids can get brain damage and dogs can get diseases.
- ...just because a pesticide is organic does NOT mean it is safe.

### **Other practices**

- That you can have a big effect on the environment if you soil test.
- I learned how to take care of lawns the healthy way. Now at home, I can: have my step-dad mow, then I topdress, then overseed, then compost tea. And it will look healthy.
- ...that compost tea is a lot better and more environmentally friendly for your lawn than fertilizer.

In addition, responses to various survey questions demonstrate students' acquisition of other important life skills:

### **Public speaking/teaching**

- ... we knew what eutrophication was, and we were able to tell other people about it, and make them aware of what they're doing when they use synthetic fertilizer and pesticides.
- I enjoyed the presenting part of the Yardscaping project the most because I thought it was really cool to teach people about the environment and how to keep it healthy.
- ... and even though I was very nervous I enjoyed talking in front of parents, because I felt like I was informing them.
- I really enjoyed being in front of everyone and teaching them how to get rid of their weeds in a safe, natural way.
- I really enjoyed presenting. I have always been a fan of giving speeches and it felt good to show everyone what I had learned.
- I really enjoyed begin able to show what I learned and to listen to what other people learned.

### **Group work/peer learning**

- Working in small groups can be challenging.
- I really enjoyed the presentations, because even though you didn't study that topic, you got to get some knowledge from them.

Lastly, the surveys indicate students are sharing information with others and changing their family's lawn care practices. Students shared or planned to share their lawn care knowledge with various people, including parents, siblings, extended family, neighbors, and friends.

When asked what information they had shared or would share, they responded:

- What we all did, how to do it, why we did it, and how it affects our community.
- How fertilizing is a last resort and that my dad should leave the grass clippings down.
- We have a lake house and we cannot use fertilizer so I told her [mother] about compost tea because it wouldn't cause eutrophication.
- Pesticides can be very harmful to the environment and to humans.
- That it is important to soil test before fertilizing.
- I talked about the [watering] guidelines and root growth.
- I shared information on grubs and ants.

When asked what practices they were doing or planned to do as a result of the program, responses included:

- I made compost tea for my lawn, used the organic weed killer, and my dad was top dressing our lawn the day after [the presentation].
- If, at some time my house needs topdressing, I'm sure I'll have the knowledge to do so. Although my lawn is big, it'll be very healthy.
- We are going to start using compost tea at our lake house because you cannot use fertilizer.
- ... when we mow, we will remember to not go lower than 3 inches.
- We are leaving the grass clippings for a natural fertilizer. My mom thought it was a great idea.
- I will try using a different sprinkler on my lawn, because with the sprinkler we have now it evaporates and doesn't get to a lot of the plants and soil.
- Watering 65 min. at 4:00 a.m. in the morning with rotary impulse sprinkler.
- ... I am leaving the grass clippings on my lawn when I mow it.
- I will be checking to see if we have a grub problem, if ants are naturally aerating our lawn, and see if any ants are getting into our house.
- My mom has decided to use the grub removal trick that was shown in the presentation.
- ... I am thinking about renting an aerator for our neighborhood.

Seventh and eighth grade students who participated in the program in 2010 and 2011 completed follow up surveys in 2012 to determine retention of information and behavior change. Results varied between the two groups. Although results indicate both groups retained information and demonstrated behavior change, the 2010 group retained more and changed more behaviors. This is most likely because in 2010, both sixth grade science classes focused only on the Youth YardScaping (YY) curriculum. In 2011, three sixth grade science classes took part in a larger project where each class focused on three separate topics: watershed stakeholders, Youth YardScaping, and forestry. Analysis of the follow up surveys shows that it is more effective to focus science classes on the YY project instead of focusing on several different, although related, topics.

Still, former students from both years retained much of their knowledge of water quality. Students were asked to list the main sources of water pollution:

- Students from 2010 class: 100% recalled one or more specific nonpoint source pollutants covered in the YY program, such as pesticides, phosphorus, human activity, lawn care products, animal, dog, and human wastes, fertilizer, soil, runoff, and chemical, while rarely listing other nonpoint source pollutants such as oil, gasoline, and trash.
- Students from 2011 class: 66% recalled one or more specific nonpoint source pollutants covered in the YY program with oil, gasoline, and trash listed in half of all student responses.

When asked, "What is the most effective way to keep pollutants out of our water?" student responses included:

- Not put chemicals on your lawn.
- Use products that won't harm the environment if it does go into the water.

- Don't spray plants with harmful spray.
- Use all natural things to keep things away. Don't spray what can be harmful to fish and marine life on your lawn.
- Watch runoff and chemicals getting into rivers. Pick up waste/animal waste.
- Use healthy lawn care products that won't pollute water.
- Use safe lawn care products.

Students from the 2010 and 2011 classes also recalled the names of lawn care practices used in the YY curriculum. Seventy nine percent of students from the 2010 class and 61% percent of students from the 2011 class recalled specific names of practices their group did not research, including aerating, topdressing, mowing, watering, soil testing, overseeding, compost tea, fertilizing, and pest control.

Results from the surveys also indicate students and their families are changing lawn care behaviors. Students were asked if they were implementing any of the YardScaping practices at home. In the 2010 group, 63% responded they were, and of that group, 52% were doing so as a result of participation in the school program. Results from the 2011 group indicated 66% of these families were applying YardScaping practices, and of that group, 50% were doing so as a result of the YY program.

Student responses about the practices adopted include:

- Overseeding, aerating.
- We have tried using natural pesticides and other environmental safe fertilizers.
- We water our grass in the morn. and stay away from chemicals.
- We have been watching what we put on our lawn and have been trying to use all natural materials.
- I am doing soil testing as a result of that [YY project].
- Watering so that the plants accurately get water.
- We have been watering our lawn more effectively.
- We are keeping the grass clipping on the lawn sometimes. This gives the grass more nutrients.
- [My mom]... now uses these [practices] when needing to – cornmeal and rubbing alcohol to kill ants.
- My mom topdresses and we don't mow so low anymore.

Below are more questions and sample responses from students who participated in 2010 and 2011, and some sample responses.

**“Have you encountered any challenges or successes when doing any of the practices? Please share.”**

- Yes, we aerated and the grass grew thicker.
- They [natural pesticides & environmentally safe fertilizers] worked well on our yard.
- Success – our grass is greener and more thick/healthy.
- The plants are growing better as a result [of proper watering].
- Yes, our lawn is much greener.

**“Have you shared any of your knowledge of YardScaping practices with anyone since you did the Youth YardScaping project? If yes, whom did you share it with and what did you share?”**

- I shared it with my grandparents because they have a big yard and never aerated.
- Yes I have. I shared it with one of my neighbors and she is now using their techniques to keep her lawn healthy.

**“What stands out the most about the YardScaping unit from Mrs. Olsen's class?”**

- If you do lots of these procedures on your lawn, you can change the pollutants in the water.
- How we do our gardening and other Yardscaping things can affect other parts of the environment.
- It got us, as a class, outside and doing things. Hands-on activities.
- You don't have to use a whole bunch of chemicals to get a good yard.
- That it was in depth enough so you would know it inside out.

- That if we do something wrong it can effect everything.

**“Please share any other comments about the Youth YardScaping project that will help us determine if it’s a worthwhile project.”**

- I think this project taught kids and their parents how to keep a healthy lawn and keep pollution out of local watersheds.
- It helps teach better products to use to make your lawn look better and not pollute water.
- I think it helped to embed knowledge by doing and presenting the project.
- The Youth YardScaping project was a fun, educational program. It was fun to learn more about the effect things had on the environment and I think it brought our class closer together.
- It’s worthwhile because it teaches kids about things their parents might be doing wrong and help them and the environment.

Results from students that participated in 2012 and have participated over the past two years indicate the success of the program on many levels, and CCSWCD plans to continue the program at Falmouth Middle School and expand the program to one new ISWG community per year.

## **APPENDIX B:**

### **Permit Year 4 Summary of Minimum Control Measure 2**

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#### **Urban Runoff & Green Neighbor Family Fest**

The inaugural *Urban Runoff* 5K race and walk and the *Green Neighbor Family Fest* were held on April 21, 2012. The goal of these events was to raise awareness of stormwater and funds for ISWG's youth education program. With approval from Maine DEP, race and festival served as the Public Involvement and Participation event for all ISWG communities.

By all accounts, the inaugural event was a huge success. A total of 562 runners and walkers registered for the race, and many local businesses supported the race through sponsorships, in-kind donations and employee participation as race participants and volunteers. Approximately 25,000 students in all public K-8 schools in each ISWG community received advertisement of the race and cause. Local media outlets advertised the events, including radio sponsorship during the month of April by 98.9 WCLZ and CCSWCD interviews on Fox's 23 *Good Day Maine* and Time Warner Cable's *Let's Connect*. Online advertising through Facebook was also used to promote the race and cause.

Anecdotes as well as a post-race survey completed by race participants demonstrate the success of the race's planning and implementation. Many participants particularly enjoyed the course, which uniquely features both suburban neighborhood streets as well as about a mile long section of trail in an urban area of Portland. Many survey respondents indicated the cause of the race, clean water education, was a major reason why they chose to participate.

To meet the goal of increasing stormwater awareness, CCSWCD designed and placed signs along the course focused on runoff, pollution, and water movement. These messages were also included on the race website, which at its peak received over 1,500 hits on one day, with an average of 300 hits per day. Stormwater awareness messages were also included in the six eblasts that were sent to all registered participants, sponsors and partners. The 2012 post-race survey did not include questions directly related to increased awareness of stormwater issues but awareness questions will be included in the 2013 post-race survey to gauge the effectiveness of these outreach methods.

The *Green Neighbor Family Fest* was held after the race on the front lawn of Deering High School. The event ran for four hours and was attended by approximately 1,000 people. Scheduled events included the awards ceremony and three child-focused, environmentally-themed live performances, including music, theater and storytelling. A total of 13 exhibits were set up by local nonprofit and governmental organizations, universities and businesses to provide hands-on, educational activities for children. These activities included water quality testing, macroinvertebrates as water quality indicators, a marine touch tank, "poo bag" toss (about proper disposal of pet waste), and many more. Children also took part in face painting and a "Pollution Solution" obstacle course.

The festival was also a great success. Children were engaged, and parents provided feedback that the activities were not only fun, but also educational for both parents and children.

Plans are underway to host the second annual *Urban Runoff* 5K and *Green Neighbor Family Fest* on Saturday, April 20, 2013.

**APPENDIX B**

Non-Stormwater Discharge Ordinance

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 4 Annual Report  
July 1, 2011 to June 30, 2012

# **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.

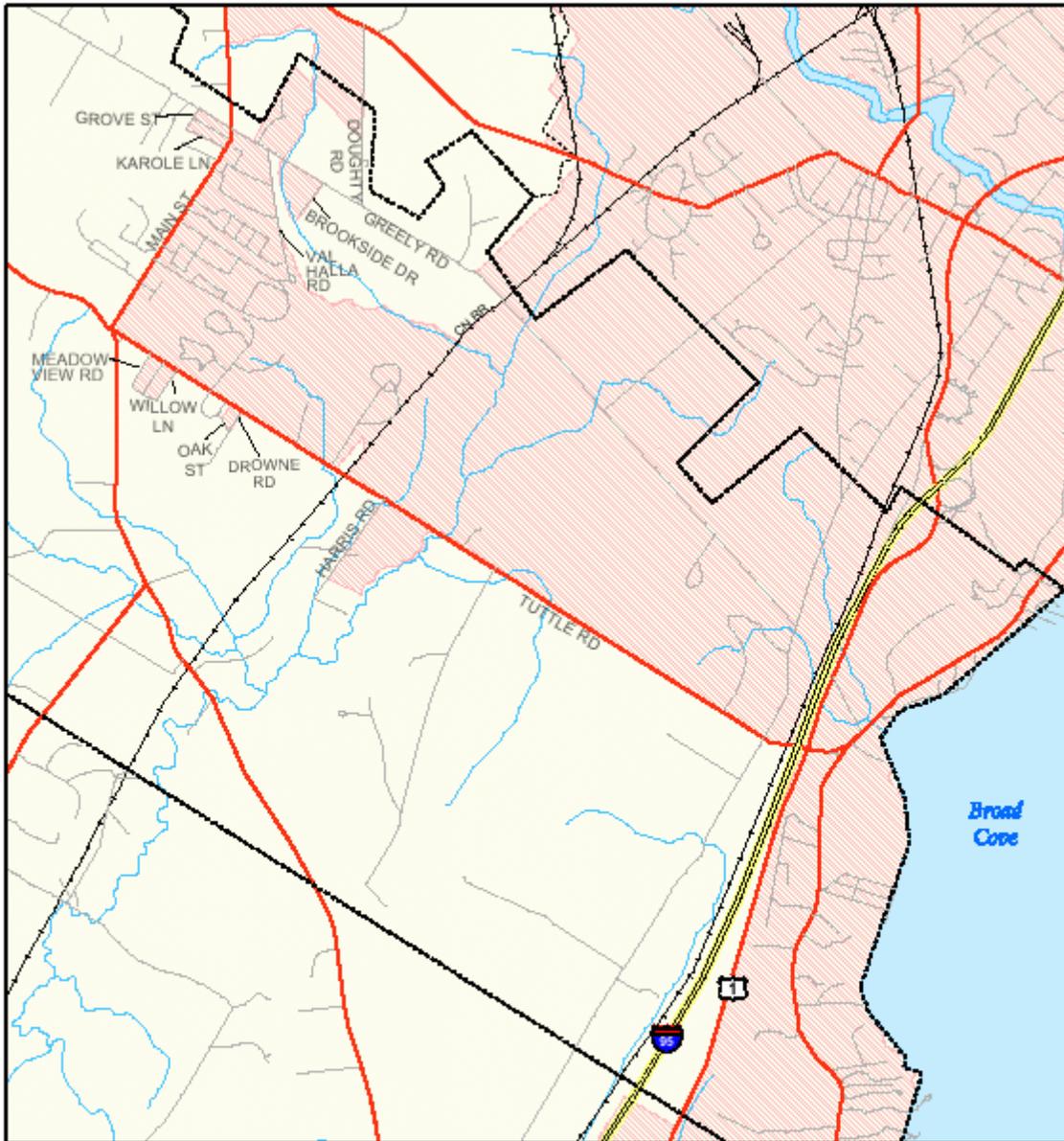
The Board of Appeals shall hold a hearing on the appeal within 30 days from the date of receipt of the notice of appeal. The Board of Appeals may affirm, reverse or modify the decision of the Code Enforcement Officer.

**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 4 Annual Report  
July 1, 2011 to June 30, 2012

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 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

O:\2008\083025\NPDES Stormwater Compliance\Year 1 2008-2009\Annual Report\Appendix C\Dry Weather Inspection SOP.doc

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**

Ditch Inspection SOP

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 4 Annual Report  
July 1, 2011 to June 30, 2012

Town of Cumberland  
Stormwater Program Management Plan  
Illicit Discharge Detection and Elimination  
Standard Operating Procedure  
for  
Ditch Inspection Program  
Effective Date: July 1, 2011

**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 roadside drainage ditch 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 roadside ditch inspection as required by Minimum Control Measure 3 Illicit Discharge Detection and Elimination, Best Management Practice (BMP) 3.4 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: Director of Operations
- Field inspections: Public Works Foreman
- Tracking and record keeping: Public Works Secretary
- Review and follow up: Director of Operations
- Corrective action: Director of Operations
- 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;
- Inspections will be performed during periods of no snow cover and prior to the growth of ditch vegetation such that potential outfalls may be easily spotted;
- Each ditch segment 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 ditch segments in the highest priority watershed shall be inspected at least once and more frequently as required by field conditions.

**Inspection Priority:** Ditch 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. The same information will be captured for a pipe outfall, swale, channel or other conveyance discharging into the ditch system;
- Digital photographs will be recorded and attached to each Inspection Form;
- Abnormal conditions, outfall or ditch damage, suspected illicit discharges, ditch erosion, dumping of leaf and yard waste, illegal dumping and other issues will be noted in the Inspection Form and will reported to the Director of Operations for remedial action as required;
- Areas of unusually lush grass or vegetation growth that is localized and may indicate failed septic systems should be noted on the Inspection Form for additional review by the Code Enforcement Officer or Licensed Site Evaluator;
- 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 Operations 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 Operations 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 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 Operations for the appropriate action;
- On at least an annual basis the inspection forms and related data will be reviewed by the Director of Operations 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.

Revision No.	Revision Date	Description
1	3/8/11	Document Development

**APPENDIX E**

Construction Site Erosion Control Inspection Form

Town of Cumberland  
Stormwater Program Management Plan  
Permit Year 4 Annual Report  
July 1, 2011 to June 30, 2012



**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 4 Annual Report  
July 1, 2011 to June 30, 2012

**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:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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 4 Annual Report  
July 1, 2011 to June 30, 2012

# 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 4 Annual Report  
July 1, 2011 to June 30, 2012

# 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.

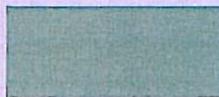
Examples of chronic erosion problems include:

- 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)

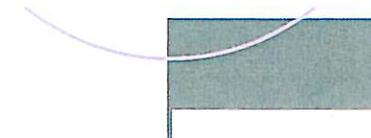
State of Maine  
**Department of  
 Environmental  
 Protection**



## **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.