



PERMIT YEAR 2 ANNUAL REPORT  
2013-2018 MUNICIPAL SEPARATE STORM SEWER  
SYSTEM PERMIT

FOR

TOWN OF CUMBERLAND, MAINE

Due to Maine DEP September 15, 2015  
Submitted to Maine DEP **September 15, 2015**

# Table of Contents

<b>SECTION 1</b>	<b>INTRODUCTION</b>	<b>1</b>
	Overview of Regulatory Program	1
<b>SECTION 2</b>	<b>PROGRESS ON MINIMUM CONTROL MEASURES</b>	<b>3</b>
	MCM 1 Public Education and Outreach	3
	BMP 1.1: Continue Awareness Outreach Efforts	3
	BMP 1.2: Update and Implement Public Stormwater Awareness Plan	4
	BMP 1.3: Develop and Implement Municipal Permit Stormwater Awareness Plan	6
	BMP 1.4: Continue Targeted BMP Adoption efforts from previous MS4 permit cycle	9
	BMP 1.5: Update and Implement BMP Adoption Plan	9
	BMP 1.6: Develop and implement Targeted Outreach in Priority Watershed Plan	13
	BMP 1.7: School Outreach	15
	MCM 2 Public Involvement and Participation	18
	BMP 2.1: Public Notice Requirement	18
	BMP 2.2: Host Public Events	19
	MCM 3 Illicit Discharge Detection and Elimination	22
	BMP 3.1: Maintain an updated Watershed Based Storm Sewer System Infrastructure Map	22
	BMP 3.2: Continue to Enforce the Stormwater Discharge Ordinance	23
	BMP 3.3: Continue Illicit Discharge Detection and Elimination Program	24
	BMP 3.4: Continue Open Ditch Illicit Discharge Program	25
	BMP 3.5: Document and Evaluate Aging Septic Systems	25
	BMP 3.6: Work with Portland Water District to Assess if Hydrant and Water Line Practices Contribute Significant Pollutants to the MS4	26
	BMP 3.7: Coordinate with DMR on issues related to Broad Cove	29
	MCM 4 Construction Site Stormwater Runoff Control	31
	BMP 4.1: Continue notification to construction site developers and operators	31
	BMP 4.2: Continue documenting every construction activity that disturb one or more acres within the Urbanized Area	31
	BMP 4.3: Continue implementing the construction site inspection program	32
	MCM 5 Post-Construction Stormwater Management	34
	BMP 5.1: Continue to Enforce Ordinance or Similar Measure	34
	BMP 5.2: Track Post-Construction Sites to ensure proper reporting and compliance with the Ordinance	34
	BMP 5.3: Develop LID notification procedures for developers	36
	MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations	37
	BMP 6.1: Operations at Municipally Owned Grounds and Facilities	37
	BMP 6.3: Continue Street Sweeping Program	39
	BMP 6.4: Cleaning of Stormwater Structures Including Catch Basins	39
	BMP 6.5: Maintenance and Upgrading of Storm water Conveyances and Outfalls	40
	BMP 6.6: Stormwater Pollution Prevention Plans (SWPPP's)	41
<b>SECTION 3</b>	<b>GENERAL REQUIREMENTS</b>	<b>42</b>
	Certification	42

## SECTION 1 INTRODUCTION

### Overview of Regulatory Program

The Town of Cumberland is subject to the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (heretofore referenced as the "General Permit") which was issued by the Maine Department of Environmental Protection (DEP) on July 1, 2013. The General Permit authorizes the direct discharge of stormwater from or associated with a regulated small municipal separate storm sewer system ("MS4") to another MS4 or to waters of the State other than groundwater.

This document constitutes the annual report for Permit Year 2 of the five-year permit cycle from 2013 to 2018 as required by Part IV Section J Reporting and Record Keeping of the MS4 General Permit.

The following table provides a listing of the annual report requirements provided in the General Permit, and the Town of Cumberland status:

Annual Report Requirement	Cumberland Status
<p>a. The status of compliance with permit conditions based on the Stormwater Program Management Plan, an assessment of the appropriateness of identified best management practices (BMPs), progress toward achieving identified measurable goals for each of the MCMs, and progress toward achieving the goal of reducing the discharge of pollutants to the Maximum Extent Practicable.</p>	<p>The Town is in compliance with the Permit Conditions based on the Stormwater Program Management Plan (revised 4/3/2014) approved by the Maine DEP on 4/4/2014.</p> <p>Section 2 of this annual report contains the details of the Town's progress on the measurable goals for each of the MCMs. The Town is reducing the discharge of pollutants to the Maximum Extent Practicable.</p> <p>The BMPs identified in the Town's Plan are still appropriate except as noted in Section 2 of this annual report.</p>
<p>b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.</p>	<p>No wet weather monitoring data was collected by the Town during Permit Year 2.</p> <p>Any monitoring data collected as a result of illicit discharge investigations is described in Minimum Control Measure 3.</p>
<p>c. A summary of the stormwater activities the town intends to undertake pursuant to its Plan during the next reporting cycle.</p>	<p>Section 2 of this annual report includes the BMPs and measurable goals identified in the Stormwater Program Management Plan that will be implemented in subsequent years.</p>
<p>d. A change in any identified BMPs or</p>	<p>Changes to the BMPs or measurable goals are</p>

measurable goals that apply to the Plan.	identified in Section 2, where the progress is reported.
<p>e. A summary describing the activities, progress, and accomplishments for each of the MCMs (including such items as the status of education and outreach efforts, public involvement activities, stormwater mapping efforts, dry weather inspections, detected illicit discharges, detected illicit connections, illicit discharges that were eliminated, construction site inspections, number and nature of enforcement actions, post construction BMP status and inspections, and the status of the town's good housekeeping/pollution prevention program).</p>	<p>Section 2 of this annual report contains the details of the Town's progress on the measurable goals for each of the BMPs.</p>

**SECTION 2      PROGRESS ON MINIMUM CONTROL MEASURES**

**MCM 1 Public Education and Outreach**

The Town is fulfilling the requirements for Public Education and Outreach through participation in the ISWG and the permittee’s provision of funding to the ISWG for Public Education and Outreach services.

**MCM Goals**

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 BMPs which reduce polluted stormwater runoff ; and
3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

Responsible party (for all MCM 1) - Public Services Director (with implementation assistance by ISWG education coordinator)

**BMP 1.1: Continue Awareness Outreach Efforts.**

Measurable Goal 1.1.1 – In Permit Year 1, the ISWG will implement awareness activities outlined in the revised Statewide Awareness Plan. Activities include:

- Maintain a link to [www.thinkbluemaine.org](http://www.thinkbluemaine.org) on municipal website;
- Participate in a statewide media campaign to include 12 months of television advertisements and 12 months of online advertisements that direct to [www.thinkbluemaine.org](http://www.thinkbluemaine.org); and
- Promote their approved public event (see BMP 2.2 Host Public Events).

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	Documentation of the statewide media campaign is described in BMP 1.2 Update and Implement Public Statewide Awareness Plan.  Documentation of promotion of the public event is described in BMP 2.2 Host Public Event.  A link to the <a href="http://www.thinkbluemaine.org">thinkbluemaine.org</a> website is posted on the public services web page.	None
2	Same as Permit Year 1 The link to the <a href="http://www.thinkbluemaine.org">thinkbluemaine.org</a> website is posted here: <a href="http://cumberlandmaine.com/government/departments/public-services/cumberland-stormwater-pagenbspwhat-is-stormwater-pollutiondid-you-know-that-stormwater-pollution-is-one-of-the-leading-causes-of-water-quality-problems-in-the-state-of-mainestormwater/">http://cumberlandmaine.com/government/departments/public-services/cumberland-stormwater-pagenbspwhat-is-stormwater-pollutiondid-you-know-that-stormwater-pollution-is-one-of-the-leading-causes-of-water-quality-problems-in-the-state-of-mainestormwater/</a>	None

Permit Year	Description of Progress	Changes
3		
4		
5		

**BMP 1.2: Update and Implement Public Stormwater Awareness Plan.**

Measurable Goal 1.2.1 – By December 2, 2013 submit a Stormwater Awareness Plan to raise awareness of stormwater issues such as the path stormwater runoff takes, sources of stormwater pollution and the impact that polluted stormwater runoff has in the community(s). The plan will identify:

- a) the target audience;
- b) the outreach tool(s) to be used;
- c) the message;
- d) the distribution system;
- e) the time line and implementation schedule;
- f) the person(s) responsible for implementation;
- g) an impact evaluation protocol;
- h) a plan modification protocol (this must include DEP approval of significant plan modifications); and
- i) the goals (e.g., the targeted level of change sought as a result of the education and outreach effort; specific measurable goals for plan implementation).

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The ISWG education coordinator prepared a plan on behalf of all of the MS4 communities in the state. The ISWG education coordinator received an extension from 12/2/2013 to 12/16/2013 for submittal of the Draft Public Stormwater Awareness Plan. The ISWG education coordinator provided the draft plan to the Maine DEP on 12/16/2013. The Maine DEP provided comments to the ISWG education coordinator on 12/20/2013. The ISWG education coordinator revised the document and resubmitted it to the Maine DEP on 1/10/2014. The Maine DEP approved the plan on 1/15/2014.	Dates were reported incorrectly during Permit Year 1 and were corrected for Permit Year 2 Annual Report.
2	No work required or completed this Permit Year.	None
3		
4		
5		

Measurable Goal 1.2.2 – Unless DEP responds in writing or verbally otherwise, then as of February 1, 2014 the Stormwater Awareness Plan is considered approved and implementation of the Stormwater Awareness Plan will begin within one week of

approval.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p><i>Television advertising</i>            The ISWG education coordinator coordinated a television and online media campaign through Time Warner Cable on behalf of ISWG. The ducky and devil ducky ads ran two weeks per month from March through June 2014. The ads were shown on cable television stations most likely to reach the target audience (e.g. HGTV, The Weather Channel, ESPN, Fox News, DIY).</p> <p>The following television campaign data were provided by Time Warner Cable:</p> <p>Ducky 1 – 824 runs            Devil Duck – 1240 runs            Total – 2064 runs            Estimated reach: 35.9%            Estimated Frequency: 3.8</p> <p><i>Online advertising</i>            The ISWG education coordinator developed online ads with a clean water message that directed to <a href="http://www.ThinkBlueMaine.org">www.ThinkBlueMaine.org</a>. Time Warner Cable placed the ads on websites most likely to reach the target audience (e.g. local and national news websites, outdoor-themed sites). The online ad campaign ran continuously from March through June 2014.</p> <p>The following online campaign data were provided by Time Warner Cable:            701,137 impressions were run            Click through rate = 0.04% (on par with national average).</p> <p>Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign increased 72% over the previous four month period. Between March and June 2014, hits to <a href="http://www.ThinkBlueMaine.org">www.ThinkBlueMaine.org</a> equaled 1,365. Hits between November 2013 and February 2014 equaled 794.</p>	None
2	<p><i>Television advertising</i>            CCSWCD coordinated a statewide television and online media campaign through Time Warner Cable. The original ducky and devil ducky ads ran two weeks per month from August through October 2014 in PY2. The ads were shown</p>	None

Permit Year	Description of Progress	Changes
	<p>on cable television stations most likely to reach the target audience (e.g. HGTV, The Weather Channel, ESPN, Fox News, DIY).</p> <p>The following television campaign data were provided by Time Warner Cable:</p> <p>Total – 762 runs  Estimated reach: 23.65%  Estimated Frequency: 2.4</p> <p><i>Online advertising</i>  CCSWCD developed online ads with a clean water message that directed to <a href="http://www.ThinkBlueMaine.org">www.ThinkBlueMaine.org</a>. Time Warner Cable placed the ads on websites most likely to reach the target audience (e.g. local and national news websites, outdoor-themed sites). The online ad campaign ran continuously from August through October 2014.</p> <p>The following online campaign data were provided by Time Warner Cable:  383,872 impressions were run  Click through rate = 0.05% (national average is 0.04%).</p> <p>Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign increased 68% over the same three month period in 2013. Between August and October 2014, there were 1,127 visits to <a href="http://www.ThinkBlueMaine.org">www.ThinkBlueMaine.org</a>. Between August and October 2013, there were 672 visits, which is almost a twofold increase in Permit Year 2.</p>	
3		
4		
5		

**BMP 1.3: Develop and Implement Municipal Permit Stormwater Awareness Plan.**

Measurable Goal 1.3.1 – By January 6, 2014 submit a Permit Awareness Plan to raise awareness of stormwater issues including MS4 permit requirements from municipal employees, elected officials and volunteers within municipal government. The plan will identify:

- a) the target audience;
- b) the outreach tool(s) to be used;
- c) the message;
- d) the distribution system;
- e) the time line and implementation schedule;
- f) the person(s) responsible for implementation;
- g) an impact evaluation protocol;

- h) a plan modification protocol (this must include DEP approval of significant plan modifications); and
- i) the goals (e.g., the targeted level of change sought as a result of the education and outreach effort; specific measurable goals for plan implementation).

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The ISWG education coordinator submitted a draft Municipal/Permit Awareness Plan on behalf of the ISWG communities on 2/7/2014. The ISWG education coordinator received comments from the Maine DEP on 3/14/2014. The ISWG education coordinator revised the document and resubmitted it to the Maine DEP on 3/28/2014. The Plan was approved by the Maine DEP on 4/28/2014.	None
2	No work required or completed this Permit Year.	None
3		
4		
5		

Measurable Goal 1.3.2 – Unless DEP responds in writing or verbally otherwise, then as of March 1, 2014 the Permit Awareness Plan is considered approved and implementation of the Permit Awareness Plan will begin within one week of approval. A more detailed schedule for raising awareness of the permit will be included as part of the Permit Awareness Plan.

Reporting: Review of the Permit Awareness Plan will be included in every Annual Report. The review will include process and impact indicators as outlined in the Permit Awareness Plan. In permit year five an analysis of the process and impact indicators of the Permit Awareness Plan will be provided.

Responsible Party – Public Services Director (with implementation assistance by ISWG Education Coordinator)

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Plan's PY1 activities and the progress completed for each activity is described below:  <i>Develop standard PowerPoint presentation that is easily tailored to target municipalities.</i> – The ISWG education coordinator prepared a draft template for presentations to the audiences described in the fact sheets, for the topics provided in the fact sheet.	The survey of awareness is being developed and will be carried out in Permit Year 2.

Permit Year	Description of Progress	Changes
	<p><i>Develop fact sheets about permit requirements and compliance for elected officials and municipal managers/directors; provide to ISWG reps for inclusion in information packets for newly elected officials.</i> – Fact sheets were developed and provided to the Maine DEP for comment on 7/14/2014. The Maine DEP provided comments on 7/16/2014.</p> <p><i>Develop talking points for use when meeting with newly elected officials; provide to ISWG reps for use when meeting with newly elected officials.</i> - Talking points for newly elected municipal officials will be finalized upon completion of the municipal fact sheets.</p> <p><i>Provide regional good housekeeping/pollution prevention training for municipal staff.</i> Training was provided at the APWA Highway Congress 6/5/2014. Two (2) Cumberland public works employees attended.</p> <p><i>Provide display or demonstration at APWA’s Highway Congress.</i> CCSWCD provided an educational display about proper vehicle washing at APWA’s annual Highway Congress, held on June 6, 2014.</p> <p><i>Develop and carry out annual survey of ISWG municipal representatives (or other relevant municipal staff) to gauge level of awareness.</i> The ISWG education coordinator is in the process of developing a survey for ISWG representatives to determine their municipal councils’ awareness of their stormwater program. The survey will be finalized and administered to ISWG representatives in PY2.</p> <p>Cumberland’s municipal outreach is scheduled for Permit Year 4.</p>	
2	<p>ISWG prepared a Fact Sheet summarizing the MS4 General Permit and Town Board and staff responsibilities. The Fact Sheet was shared with the Town Council on June 15, 2015.</p> <p>ISWG also prepared a poster entitled “Clean Water is Everyone’s Job”. The poster will be distributed in PY 3.</p> <p>The Public Services Administrative Assistant provided an overview of the Town’s Stormwater Program and reviewed the Fact Sheet with the Council at the meeting.</p> <p>CCSWCD coordinated with each of the 14 ISWG representatives to finalize a survey to determine their</p>	None

Permit Year	Description of Progress	Changes
	municipal councils' awareness of their stormwater program. PY2 results will be compared to future years' data.	
3		
4		
5		

**BMP 1.4: Continue Targeted BMP Adoption efforts from previous MS4 permit cycle.**

Measurable Goal 1.4.1 – In Permit Year 1, the ISWG will continue BMP adoption activities carried out in Permit Year 5 of the BMP Adoption Plan. Activities include:

- Providing a minimum of six adult education classes throughout the ISWG region per year;
- Work with a minimum of 21 retail locations to provide healthy lawn care education to consumers;
- Maintain the YardScaping website hosted on CCSWCD's website; and
- Provide information to targeted neighborhoods via direct mail, neighborhood canvassing, socials or other means.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The items listed under this BMP and Measurable Goal are effectively the same as those listed under BMP 1.5 Measurable Goal 1.5.2 and therefore progress is reported under Measurable Goal 1.5.2.	None
2	Same as Permit Year 1	None
3		
4		
5		

**BMP 1.5: Update and Implement BMP Adoption Plan**

Measurable Goal 1.5.1 – By November 1, 2013 submit a plan to encourage targeted audience to adopt or practice specific BMPs that will reduce stormwater pollution. The Plan will include:

- a) the BMP;
- b) the target audience;
- c) the outreach tool(s) to be used;
- d) the message;
- e) the distribution system;
- f) the time line;
- g) the person(s) responsible for implementation;
- h) an impact evaluation protocol;
- i) a plan modification protocol; and
- j) the targeted level of change as a result of the outreach effort (specific measurable

goals for plan implementation).

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The ISWG education coordinator revised the Targeted Best Management Practices Adoption Plan developed under the 2008 permit. The Plan was submitted to Maine DEP on October 31, 2013. The revised Plan was submitted on December 20, 2013 and notice of plan approval was received on January 15, 2014.	None
2	No work required or completed this Permit Year.	None
3		
4		
5		

Measurable Goal 1.5.2 – Unless DEP responds in writing or verbally otherwise, then as of January 15, 2014 the BMP Adoption Plan is considered approved and implementation of the Plan will begin.

Reporting – A review of BMP Adoption Plan will be included in every Annual Report. The review will include process and impact indicators as outlined in the BMP Adoption Plan. In Permit Year 5 an in-depth assessment of both the implementation and the impact of the BMP Adoption Plan will be provided.

A refined schedule for BMP adoption was included in the BMP Adoption Plan.

The following is a summary of the activities completed for this Measurable Goal for Permit Year 2. There were no changes to the Measurable Goal.

**Point of Sale**

Retain 21 Point of Sale locations in the ISWG communities	complete	Three additional Point of Sale locations joined ISWG’s YardScaping program in 2015 (Home Depot in Portland, South Portland and Biddeford), one store closed (Estabrook’s in Scarborough) bringing the total number of stores participating in the program to 23. The distribution of the stores is as follows:
		Biddeford: 1
		Cape Elizabeth: 0
		Cumberland: 1
		Falmouth: 2
		Freeport: 1
		Gorham: 2
		Old Orchard Beach: 0
		Portland: 3
		Saco: 1

		Scarborough: 1
		South Portland: 4
		Westbrook: 2
		Windham: 3
		Yarmouth: 3
Establish Point of Sale program in Home Depot stores	complete	In the spring of 2015, ISWG implemented the Point of Sale program in the four Home Depot stores located in ISWG municipalities (Biddeford, Portland, South Portland, and Windham). Program components include a staff training, distribution of educational materials to the general public, and an educational event for customers at each store.

**Adult Education**

Offer a minimum of seven adult education events per year on YardScaping practices	complete	Gorham: 7/12/2014, Table at Farmer's Market, 22 interactions
		Portland: 7/23/2014, Table at Farmer's Market, 13 interactions
		Scarborough: 8/1/2014, YardScaping Social at Broadturn Farm, 12 interactions
		Windham: 8/23/2014, Home Depot Educational Table Event, 18 interactions
		Portland: 9/13/14, Portland Greenfest, 52 interactions
		Gorham: 9/27/2014, 7 participants
		Scarborough: 3/26/2015, 12 participants
		Falmouth: 4/10/2015, 6 participants (Falmouth Middle School Teacher Training)
		South Portland: 4/13/2015, 10 participants (Home Depot Staff Training)
		Biddeford: 4/14/2015, 3 participants (Home Depot Staff Training)
		Portland: 4/20/2015, 8 participants (Home Depot Staff Training)
		Windham: 5/1/2015, 3 participants (Home Depot Staff Training)
		Windham: 5/10/2015, Home Depot Educational Event, 16 interactions
		Portland: 5/16/2015, Home Depot Educational Event, 20 interactions
		Biddeford: 5/16/2015, Home Depot Educational Event, 19 interactions
		South Portland: 5/17/2015, Home Depot Educational Event 18 interactions
		Falmouth: 6/9/2015, 32 participants (Falmouth Middle School Youth YardScaping presentation)
		Falmouth: 6/9/2015, 35 participants (Falmouth Middle School Youth YardScaping presentation)
Promote adult education classes	complete	Information on YardScaping practices was published in local adult education brochures, via direct mail, using social media, 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 PY1 classes, as well as those practices participants of PY2 classes intend to implement below.
-----------------------	----------	---

*Adult Education Behavior Change Tracking*

During the spring of 2015, phone calls were made to participants of YardScaping adult education classes held in the fall of 2013 and spring of 2014 in order to determine class participants' level of implementation of the YardScaping practices. Follow up phone calls are made six months to one year after the class to allow participants a growing season to implement the recommended practices. 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>Permit Year 1 Post-Class Evaluations</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"	4	3	75.0%
Leave grass clippings	5	4	80.0%
Sharpen mower blades	10	6	60.0%
Aerate	22	13	59.1%
Topdress	21	12	57.1%
Overseed	16	10	62.5%
Use low maintenance seed	15	10	66.7%
Get a soil test	19	8	42.1%
Use nitrogen-only fertilizer	16	3	60.0%
Use compost tea	20	5	25.0%

Below are the results of the Permit Year 2 post-class evaluations completed by the YardScaping class participants.

<b>Permit Year 2 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"	4	4	100.00%
Leave grass clippings	4	4	100.00%
Sharpen mower blades	3	3	100.00%
Aerate	7	7	100.00%
Topdress	7	7	100.00%
Overseed	7	7	100.00%
Use low maintenance seed	6	6	100.00%
Get a soil test	5	5	100.00%
Use nitrogen-only fertilizer	7	8	87.50%
Use compost tea	8	9	88.89%

CCSWCD staff will contact the class participants from the Permit Year 2 classes in the fall of 2015 and/or

spring of 2016 to determine which behaviors have been adopted.

**Targeted Information Distribution**

Distribute lawn care information in one targeted neighborhood per 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: 40
		Gorham: 68
		Old Orchard Beach: 77
		Portland: 203
		Saco: 107
		Scarborough: 110
		South Portland: 86
		Westbrook: 205
		Windham: 92
Yarmouth: 61		

**Websites & Free Media**

Maintain and monitor CCSWCD YardScaping website	ongoing	CCSWCD is in the process of updating their website as the current format is no longer supported. YardScaping information will be updated once the website redesign is complete, which is scheduled for fall 2015.
Newspaper coverage of YardScaping activities and healthy lawn care	complete	<u><i>Portland Press Herald: Good for you if you live by water, good for all if you don't pollute (September 7, 2014)</i></u>
		<u><i>Portland Press Herald: Chemical Lawns a Formula for Trouble (October 5, 2014)</i></u>
		<u><i>Portland Press Herald: Maine Gardener: Put lawn and garden to bed for the winter (November 2, 2014)</i></u>
		<u><i>Portland Press Herald: Lawn Chemicals Threaten Health of Children, Environment (December 24, 2014)</i></u>
		<u><i>Portland Press Herald: Fertilizing for a Perfect Lawn Harms Coastal Waters (January 7, 2015)</i></u>
		<u><i>Portland Press Herald: Pause to understand hazards before using pesticides (March 15, 2015)</i></u>

**BMP 1.6: Develop and implement Targeted Outreach in Priority Watershed Plan.**

Measurable Goal 1.6.1 – By July 1, 2014 submit a draft plan on how to meet either permit requirement H.1.a.iv.1 or H.1.a.iv.2. The plan will identify:

- a) the specific stormwater activity or pollutant to be addressed;
- b) the target audience;
- c) the outreach tool(s) to be used;

- d) the message and the BMPs to be encouraged;
- e) the time line and implementation schedule;
- f) the person(s) responsible for implementation;
- g) the goal of the outreach effort; and
- h) the impact evaluation protocol.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The ISWG education coordinator worked with the York County MS4s to develop a regional MS4 Enhanced Outreach Plan. The draft plan was submitted to Maine DEP on June 25, 2014.	None
2	Comments on the draft plan were received from Maine DEP on 8/11/2014. The comments were addressed, and a revised plan was submitted to DEP on 9/23/2014. Additional comments were received from DEP on 10/29/2014. The plan was revised and resubmitted on 12/18/2014. The plan was approved by DEP on 12/30/2014.	None
3		
4		
5		

Measurable Goal 1.6.2 – by November 1, 2014 submit a final plan. Unless DEP responds in writing or verbally otherwise, then as of January 5, 2015 the Targeted Outreach in Priority Watershed Plan is considered approved and implementation will begin.

Reporting: review of Targeted Outreach in Priority Watershed Plan will be included in Annual Reports starting in Permit Year 2. The review will include process and impact indicators as outlined in the Targeted Outreach in Priority Watershed Plan. In Permit Year 5 an analysis of the process and impact indicators of the Targeted Outreach in Priority Watershed Plan will be provided.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work required to be completed this Permit Year. The Maine DEP comments will be addressed and finalized by November 1, 2014.	None
2	LR22 – act to Promote Asphalt and Latex Pavement Sealing Products was drafted by Representative Matthea Daughtry in January 2015. The Legislative revisers office adjusted the bill and issued it in draft on 3/11/2015. Rep. Daughtry met with the revisers office on 3/17 and adjusted the language. The bill, LD 1208 was drafted and issued on 4/7/2015, with a hearing scheduled for the Environment and Natural Resources Committee on 4/23/2015.	None

Permit Year	Description of Progress	Changes
	<p>Representatives from ISWG and the York County MS4s held several conference calls (1/6/2015, 4/16/2015 and 4/27/2015) and meetings (12/11/2014) to review and adjust the language, conduct research on the issue and how other states and municipalities have addressed bans on coal tar-based sealants.</p> <p>ISWG drafted a fact sheet, which was reviewed by ISWG and the York County MS4s. The fact sheet was reviewed only by Ms. Daughtry and revised based on all comments received. The fact sheet was provided to the Environment and Natural Resources Committee members via email and as part of their informational packet for consideration. Phone calls were also made to representatives on the committee to discuss the bill and fact sheet. A small number of committee members were reached directly, and messages were left for those that were not reached. No phone calls were returned before the Committee met to consider the bill.</p> <p>ISWG and the York County MS4s reached out to the Long Creek Watershed Management District, the Falmouth Conservation Commission, Environmental Health Strategy Center, MEWEA, and the US Geologic Survey (who has done much of the research on coal-tar based sealants). In addition, ISWG and York County MS4s reached out their MMA Legislative committee members to encourage them to vote to support the bill (the MMA Legislative committee is the entity that decides what bills MMA will support).</p> <p>The hearing for the bill was conducted on 4/23/2015. The Falmouth Conservation Commission, Environmental Health Strategy Center, MEWEA, and MMA all testified for the bill. The Long Creek Watershed Management District testified neither for nor against the bill. The Pavement Coatings Technology Council and Maine DEP testified against the bill.</p> <p>A work session was held on 4/20/2015, and the US Geologic Survey attended this work session. At the end of the session, a majority of the Environment and Natural Resources Committee voted “ought not to pass”. On May 26, 2015, the House and Senate accepted the majority committee’s recommendation to not pass the bill.</p> <p>Ms. Daughtry has stated she will revise and re-issue the bill in 2016. ISWG and the York County MS4s are obtaining a full copy of all testimony, and anticipate making some revisions to our proposed plan for enhanced public education to provide better public education to the legislators for this issue.</p>	
3		
4		
5		

**BMP 1.7: School Outreach**

Measurable Goal 1.7.1 – In Permit Year 1, continue to offer the “It’s all connected” school curriculum to elementary and/or middle schools.

Measurable Goal 1.7.2 – In Permit Years 2 - 5, as funding permits, continue to offer the “It’s all connected” school curriculum to elementary and/or middle schools.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p>PWD and CCSWCD offered the “Its all connected” program to the Cumberland School District. The following is a summary of the programming provided to Cumberland students:</p> <p><b>Cumberland</b>            Total students: 336 (CCSWCD: 46, PWD: 290)            Total contact hours: 1,294 (CCSWCD: 119, PWD: 1,135)            Lesson topics: Nonpoint source pollution, watersheds, water quality/testing, water cycle and distribution, water systems/movement, watershed delineation, local watersheds, nested watershed concept, topography, Stormwater, brook trout anatomy, life cycle, habitat and adaptations, native and invasive aquatic species, impervious/pervious surface, best management practices, trout releases at Collyer Brook, macroinvertbrate sampling, streamside assessment.            Schools: Greely Middle School, Greely High School            Educator: PWD, CCSWCD</p>	
2	<p><b>Cumberland</b>            Total students: 404 (CCSWCD: 235, PWD: 169)            Total contact hours: 1,555 (CCSWCD: 235, PWD: 1,320)            Lesson topics: Marine debris and ocean currents; watersheds, nonpoint source pollution, and water quality parameters; in-class water quality testing; groundwater resources and pollution prevention<sup>1</sup>; global water distribution, conservation, and the water cycle; branching patterns, water systems/movement, watersheds; runoff, stormwater, nonpoint source pollutants, solutions; habitat requirements and life cycle of Maine’s brook trout; impervious/pervious surfaces, nonpoint source pollutants, shorefront landscape design, vegetated buffers; water quality monitoring, macroinvertebrates, mock bioassessment; erosion, best management practices, landscape evaluation and redesign; trout releases at Collyer Brook: water quality testing, macroinvertebrate sampling, streamside assessment hike            Schools: Greely High School, Greely Middle School            Educator: CCSWCD, PWD</p>	
3		
4		

<sup>1</sup> Additional funding for groundwater lessons provided by Yarmouth Water District

Permit Year	Description of Progress	Changes
5		

Reporting – Annual reports will include the total number of students reached, which schools were involved and the lesson topics that were covered.

**MCM 2 Public Involvement and Participation**

The Town is fulfilling the requirements for Public Involvement and Participation through participation in the ISWG and the Town's provision of funding to the ISWG for Public Involvement and Participation services, or through directly fulfilling the requirements.

MCM Goals:

1. Involve the public in both the planning and implementation process of improving water quality and reducing quantity via the stormwater program.

**BMP 2.1: Public Notice Requirement**

Measurable Goal 2.1.1 – ISWG and/or its members will follow state and local Public Notice requirements for both ISWG and individual Stormwater Management Plans. Copies of the plans will be made available on the Town’s web site.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town provided public notice of its NOI and SWPM Plan on the Town website.	None
2	No work required or completed this Permit Year.	None
3		
4		
5		

Measurable Goal 2.1.2 –ISWG and/or its members will follow state and local Public Notice requirements when involving stakeholders in the implementation of the Small MS4 General Permit.

Report –The annual report will describe compliance with public notice requirements including documentation of meetings and attendance, where applicable.

Responsible party - Public Services Director (with implementation assistance by ISWG Education Coordinator)

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The ISWG meetings are open to the public. A listing of meetings and attendance is provided in Appendix A.	None
2	The ISWG meetings are open to the public. Cumberland staff attended 2 meetings, and the Cumberland stormwater consultant attended 5 meetings.	Per DEP request, appendices have been

Permit Year	Description of Progress	Changes
		removed from the Annual Report.
3		
4		
5		

**BMP 2.2: Host Public Events**

Measurable Goal 2.2.1 – ISWG and/or permittee will annually host/conduct or participate in at least one public event such as storm drain stenciling, stream clean-up, household hazardous waste collection day, volunteer monitoring, neighborhood educational events, conservation commission outreach program, Urban Impaired Stream outreach program, or adopt a storm drain or local stream program). The target audience will be adult residents living in the urbanized area of the Town. The message will be tailored to best reach the target audience given the characteristics of the event. The ISWG and/or permittee will consult with DEP to ensure the event will satisfy requirements.

Reporting - The annual report will include description of the event including estimated attendance/participation and an impact evaluation to assess effectiveness of the methods used to plan and host the event.

Responsible Party - Public Services Director (with implementation assistance by ISWG Education Coordinator)

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p><b>Urban Runoff &amp; Green Neighbor Family Fest</b></p> <p>The third annual <i>Urban Runoff</i> 5K race and walk and the <i>Green Neighbor Family Fest</i> were held on April 26, 2014. The goal of these events was to raise awareness of polluted runoff and support ISWG’s school education program. With approval from Maine DEP, the race and festival served as the Public Involvement and Participation event for all ISWG communities.</p> <p>By all accounts, the event was a huge success. Approximately 600 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. Local media outlets advertised the events, including the donation of radio advertisement and an on-air interview during the month of April by 98.9 WCLZ and news coverage by News Chanel 8</p>	None

Permit Year	Description of Progress	Changes
	<p>WMTW. Social media, paid online advertising, posters, and direct mail and email were also used to promote the race and cause. Stormwater awareness messages were included on the event website, social media, eblasts, and other marketing tools that were sent to all registered participants, sponsors, and partners.</p> <p>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 changed this year to end in front of Deering High School. Many survey respondents indicated the cause of the race, clean water education, was a major reason why they chose to participate.</p> <p>The <i>Green Neighbor Family Fest</i> was held after the race in Deering High School gymnasium due to weather. The event ran for three hours and was attended by approximately 700 people. Scheduled events included the awards ceremony and a live music. A total of 21 exhibits were set up by local nonprofit and governmental organizations, universities, and businesses to provide hands-on, educational activities for children. These activities included a marine touch tank, making “seed bombs” (seeds rolled in compost), water quality experiments, “poo bag” toss (about proper disposal of pet waste), and many more. Children also took part in face painting and water related prize giveaways.</p> <p>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.</p> <p>Plans are underway to host the fourth annual <i>Urban Runoff 5K</i> and <i>Green Neighbor Family Fest</i> on Saturday, April 25, 2015.</p>	
2	<p><b>Urban Runoff &amp; Green Neighbor Family Fest</b></p> <p>2015 marked the fourth year ISWG supported, coordinated, promoted, and participated in the Urban Runoff and Green Neighbor Family Fest, a day-long community event that promotes clean water and raises awareness of water pollution. In addition to raising awareness, funds raised from the Urban Runoff and Green Neighbor Family Fest support ISWG’s in-school youth education program. With approval from Maine DEP, the race and festival, held on April 25, 2015, served as the Public Involvement and Participation event for all ISWG communities. Each community’s</p>	None

Permit Year	Description of Progress	Changes
	<p>participants are summarized in the table below.</p> <p>By all accounts, the event was a huge success. Approximately 700 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. Local media outlets advertised the events, including the donation of radio advertisement during the months of March and April by 98.9 WCLZ. WMTW News Channel 8 promoted the events prior to April 25<sup>th</sup>, and they attended the race and festival to provide news coverage of the events. Social media, paid online advertising, posters, and direct mail and email were also used to promote the race and included a clean water message. Additional clean water messages were included on the event website, social media, eblasts, and other marketing tools that were sent to all registered participants, sponsors, and partners.</p> <p>Anecdotes as well as a post-race survey completed by race participants demonstrate the success of the race’s planning and implementation. Many survey respondents indicated the race’s cause: clean water and youth education, was a major reason why they chose to participate.</p> <p>The <i>Green Neighbor Family Fest</i> was held after the race at Deering High School. The event ran for three hours and was attended by approximately 700 people. Scheduled events included the awards ceremony and a live music. A total of 21 exhibits were set up by local nonprofit and governmental organizations, universities, and businesses to provide hands-on, educational activities for children. These activities included a marine touch tank, making “seed bombs” (seeds rolled in compost), water quality experiments, and many more. Children also took part in face painting and water related prize giveaways.</p> <p>Plans are underway to host the fifth annual <i>Urban Runoff 5K</i> and <i>Green Neighbor Family Fest</i> on Saturday, April 23, 2016.</p> <p><i>Promotion</i>  With the help of all ISWG representatives, CCSWCD promoted ISWG’s public event, the Urban Runoff 5K and Green Neighbor Family Fest, via social media, paid online ads, and direct email communication to participants. In addition, 340 posters were distributed throughout the 14 ISWG communities by ISWG representatives; radio ads aired on 98.9 WCLZ during the months of March and April; and</p>	

Permit Year	Description of Progress	Changes
	<p>WMTW News Channel 8 attended the event and covered the events leading up to April 25, 2015.</p> <p>Cumberland placed 19 posters throughout Town advertising the event, and had 27 participants in the race.</p> <p>The Town also held a Household Hazardous Waste Day on October 11, 2014.</p>	
3		
4		
5		

**MCM 3 Illicit Discharge Detection and Elimination**

**MCM Goals**

1. Maintain an updated watershed based storm sewer system infrastructure map;
2. Continue to enforce the Town’s stormwater discharge ordinance;
3. Continue to implement the Town’s illicit discharge detection and elimination program including dry weather outfall inspections in the two highest priority sub-watersheds, which encompass the entire Urbanized Area;
4. Continue to implement the Town’s strategy to detect any illicit discharges to the open ditch system within the sub-watershed of the East Branch of the Piscataqua River and expand this program in to the Casco Bay Frontal Drainages sub-watershed.
5. Develop a list of septic systems that are 20 years old or older and implement a drive-by evaluation and documentation program in the following sub-watersheds: East Branch of the Piscataqua River and Casco Bay Frontal Drainages, and
6. Work with the Portland Water District to identify if hydrant flushing practices in the MS4 constitute significant contributors of pollutants.

For specific permit requirements and suggestions, Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems Part IV.H.3 refer to the General Permit.

**BMP 3.1: Maintain an updated Watershed Based Storm Sewer System Infrastructure Map**

Measurable Goal 3.1.1 - The Town created a watershed-based map of the MS4 infrastructure during the prior two permit cycles (2003-2013). Annually by June 30 each year, the Town will update the paper copies of the maps to reflect new infrastructure and changes to the infrastructure. If funding allows, the GIS map system will also be updated.

Reporting - Annual update of mapping efforts undertaken in the Permit Year.

Responsible Party - Public Services Director

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town updated its electronic infrastructure map based on outfall and ditch inspections during Permit Year 1. The Town has 230 catch basins, 41 outfalls, 38 drain manholes, 47,680 lineal feet of pipes, and 60,750 lineal feet of ditches in the Urbanized Area. The Town has also mapped 53 additional catch basins and pipes associated with the school district, and 46 catch basins associated with State DOT Roads (Main Street, Tuttle Road).	None
2	An intern was hired to do a thorough cross check of the storm drain system. As a result, the Town now has the following infrastructure: 51 outfalls, 291 catch basins, 47 drain manholes, 399 culverts, 50,700 feet of storm drain pipe, and 86,000 feet of ditches.	None
3		
4		
5		

**BMP 3.2: Continue to Enforce the Stormwater Discharge Ordinance**

Measurable Goal 3.2.1 - The Town of Cumberland adopted and implemented an ordinance prohibiting the discharge of anything other than stormwater into the Town’s stormwater infrastructure within the Urbanized Area on February 28, 2009. The Ordinance is Article I Stormwater Discharge of Chapter 242 Stormwater Management of the Town’s Zoning Ordinance. The Town will continue to implement this ordinance. As part of the Illicit Discharge Detection and Elimination Program, the Town maintains a listing of illicit discharges that have been identified and how they are addressed. The Town will update the spreadsheet by June 30 each year to include information on whether the Stormwater Discharge Ordinance was used as an enforcement tool for the illicit discharges.

Reporting: Documentation of illicit discharge incidents and municipal enforcement actions as a result of the adopted ordinance will be included in annual reports to DEP each year of the permit.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	Appendix B contains a copy of the IDDE Tracking Spreadsheet. No NOVs were issued during Permit Year 1.	None
2	No NOVs were issued during Permit Year 2. Three potential illicit discharges were under investigation in Permit Year 2. Two of the outfalls flow from shady low/wetland areas and exhibited green algal growth at the outfall. These outfalls were sampled for human bacteroides. Results showed no human bacteroides were present. No further investigation is	Per DEP request, appendices have been removed from the Annual

Permit Year	Description of Progress	Changes
	planned for these outfalls. The third outfall is continuing to be monitored, but has not been sampled because no flow is present.	Report.
3		
4		
5		

**BMP 3.3: Continue Illicit Discharge Detection and Elimination Program**

Measurable Goal 3.3.1 – During the past permit cycle, the Town developed an illicit discharge detection and elimination program which included a prioritized outfall inspection program that required annual dry weather inspections in two highest priority sub-watersheds (East Branch of the Piscataqua River and Casco Bay Frontal Drainages). The General Permit requires that the Town continue to implement the IDDE program and expand inspections into sub-watersheds that were not previously inspected, however these are the only two sub-watersheds in the Urbanized Area of Cumberland. Therefore, the Town will continue to implement the program and conduct inspections in these two sub-watersheds.

Reporting - Inspection results will be documented in a spreadsheet or other recordkeeping system and a summary will be reported in annual reports submitted to the DEP.

Responsible Party: Public Services Director

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town inspected 8 outfalls in the Urbanized Area (20%) and all MS4 and school catch basins during Permit Year 1. Three potential illicit discharges were identified during the outfall inspections, and no potential illicit discharges were identified during catch basin inspections.  No public reports of illicit discharges were received, and no illicit discharges were identified by the public works employees during their regular work duties. (See Measurable Goal 3.1.1 and Appendix B for details).	
2	The Town re-inspected three outfalls, and inspected an additional 34 outfalls in the highest priority watershed (East Branch of the Piscataqua River). All catch basins were inspected in the MS4 area and at the schools. One illicit discharge is under investigation for an observation of foam. Some of the outfall inspections were conducted during wet weather, and will be re-inspected during dry weather.  No public reports of illicit discharges were received and no new illicit discharges were identified by public works	Per DEP request, appendices have been removed from the Annual Report.

Permit Year	Description of Progress	Changes
	employees during their regular work duties.	
3		
4		
5		

**BMP 3.4: Continue Open Ditch Illicit Discharge Program**

Measurable Goal 3.4.1 – During the past permit cycle, the Town developed a strategy for detecting illicit discharges in their open ditch system within their highest priority sub-watershed (East Branch of the Piscataqua River River). The Town will continue to implement the open ditch inspection program and will expand it into the Casco Bay Frontal Drainages sub-watershed.

Reporting - Annual reports to DEP each year of the permit will include a status report on the inspections completed. Note: reporting of illicit discharge detections and actions taken will be in conjunction with BMP 3.2, Continue to Enforce the Stormwater Discharge Ordinance.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	Inspections were completed on 55% of the ditches in the Urbanized Area during Permit Year 1. No illicit discharges were identified during ditch inspections.	None
2	Because of the increase in ditches mapped this year, the total % of ditches inspected during Permit Year 1 was recalculated to be 44%. An additional 41% of the ditches in the urbanized area were inspected in Permit Year 2, resulting in a total of 85% of the ditches inspected during Permit Years 1 and 2. Some of the inspections completed during this permit year were wet weather inspections, but most of the ditches did not have flowing water and so observation of illicit discharge potential was possible. No potential illicit discharges were identified from ditch inspections. The Town continues to map private pipes protruding into ditches as pipe stubs where observed, but does not trespass on private property to fully map other infrastructure.	None
3		
4		
5		

**BMP 3.5: Document and Evaluate Aging Septic Systems**

Measurable Goal 3.5.1 – By June 30, 2016, the Town will develop a list of aging (i.e., greater than 20 years old) septic systems that might discharge to the MS4 if they were to fail for the following sub-watersheds: East Branch of the Piscataqua River and Casco Bay Frontal Drainages.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work was required to be completed this Permit Year.	None
2	Although no work was required to be completed this year, the Town mapped the approximate locations of 563 septic systems (leach field boundaries and tank access locations) on their GIS. Many of these systems are outside the Urbanized Area, and may be less than 20 years old. The data will be reviewed to develop a list for drive-by inspections in Permit Year 4.	None
3		
4		
5		

Measurable Goal 3.5.2 – By June 30, 2017, the Town will implement a drive-by evaluation and documentation program of the aging septic systems identified in Measurable Goal 3.5.1. The program will include a mechanism to address any discharges from failed septic systems.

Reporting – The Permit Year 3 Annual Report will include a status report on the number of septic systems identified. The Permit Year 4 Annual Report will include a description of the evaluation and documentation program. Note: reporting of illicit discharge detections and actions taken will be done in conjunction with BMP 3.2, Continue to Enforce the Stormwater Discharge Ordinance.

Responsible Party: Public Services Director

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work was required to be completed this Permit Year.	None
2	No work required or completed this Permit Year.	None
3		
4		
5		

**BMP 3.6: Work with Portland Water District to Assess if Hydrant and Water Line Practices Contribute Significant Pollutants to the MS4**

Measurable Goal 3.6.1 - In Permit Year 1, coordinate with the water utility via mail or in person to

evaluate whether or not water line or hydrant flushing from potable water sources is a significant contributor of pollutants to the MS4. Evaluation will include the following action:

- Provide the water utility with a location map showing the extent of the municipal urbanized area, and the highest priority watershed(s).
- Gather information from the water utility, specific to the Urbanized Area and priority watershed(s), including the number and location of hydrants, details on water line or hydrant flushing that outlines procedures, including how often flushing occurs, typical flow rates and duration, where the water is conveyed, what the target or actual chlorine concentrations are, and what best practices are employed to prevent erosion and address potential pollutants.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town's consultant met with the PWD and ISWG communities on 1/17/2014, where discussions occurred regarding the flow rates, target chlorine concentrations and best practices. The PWD agreed to conduct chlorine monitoring and to investigate BMPS to reduce chlorine discharges.  The Town provided the PWD with shape files showing the highest priority watershed (Presumpscot River Watershed HUC 0106000103) on June 3, 2014.	None
2	No work required or completed this Permit Year.	Measurable Goal was renumbered 3.6.1. It was incorrectly numbered in the Stormwater Program Management Plan.
3		
4		
5		

Measurable Goal 3.6.2 - By the end of Permit Year 2, using available GIS information, the location of hydrants will be added as a layer to the storm sewer system infrastructure map to aid in the evaluation. The municipality will work with the water utility to prioritize the hydrants and water lines that have the potential to cause exceedances of the ambient water quality criterion for chlorine when discharged through the MS4.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work was required to be completed this Permit Year.	None
2	The hydrants were added to the on-line GIS infrastructure. The Town's consultant conveyed to PWD that any discharges to the small stream will require dechlorination.	Measurable Goal was renumbered 3.6.2. It was incorrectly numbered in the Stormwater Program Management Plan.
3		
4		
5		

Measurable Goal 3.6.3 - Permit Years 2 – 5, the municipality will request an annual water quality progress report that documents what best management practices are being implemented for flushing activity at the prioritized hydrants as well as the water utility's testing results of the total residual chlorine for any such discharges.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work was required to be completed this Permit Year.	None
2	The Town's consultant met with the Portland Water District on 1/29/2015 to review the Portland Water District's water quality testing reports and to determine next steps. The Portland Water District will be testing dechlorination units in Permit Year 3.	Measurable Goal was renumbered 3.6.3. It was incorrectly numbered in the Stormwater Program Management Plan.
3		
4		
5		

Measurable Goal 3.6.4: If it is determined by the end of Permit Year 3, that water line and hydrant flushing is a significant contributor of pollutants to the MS4, and the water utility has demonstrated that it will not voluntarily implement BMPs in order to reach ambient water quality criteria for chlorine, the municipality will, by the end of Permit Year 4, update their IDDE ordinance to allow enforcement of discharges that cause exceedances of water quality criteria.

Reporting: The annual report will include a status update on the evaluation of water line and hydrant flushing as a significant contributor of pollutants to the MS4 and an update on subsequent actions.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No work was required to be completed this Permit Year.	None
2	No work was required to be completed this Permit Year.	Measurable Goal was renumbered 3.6.4. It was incorrectly numbered in the Stormwater Program Management Plan.
3		
4		
5		

**BMP 3.7: Coordinate with DMR on issues related to Broad Cove**

Measurable Goal 3.7.1 – The Town currently cooperates with the Department of Marine Resources to collect bacteria samples at two locations in Broad Cove. The Town of Cumberland will continue this activity and will share information with DMR related to illicit discharge inspections and potential bacteria sources in the sub watershed that drains to Broad Cove (Casco Bay Frontal Drainages). In addition, the Town will meet with DMR during Permit Year 1 to understand what activities DMR has planned for investigating sources of bacterial contamination.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town’s consultant met with the DMR on 6/25/2014. DMR provided information on the shoreline surveys they complete in order to assist towns in opening shellfish areas. The Towns provided DMR with information relevant to the MS4 Program. DMR will make available their historic database of recent sampling.	None
2	No shoreline surveys were planned for Cumberland in Permit Year 2. The Town continues to conduct volunteer monitoring	None

Permit Year	Description of Progress	Changes
	at DMR locations.	
3		
4		
5		

**MCM 4 Construction Site Stormwater Runoff Control**

**MCM Goals**

Continue to 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 MDEP's General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems Part IV.H.4.

The Town will rely on the Maine Construction General Permit or Chapter 500, Stormwater Management.

**BMP 4.1: Continue notification to construction site developers and operators**

Measurable Goal 4.1.1 – Continue notifying developers and contractors through the modified building permit and through meetings with Code Enforcement and Planning staff, and by making notification materials available at Town Hall. The documents provide notification to applicants of the requirements for registration under the Maine Construction General Permit or Chapter 500 Stormwater Management for the Discharge of Stormwater Associated with Construction Activities.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p>The Town of Cumberland provides notification of Chapter 500 and MCGP requirements to each developer either in meetings for planning board or building permit sites. The Town provides notice of MGCP requirements verbally and on the building permit application form for building permit only sites.</p> <p>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.</p> <p>The Town also maintains a library of available information and handouts for contractors and developers as well.</p>	None
2	Same as Permit Year 1	None
3		
4		
5		

**BMP 4.2: Continue documenting every construction activity that disturb one or more acres within the Urbanized Area.**

Measurable Goal 4.2.1 – During the previous Permit Cycle, the Public Services Director developed a spreadsheet to document the construction activities that disturb more than one acre of land in the

Urbanized Area. By June 30 each year the spreadsheet will be updated to include the construction projects in the Urbanized Area that disturbed more than one acre of land.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The spreadsheet documenting the sites that required inspections is contained in Appendix C.	None
2	The spreadsheet continues to be maintained and is available upon request.	Per DEP request, appendices have been removed from the Annual Report.
3		
4		
5		

**BMP 4.3: Continue implementing the construction site inspection program.**

Measurable Goal 4.3.1 – During the previous permit cycle, the Town developed a procedure for construction site inspections by either a municipal official or a contracted third party to meet the terms and conditions of the MS4 General Permit (i.e., to ensure projects are in compliance with the Maine Construction General Permit and Basic Standards of Chapter 500, Stormwater Management). The program includes three construction inspections for sediment and erosion control issues in those sites that are in the highest priority subwatershed (East Branch of the Piscataqua River), and two inspections in all other portions of the Urbanized Area. One of the inspections occurs at the end of construction to document that final stabilization of the site has been completed. The Town will continue to implement this program, using the standardized inspection form, and by June 30 each year will document this information in the Construction Inspection Tracking spreadsheet that is also used to document BMP 4.2.

Reporting – The Permit Year 1, 2, and 3 Annual reports will include a summary of information tracked in the spreadsheet.

Responsible Parties: Public Services Director (for third party inspections) and Code Enforcement Officer (for sites without third party inspectors)

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town completed construction site inspections on all sites that disturbed more than one acre of land that discharged to the Town’s MS4. At least three inspections were completed at the one site whose construction ended in	None

Permit Year	Description of Progress	Changes
	Permit Year 1 (Maine Standards Building). The other sites (Friends School and Raven Farm Substation) are still under construction and inspections will continue.	
2	The Town reiterated to its third party inspectors the importance of ensuring that contractors follow their erosion and sediment control plans for sites in the Urbanized Area and requested they use a new form. The Town continued construction inspections at Friends School, and began inspections at the only other site under construction that triggers this requirement, Spears Hill Subdivision.	None
3		
4		
5		

**MCM 5 Post-Construction Stormwater Management**

**MCM Goals:**

(Within the Urbanized Area)

- Continue to implement 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 Town’s MS4;
- Continue to implement an ordinance or similar measure to ensure adequate long-term operation and maintenance of post-construction BMPs;
- Ensure post-construction BMPs are functioning as intended; and
- Document and report annually to the MDEP all applicable post-construction related information.

For specific permit requirements and suggestions, refer Part IV.H.5 of the General Permit.

**BMP 5.1: Continue to Enforce Ordinance or Similar Measure**

Measurable Goal 5.1.1 – During the previous permit cycle, the Town passed a Post-Construction Stormwater Management Ordinance (effective September 14, 2009) which requires that any site that disturbs more than one acre certify to the Town annually by March 1 that a state certified inspector has inspected and maintained their stormwater BMPs. The ordinance is Article II of Chapter 242 Stormwater Management of the Zoning Ordinance. The Town will continue to enforce this ordinance.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town continues to enforce this ordinance. No NOVs were issued.	None
2	Though annual certifications were submitted to after the deadline specified in the ordinance, the Town did not issue NOVs because this was the first year that any certifications were required. The Town worked closely with the two site owners to ensure they understood the importance of the requirements.	None
3		
4		
5		

**BMP 5.2: Track Post-Construction Sites to ensure proper reporting and compliance with the Ordinance**

Measurable Goal 5.2.1 - The Town has developed a spreadsheet to track sites that trigger the Post-Construction Ordinance and to document the following elements which are required to be reported to the Maine DEP:

- The cumulative number of sites that have post construction BMPs discharging into the

- permittee's MS4;
- A summary of the number of sites that have post-construction BMPs discharging into the permittee's MS4 that were reported to the municipality;
- The number of sites with documented functioning post-construction BMPs; and
- The number of sites that required routine maintenance or remedial action to ensure that the post-construction BMP is functioning as intended.

The Town will complete the spreadsheet by June 30 each year.

The Town ordinance requires that owners and operators hire a “Qualified Third Party Inspector” to inspect the site, therefore the General Permit requirements related to Town inspections in watersheds of Urban Impaired Streams and Lakes Most at Risk do not apply.

Reporting - Documentation of all inspections will be entered into a spreadsheet for tracking and annual reporting to DEP.

Responsible Parties: Public Services Director

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p>The tracking sheet used to track sites triggering the construction inspection requirements of the permit is used to track Post-Construction Inspection sites (see Appendix C).</p> <p>One site (the Maine Standards Building) is due to provide a Post-Construction maintenance certification to the Town in the Fall of 2014.</p>	None
2	<p>Two sites were required to submit annual certifications, and did so in Permit Year 2. The following is a summary of the information required for this report:</p> <p>2 sites discharged to the Town’s MS4            2 sites provided their maintenance certifications to the Town            1 site had fully functioning BMPs (Maine Standards)            1 site required routine maintenance which was corrected during the inspection (Ravens Farm Substation).</p> <p>Two additional sites will be required to provide annual certifications when construction is complete (Spear’s Hill Subdivision, and Norton Financial Services).</p>	Per DEP request, appendices have been removed from the Annual Report.
3		
4		
5		

**BMP 5.3: Develop LID notification procedures for developers**

*Measurable Goal 5.3.1* - The Town will develop a procedure to notify developers they should consider low impact development techniques. Though no date is specified in the General Permit for this requirement, the Town will complete this during Permit Year 2.

Permit Year	Description of Progress	Changes
1	No work required or completed this permit year.	None
2	The Town provides applicants with an EPA brochure describing the water quality and community benefits of LID.	This BMP is required by the General Permit but was omitted from the SWPM Plan. The BMP and measurable goal were added and completed this permit year.
3		
4		
5		

**MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations**

This program has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

MCM Goals:

- Maintain an updated 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.
- Continue to implement written operation and maintenance procedures for the facilities in the inventory to ensure long term operation of structural and non-structural controls that reduce stormwater pollution to the maximum extent practicable.
- Train employees on ways to prevent and reduce stormwater pollution from municipal operations and facilities.
- Continue to implement 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.
- Continue to maintain the conveyances, structures and outfalls of the regulated MS4.
- Continue to implement the Stormwater Pollution Prevention Plan for the Department of Public Works site.

For specific permit requirements and suggestions, refer to Part IV.H.6 of the General Permit.

**BMP 6.1: Operations at Municipally Owned Grounds and Facilities**

Measurable Goal 6.1.1 – During the previous permit cycle, the Town developed an inventory of all municipal operations conducted in, on, or associated with facilities, buildings, golf courses, cemeteries, parks and open space that have the potential to cause or contribute to stormwater or surface water pollution.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town reviewed the inventory of facilities. No changes to the inventory were deemed necessary.	None
2	Same as Permit Year 1	None
3		
4		
5		

Measurable Goal 6.1.2 – The Town relies on the Standard Operating Procedures contained in the Stormwater Program Management Plan. The Town will continue to implement these SOPs at the inventoried facilities in Town. The SOPs are kept at the facilities by the people responsible for implementing them.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the

Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	No changes to the SOPs were deemed necessary.	None
2	The Val Halla and Twin Brooks SOPs were reviewed and updated.	None
3		
4		
5		

**BMP 6.2: Training**

Measurable Goal 6.2.1 – Formal stormwater pollution prevention employee training is offered annually to public works and maintenance personnel. The trainings cover such topics as spill prevention and response, good housekeeping, operation and maintenance procedures, and materials management practices.

Reporting - Annual reports to DEP each year of the permit will include a status report on the development of the training program and number of employees trained.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p>Three Public Works employees, two Parks employees and the Public Services Administrative Assistant were trained on 10/20/2014 in the following topics:</p> <ul style="list-style-type: none"> <li>- MS4 Program in general</li> <li>- IDDE procedures for outfall inspections and ditch inspections</li> <li>- Oil Spill Prevention Control and Countermeasure requirements (for DPW facility)</li> <li>- Stormwater Pollution Prevention Plan requirements (for DPW facility)</li> <li>- Operations and Maintenance Procedures for the municipal operations facilities</li> </ul> <p>Two public works employees also attended the 6/5/2014 Highway Congress PPGH training provided by CCSWCD. Two public works employees were field trained in illicit discharge inspections on June 17, 2014.</p>	None
2	<ol style="list-style-type: none"> <li>1) The Public Services Administrative Assistant attended the 5/14/2015 training on PPGH presented by ISWG.</li> <li>2) All four public works employees, the administrative assistant and the IT Manager attended the Integrated Environmental training on ditch and</li> </ol>	This BMP was renumbered 6.2. It was incorrectly numbered in

Permit Year	Description of Progress	Changes
	<p>outfall inspections on 8/7/2014.</p> <p>3) Ten Public Works and Parks Recreation employees attended a general MS4 training, with a facility specific review of the SWPPP, SPCC plans and Stormwater O&amp;M Plans on 1/23/2015.</p> <p>4) The Code Enforcement Officer attended the Maine Coastal Erosion Control Workshop on April 8, 2015.</p> <p>5) The Parks and Recreation supervisor was trained on 5/27/2015 on Stormwater O&amp;M Procedures for Twin Brooks.</p>	the Stormwater Program Management Plan.
3		
4		
5		

**BMP 6.3: Continue Street Sweeping Program**

Measurable Goal 6.3.1 - Each permit year the Town will continue to sweep all publicly accepted paved streets and publicly owned paved parking lots at least once a year as soon as possible after snowmelt.

Reporting - Annual reports to DEP each year of the permit will include a status report on street sweeping.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The Town began street sweeping as soon as possible after snow melt this Permit Year. A total of 177.5 cubic yards of material was removed from the streets via street sweeping.	None
2	The Town began street sweeping as soon as possible after snow melt this Permit Year. Most roads were swept twice – 417 cy of material was removed during the first sweeping, and 191 cy was removed during the second sweeping.	None
3		
4		
5		

**BMP 6.4: Cleaning of Stormwater Structures Including Catch Basins**

Measurable Goal 6.4.1 - The Town will inspect at least 50% of its catch basins each year, and will clean them if the sumps have accumulated sediment that fills more than 50% of the sump. Those catch basins that frequently accumulate excess sediment will be cleaned more frequently than every two years.

Reporting - Annual reports to DEP each year of the permit will include a status report on cleaning of catch

basins.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	All catch basins were inspected for sediment content. Of the 230 town-owned catch basins in the urbanized area, the Town removed 8.25 cubic yards of material from 139 catch basins. The Town also removed 8 cubic yards of material from the school district catch basins and catch basins that were outside the urbanized area.	None
2	All of the 291 town-owned catch basins in the urbanized area were inspected. 189 of the Town basins were cleaned, and 16.5 cubic yards of material was removed. The Town also removed 5 cubic yards of material from the school district catch basins.	None
3		
4		
5		

**BMP 6.5: Maintenance and Upgrading of Storm water Conveyances and Outfalls**

Measurable Goal 6.5.1 – The Town will continue to maintain and upgrade the stormwater conveyance systems based on its long term Capital Improvement Program.

Reporting - Annual reports to DEP each year of the permit will include a status report on the maintenance and upgrading of stormwater conveyances and outfalls.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	A summary of the drainage repairs completed in town during Permit Year 1 is provided in Appendix D.	None
2	Nine culverts were repaired or replaced and repair to approximately 25 ditch areas was conducted, including roadside washouts. Other general maintenance was conducted as needed based on public works identification, or based on complaints by citizens.	Per DEP request, appendices have been removed from the Annual Report.
3		

Permit Year	Description of Progress	Changes
4		
5		

**BMP 6.6: Stormwater Pollution Prevention Plans (SWPPP's)**

Measurable Goal 6.6.1 – During Permit Year 1, the Town will update the SWPPP for the Public Works Facility to conform to the conditions and requirements of the Maine Multi-Sector General Permit for Stormwater Discharge Associated with Industrial Activity published April 26, 2011. During subsequent permit years, the Town will implement the SWPPP, including conducting quarterly visual monitoring and quarterly housekeeping inspections.

Reporting - Annual reports to DEP each year of the permit will include a status report on the development of the SWPPP's.

Responsible Party: Public Services Director.

The following is a summary of the activities completed for this Measurable Goal. Any changes to the Measurable Goal are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	The SWPPP for the Public Works Facility was completed in September 2013. An Oil SPCC Plan was also prepared for the facility in September 2013.	None
2	An oil SPCC Plan was prepared for the Val Halla Maintenance facility. No significant changes to the SWPPP were made, but the facility was regraded, and some crushed rock was installed at the DPW facility to prevent channelization of runoff along the edge of the pavement.	None
3		
4		
5		

**SECTION 3    GENERAL REQUIREMENTS**

**Certification**

The General Permit requires that this Plan be certified by either a principal executive officer or ranking elected official. This section provides the necessary certification.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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

William Shane

Date: \_\_\_\_\_

Title: Town Manager

