

# PERMIT YEAR 1 ANNUAL REPORT 2013-2018 MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT

# **FOR**

TOWN OF CUMBERLAND, MAINE

Due to Maine DEP September 15, 2014 Submitted to Maine DEP September 15, 2014

# **Table of Contents**

SECTION 1	INTRODUCTION	4
Overview o	of Regulatory Program	4
SECTION 2	PROGRESS ON MINIMUM CONTROL MEASURES	6
BMP 1.1 BMP 1.2	iblic Education and Outreach	6 7
BMP 1.4 cycle BMP 1.5 BMP 1.6	:: Continue Targeted Best Management Practices Adoption efforts from previous MS4	permit 11 12
MCM 2 Pul BMP 2.1	': School Outreach	18
BMP 3.1 BMP 3.2 BMP 3.3 BMP 3.4 BMP 3.5 BMP 3.6 Significa	cit Discharge Detection and Elimination	21 22 23 24 atribute
BMP 4.1 for regis Manage BMP 4.2 the Urba	nstruction Site Stormwater Runoff Control	ents 29 thin 30
BMP 5.1 BMP 5.2	st-Construction Stormwater Management	32
BMP 6.1 BMP 6.3 BMP 6.4 BMP 6.5	ellution Prevention/Good Housekeeping for Municipal Operations	34 36 36

<b>SECTION 3</b>	GENERAL REQUIREMENTS	39
Certifica	ition	
APPEND	ICES	
A.	ISWG Attendance	
В.	IDDE Tracking Spreadsheet	
<b>C.</b>	Construction/Post-Construction Tracking Spreadsheets	
D.	Summary of Maintenance Completed on Storm Drain System	

#### 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 1 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	
a. The status of compliance with permit conditions based on the Stormwater	The Town is in compliance with the Permit Conditions based on the Stormwater	
Program Management Plan, an assessment of the appropriateness of identified best management practices (BMPs), progress towards achieving identified massurable goals for each	Program Management Plan (revised 4/3/2014) approved by the Maine DEP on 4/4/2014.	
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.	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.	
	The BMPs identified in the Town's Plan are still appropriate except as noted in Section 2 of this annual report.	
b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.	No stormwater monitoring data was collected by the Town during Permit Year 1.  Any monitoring data collected as a result of illicit discharge investigations is described in	
	Minimum Control Measure 3.	

c. A summary of the stormwater Section 2 of this annual report includes the BMPS and measurable goals identified in the activities the town intends to undertake pursuant to its Plan during Stormwater Program Management Plan that the next reporting cycle. will be implemented in subsequent years. d. A change in any identified BMPs or Changes to the BMPs or measurable goals measurable goals that apply to the are identified in Section 2, where the Plan. progress is reported. Section 2 of this annual report contains the e. A summary describing the activities, progress, and accomplishments for details of the Town's progress on the each of the MCMs (including such measurable goals for each of the BMPs. 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).

#### 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 Works 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 w ww.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; and
- Promote their approved public event (see BMP 2.2 Host Public Events).

Permit	Description of Progress	Changes
Year		
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 thinkbluemaine.org website is posted on the public services web page.	None
2		
3		

Permit	Description of Progress	Changes
Year		
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)
- 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).

Permit	Description of Progress	Changes
Year		
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 12/2/2014 to 12/16/2014 for submittal of the Draft Public Stormwater Awareness Plan. The ISWG education coordinator provided the draft plan to the Maine DEP on 12/16/2014. The Maine DEP provided comments to The ISWG education coordinator on 12/20/2014. 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 1/15/2015.	None
2		
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.

Permit	Description of Progress	Changes
Year 1	Television advertising 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).  The following television campaign data were provided by Time Warner Cable:	None
	Ducky 1 – 824 runs Devil Duck – 1240 runs Total – 2064 runs Estimated reach: 35.9% Estimated Frequency: 3.8	
	Online advertising The ISWG education coordinator developed online ads with a clean water message that directed to www.ThinkBlueMaine.org. 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.	
	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).	
	Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign increased 82% over the previous four month period. Between March and June 2014, hits to	

Permit	Description of Progress	Changes
Year		
	www.ThinkBlueMaine.org equaled 1,365. Hits between	
	November 2013 and February 2014 equaled 794.	
2		
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)
- 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).

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		
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 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)

Permit	Description of Progress	Changes
Year		
1	The Plan's PY1 activities and the progress completed for each activity is described below:	The survey of awareness is being
	Develop standard PowerPoint presentation that is easily tailored to target municipalities. – 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.	developed and will be carried out in Permit Year 2.
	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. – 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.	
	Develop talking points for use when meeting with newly elected officials; provide to ISWG reps for use when meeting with newly elected officials Talking points for newly elected municipal officials will be finalized upon completion of the municipal fact sheets.	
	Provide regional good housekeeping/pollution prevention training for municipal staff. Training was provided at the	

Permit	Description of Progress	Changes
Year		
	APWA Highway Congress 6/5/2014. Two (2) Cumberland public works employees attended.	
	Provide display or demonstration at APWA's Highway Congress. CCSWCD provided an educational display about proper vehicle washing at APWA's annual Highway Congress, held on June 6, 2014.	
	Develop and carry out annual survey of ISWG municipal representatives (or other relevant municipal staff) to gauge level of awareness. 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.  Cumberland's municipal outreach is scheduled for Permit Year 4.	
2	1601 4.	
3		
4		
5		

# BMP 1.4: Continue Targeted Best Management Practices 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.

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	None
	Measurable Goal 1.5.2 and therefore progress is reported	

Permit	Description of Progress	Changes
Year		
	under Measurable Goal 1.5.2.	
2		
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
- 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.	
2		
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 five 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. There were no changes to the Measurable Goal

# Point of Sale

Task	Status	Details
Retain 21 Point of Sale locations in the ISWG communities.	complete	Two additional Point of Sale locations joined the program in 2014 (Broadway Gardens in Westbrook and Home Depot in Windham), one store decided to not participate in the program (Radley's Hometown Hardware in Old Orchard Beach) bringing the total number of stores participating in the program to 22. The distribution of the stores is as follows:  Biddeford: 0 Cape Elizabeth: 0 Cumberland: 1 Falmouth: 2 Freeport: 1 Gorham: 2 Old Orchard Beach: 0 Portland: 2 Saco: 1 Scarborough: 2 South Portland: 3 Westbrook: 2 Windham: 3 Yarmouth: 3
Establish Point of Sale program in Home Depot stores	ongoing	The ISWG education coordinator began piloting the Point of Sale program in the Windham Home Depot store in the spring of 2014. Program components are being tracked and evaluated to determine an effective program for Home Depot stores. It is anticipated that all Home Depot stores in the ISWG communities will be included in the Point of Sale program in 2015.

# **Adult Education**

		Cumberland: 9/21/2013, 5 participants
Offer a minimum of		Scarborough: 9/25/2013, 7 participants
seven adult	complete	Gorham: 9/29/2013, 11 participants
education classes per	complete	Falmouth: 3/26/2014, Youth YardScaping teacher training, 8
year		participants
		Scarborough: 4/9/2014, 14 participants

		Falmouth: 6/2/2014, Falmouth Middle School Youth YardScaping presentation, 32 participants  Falmouth: 6/3/2014, Falmouth Middle School Youth YardScaping presentation, 28 participants  Falmouth: 6/4/2014, Falmouth Middle School Youth YardScaping
		presentation, 38 participants Falmouth: 6/5/2014, Falmouth Middle School Youth YardScaping presentation, 35 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 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 PY5 classes, as well as those practices participants of PY1 classes intend to implement below.

#### **Adult Education Behavior Change Tracking**

During the fall of 2013, CCSWCD staff made follow up phone calls with participants of YardScaping adult education classes held in the fall of 2012 and spring of 2013 (PY5 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.

Projected Behavior Change from 2008 PY5 classes				
Lawn Care Practice	Plan to implement	Implemented Practice	Projected behavior change based on follow up	
Set Mower to a height of 3"	17	17	100.00%	
Leave grass clippings	9	9	100.00%	
Sharpen mower blades	17	4	23.53%	
Aerate	37	20	54.05%	
Topdress	37	19	51.35%	
Overseed	38	25	65.79%	
Use low maintenance seed	39	25	64.10%	
Get a soil test	38	5	13.16%	
Use nitrogen-only fertilizer	34	9	26.47%	
Use compost tea	26	9	34.62%	

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. Below are the results of the Permit Year 1 post-class evaluations completed by the YardScaping class participants.

2013 PY1 Post-Class Evaluations				
Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement	
Set Mower to a height of 3"	4	4	100.00%	
Leave grass clippings	5	5	100.00%	
Sharpen mower blades	10	10	100.00%	
Aerate	22	23	95.65%	

Topdress	21	22	95.45%
Overseed	16	16	100.00%
Use low maintenance seed	15	16	93.75%
Get a soil test	19	20	95.00%
Use nitrogen-only fertilizer	16	20	80.00%
Use compost tea	20	22	90.91%

CCSWCD staff will contact the class participants from the Permit Year 1 classes in the fall of 2014 to determine which behaviors have been adopted.

# **Targeted Information Distribution**

rargeted injornation bistria	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
One neighborhood per	Freeport: 40
ISWG community	Gorham: 68
distributed targeted lawn care outreach materials	Old Orchard Beach: 77
care outreach materials	Portland: 203
	Saco: 107
	Scarborough: 110
	South Portland: 86
	Westbrook: 205
	Windham: 92
	Yarmouth: 61

# Websites & Free Media

Maintain and monitor CCSWCD YardScaping website	YardScaping classes, socials and point of sale stores were updated on CCSWCD's YardScaping website and social media was used to provide healthy lawn care information to followers and the public. Increased hits were seen after targeted neighborhood outreach efforts, public events, and adult education presentations.
Newspaper coverage of YardScaping activities and healthy lawn care	Portland Press Herald: Create a thriving backyard community (May 31, 2014)  Portland Press Herald: Maine Voices: Clean water can't be taken for granted (April 13, 2014)  Portland Press Herald: Conventional and organic approaches (April 6, 2014)  Portland Press Herald: Maine Gardener: Feeling fallish? Your lawn is, too (October 6, 2013)

# Activities completed in addition to those identified in the plan

# 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) Identify 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
- h) 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	Description of Progress	Changes
Year		
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		
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 two. The review will include process and impact indicators as outlined in the Targeted Outreach in Priority Watershed Plan. In permit year five an analysis of the process and impact indicators of the Targeted Outreach in Priority Watershed Plan will be provided.

Permit	Description of Progress	Changes
Year		
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		

Permit	Description of Progress	Changes
Year		
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	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:  Cumberland  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	
2		
3		
4		
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	Description of Progress	Changes
Year		
1	The Town provided public notice of its NOI and SWPM Plan	None
	on the Town website.	
2		
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)

Permit	Description of Progress	Changes
Year		
1	The ISWG meetings are open to the public. A listing of	None
	meetings and attendance is provided in Appendix A.	

Permit	Description of Progress	Changes
Year		
2		
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)

Permit Year	Description of Progress	Changes
1	Urban Runoff & Green Neighbor Family Fest	None
	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.	
	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	

Permit Year	Description of Progress	Changes
	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 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.	
	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.	
	The Green Neighbor Family Fest 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.	
	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 fourth annual <i>Urban Runoff</i> 5K and <i>Green Neighbor Family Fest</i> on Saturday, April 25, 2015.	
2		
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

Permit	Description of Progress	Changes
Year		
1	The Town updated its electronic infrastructure map	None
	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	

Permit	Description of Progress	Changes
Year		
	associated with State DOT Roads (Main Street, Tuttle	
	Road)	
2		
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	Description of Progress	Changes
Year		
1	Appendix B contains a copy of the IDDE Tracking	None
	Spreadsheet. No NOVs were issued during Permit Year	
	1.	
2		
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		
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	Description of Progress	Changes
Year		
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		
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	Description of Progress	Changes
Year		
1	No work was required to be completed this Permit Year.	None
2		
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	Description of Progress	Changes
Year		
1	No work was required to be completed this Permit Year.	None
2		
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 3.7.1 - 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.

Permit	Description of Progress	Changes
Year		
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.	None
	The Town provided the PWD with shape files showing the	

Permit	Description of Progress	Changes
Year		
	highest priority watershed (Presumpscot River Watershed	
	HUC 0106000103) on June 3, 2014.	
2		
3		
4		
5		

Measurable Goal 3.7.2 - 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	Description of Progress	Changes
Year		
1	No work was required to be completed this Permit Year.	None
2		
3		
4		
5		

Measurable Goal 3.7.3 - 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.

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

Measurable Goal 3.7.4: 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	Description of Progress	Changes
Year		
1	No work was required to be completed this Permit Year.	None
2		
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.

Permit	Description of Progress	Changes
Year		
1	The Town's consultant met with the DMR on 6/25/2014.	None
	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	

Permit	Description of Progress	Changes
Year		
	MS4 Program. DMR will make available their historic	
	database of recent sampling.	
2		
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 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;

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.

Permit	Description of Progress	Changes
Year		
1	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.  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.  The Town also maintains a library of available information and handouts for contractors and developers as well.	None
2		

Permit	Description of Progress	Changes
Year		
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	Description of Progress	Changes
Year		
1	The spreadsheet documenting the sites that required	None
	inspections is contained in Appendix C.	
2		
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)

Permit	Description of Progress	Changes
Year		
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 site whose construction ended in Permit Year 1 (Maine Standards Building). The other sites (Friends School and Raven Farm Substation) are still under construction and inspections will continue.	None
2		
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	Description of Progress	Changes
Year		
1	The Town continues to enforce this ordinance. No NOVs were issued.	None
2		
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

Permit	Description of Progress	Changes
Year		
1	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).  One site (the Maine Standards Building) is due to provide a Post-Construction maintenance certification to the Town in the Fall of 2014.	None
2		
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.

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

Measurable Goal 6.1.3 – 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.

Permit	Description of Progress	Changes
Year		
1	Three Public Works employees, two Parks employees and the Public Services Administrative Assistant were trained on 10/20/2014 in the following topics:  - MS4 Program in general  - IDDE procedures for outfall inspections and ditch inspections	None
	<ul> <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</li> </ul>	

Permit	Description of Progress	Changes
Year		
	municipal operations facilities	
	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.	
2		
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	Description of Progress	Changes
Year		
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		
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	Description of Progress	Changes
Year		
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		
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	Description of Progress	Changes
Year		
1	A summary of the drainage repairs completed in town during Permit Year 1 is provided in Appendix D.	None
2	S - S - S - S - S - S - S - S - S - S -	
3		
4		

Permit Year	Description of Progress	Changes
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	Description of Progress	Changes
Year		
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		
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

Title: Town Manager

# **APPENDIX A**

**ISWG Attendance** 

## Interlocal Stormwater Working Group Permit Year 1 Meeting Attendance

Last	First	Organization/Municipality	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	TOTAL
Blanchette	Angela	Saco	1	_	ЭСР	1	-	Dec	Juii	- 100	1	Apı	1	-	4
Bobinski	Mike	City of Portland	-		_		-		$\vdash$				-		
Bohlen	Curtis	Casco Bay Estuary Partnership	1		_		-		_		-		1	-	2
Bolduc	Michael	City of Saco	-		_		-		-		_		-	-	
Bradstreet	Steve	Ransom / Cumberland	1	-	_		1		_		_	-		-	1
Branscom	John	Maine Turnpike Authority	1	_	_	1	-		1		1		1		5
Buckley	Stephen	Scarborough	1	_	1	_	_		1	-	1		1		6
Burns	Robert	Gorham	1	_	1				1	-	1		-	-	5
Clannon	LaMarr	Maine NEMO	+ -		-		1		-			-		-	
Corbin	Garrett	MMA		-	_		-		-						
Decrosta	Steve	Falmouth Conservation Commission		-	_		-		-	-	_	-	_	-	<u> </u>
Dillon	Fred	South Portland	1	-	_	1	-		1		1	-	1	-	5
Diskinson	Mel	Falmouth Conservation Commission	-	-	_		-				-			-	
Dubois	Marianne	Maine DEP		-	_		-		1			-	_	-	1
Dudley	Eric	Westbrook		-	_	1	-								1
Earley	Kathi	Portland	1	-	_	1			-		1	-	1	-	4
Finch	Susan	SMCC	-	-	1	+	-		1		1		1	-	5
Fitch	Jami	CCSWCD	1	-	1	_			1	-	1		1	_	6
Fortier	Doug	Windham	1	_		1	-		1	-	1	-	1	-	5
Gammon	Todd	AMEC	-	-	_		-		-	-		-		-	
Gallinaro	Nancy	Portland		-	_		-		-	-		-	1	-	1
Harding	Steve	AMEC	1	-	_	1	-		1	-	_	-	1		4
Henderson	Zach	Woodard & Curran	-	-	_		-			-		-		-	-
Hinderliter	Jeffrey	OOB	1	-	_		-		-	-	_	-	_	-	1
Howard	Carter	Saco	-	-	_		-		-	-		-	1	-	1
Johnson	Steve	Yarmouth	1	-	_	1	-		-	-	1	-	1		4
Katsiaficas	Jim	Perkins Thompson	-	-	_		-		-	-		-		-	-
Kidder	Tyler	USM		-	-		-		1	-	-	-	_	-	1
Kuhns	Mick	Maine DEP		-	_		-		-	-	_	-	-	-	
Ladd	David	Maine DEP		-	1	1	-		1	-	1	-	_	-	4
Leavett		Westbrook	1	-		1	-		1	-	1	-	1	-	5
Lee Pinard	Lynn Tamara	CCSWCD	1	_	1				1	_	1			-	5
Malley	Robert	Cape Elizabeth	1	_	1		-		1	-	1		1	-	6
Milligan	Tom	City of Biddeford	1	_	1		_		1	_	1		1		6
Mountain	Aimee	GZA / MTA	-		-	1	-		-	-	1		1	_	2
Niles	Rich	AMEC	1	-	1		-		$\vdash$	-	1	-		-	3
O'Dore	Aric	Maine Water	-		-		-		-	-	1	-	-	-	1
	Albert		1	-	1	1	-		1	-	1		-	-	5
Presgraves Rabasca	Kristie	Integrated Enviro. Eng. / Cumberland	1	_	1				1	_	1		1	-	6
		Falmouth	1	_	-	1	-		-	-	<b>⊢</b> ∸	-		-	1
Reynolds Rinehart	Jay Christine	Wright-Pierce / OOB		_	1	1	-		$\vdash$	-	1		1	-	
Robertson	Bill	Old Orchard Beach	1	-	-	1	-		-	-	1	-	1	-	5
Roncarati		Portland	1	-	1	1	-		1		1	-	1	-	6
	Doug		1		-	_	-		-	-	1	-	1		3
Saunders	Robyn Michael	CCSWCD; GZA / MTA (through Jan. 2014)	1		1	1	-		-	-		-			4
Shaw	Erik	Scarborough	1	-			-		-	-	1	-	1	-	4
Street		Yarmouth	_	-	_		-		-	-		-		-	-
Strouse	Aubrey	Verdent Water	1	-			-		-			-	-	-	1
Thomes	David	South Portland MDOT	_		1				-		-			-	
Tibbetts	Steve		1		1				-		1			-	3
True	Heather	CCSWCD		-	-		-		-		-	-	-	-	<del>-</del>
Wendel	Jim	Scarborough	+ .	-	<u> </u>		-		<u> </u>		-	-	-	-	<del>                                     </del>
White	Kelsey	CCSWCD	1		1				1						3
Witherill	Don	Maine DEP	+												-
			28		17	22			19		24		22		132

# **APPENDIX B**

**IDDE TRACKING SPREADSHEET** 

# Town of Cumberland Stormwater Phase II IDDE Tracking Sheet

Date of	Location of Potential Illicit	Description of Observations, Actions Taken/Resolution : Outcome of actions taken and	<u>Date</u>
<u>Discovery</u> :	<u>Discharge</u> :	any necessary follow-up (what was done)	Resolved:
5/15/2014	Outfall GR-01 (Greely Road)	Observation of high nutrient content at outlet during dry weather outfall inspection. Steady flow (~1-5 gpm). Checked upstream catchbasins: directly across street had steady flow, source could be groundwater from ditches, upstream: gr-05 (closest cb, which had only a little flow) and gr-04 (upstream of gr-05 - no flow). Likely flow is from groundwater intrusion, and wetlands across street. A little standing foam observed.  Revisited 6/17/2014 and tested for surfactants using ChemMetrics methylene blue anionic surfactants test kit. Detected 0-0.25 mg/l surfactants (tested two samples). Also tested using ammonia field test strips - no ammonia detected. EPA Bacteria Source Tracking Protocol (2012) indicates surfactants in excess of 0.25 (not 0-0.25) mg/l may suggest human bacteria source. For this outfall, concentrations were below EPA threshold.  Foam may be from natural source, wooded area across Greely Road.  Recommend additional inspections in cooler weather - September or October.	
5/15/2014	Outfall SRL-01 (Shady Run Lane near outlet control structure)	Observation of foam at catchbasin upstream of outlet. This structure receives water from a wet wooded area near a residence. Recommended revisit and checking with homowner to see if there was a plumbing problem.  Revisited 6/17/2014 and tested for surfactants using ChemMetrics methylene blue anionic surfactants test kit. Ran two samples, did not detect any surfactants. Ammonia field test strips detected no ammonia. Remove recommendation to check for plumbing problem unless further issues noted. Recommend additional inspections in cooler weather - September or October.	

# Town of Cumberland Stormwater Phase II IDDE Tracking Sheet

Date of	Location of Potential Illicit	Description of Observations, Actions Taken/Resolution : Outcome of actions taken and	<u>Date</u>
<u>Discovery</u> :	<u>Discharge</u> :	any necessary follow-up (what was done)	Resolved:
6/24/2014	Outfall HD-01 (Hemlock Drive)	Observation of high nutrient content at flowing discharge during outfall inspection.  Sampled for ammonia and surfactants on 6/24 and 6/25: both showed no ammonia and max 0.25 mg.l surfactants. Observations were slimy green algae. EPA Bacteria Source Tracking Protocol (2012) indicates surfactants in excess of 0.25 (not 0-0.25) mg/l may suggest human bacteria source. For this outfall, concentrations were below EPA threshold.	
		Inspections upstream of outfall were conducted - described here from the locations closest to the outfall, back up to furthest from the outfall: inlet across hemlock drive adjacent to resident's "japanese garden" showed steady flow from a ditch adjacent to the garden. Walking upstream along the ditch, lead to a wooded wet area with high nutrient content - some iron oxidixing (orange) as groundwater becomes surface water. This wet area upstream of the garden was also very high nutrient and is likely just high nutrient because of all the organic matter in the wet area. Working further upstream, pipe discharging to this area comes from PW-06 (first upstream catch basin on Pinewood Drive) which had no flow. Just to see what was further upstream, checked PW-05 which had no flow either, but showed some green coating - indicative of high nutrient dishcarges.  Recommend re-inspection of outfall and PW-06 and PW-05.	



Meeting minutes for the Town's Planning Board were reviewed and the following projects may have exceeded the threshold of one acre disturbance. A discussion of whether these sites trigger the Post Construction Ordinance is provided in the notes section.

<b>Meeting Date</b>	Map/Lot	Site Name/Description	Notes	Action to take?
	U 11 Lot 01 Permit 13-			
	147 issued 8/1/2013		The Town maintains the	
2013 Building			stormwater infrastructure	KLR to report maintenance during
Permits		School District Renovations	under contract to the district.	annual reporting
			Construction of large single	
			family home in Urbanized	
	8/6/2013 Permit 13-		Area, but disturbed area was	
	151	107 Ravine Road	less than one acre of land.	None
	131	107 Kaville Koad	less than one acre or land.	None
			Single family construction,	
			large home, inside the	
			Urbanized Area, but	
			discharges to either a private	
	U02 0005	Nicola's Way	road or Route 88 (non MS4)	None
	002 0003	Tricola 5 vvay	Todd of Noute 00 (non 1915-1)	None
				Dill I am along a sefimon and a service size.
				Bill Longley confirmed construction
				inspections have been underway
				during 2013/2014 and will continue
				until construction is complete. A
				maintenance agreement will need to
				be completed when construction is
		Friends School just east of Rt	Major Site Plan Sketch Plan	complete and Post Construction
		1 on the	submitted in 2013 - under	Certifications will need to be
		Falmouth/Cumberland Town	construction on 4/24/2014	provided to the Town annually (est by
2013	R01 Lot 10	Line	when KLR drove by.	July 1, 2015).

<b>Meeting Date</b>	Map/Lot	Site Name/Description	Notes	Action to take?
			Construction completed	
			2013, but site is outside the	
2013		Drowne Road Subdivision	UA	None
			This site is located off of	
			Route 100 outside the 2010	
2013	Map U21 Lot 1	Emerald Commons	Urbanized area.	None
			Site received an extension for	
			major site plan review. South	
			side of Greely Road, outside	
2013		Cumberland Animal Clinic	UA.	None
		Castle Rock Business park / 17	Located off Route 100/Mill	
2013	R07C Lot 1A lots 1-17	single family dwellings	Road - outside the UA.	None
			Located off Whitney and	
2013		Cider Mill Subdivision	Orchard Roads - outside UA.	None
			Though this site is within the	
			UA, all stormwater	
			infrastructure drains to Route	
			88, which is DOT MS4 area,	
			not Town MS4. No	
			Maintenance Agreement	
2013	U03 Lot 2C	R&N Subdivision	necessary.	None
			Though this site is within the	
			UA, all stormwater	
			infrastructure drains to Route	
			88, which is DOT MS4 area,	
			not Town MS4. No	
			Maintenance Agreement	
2013	U02 Lot 5	Maeve's Way	necessary.	None

Meeting Date	Map/Lot	Site Name/Description	Notes	Action to take?
			Construction was completed	
			in October 2013. Site came	
			back through planning board	
			to relocate propane tanks	
			and change landscaping	
			(buffer) Bill Longley	
			confirmed construction	
			inspections were completed.	
			This site is within the UA, and	
			discharges east toward Rt 88,	First Annual maintenance
		221 US Route 1 Maine	but does discharge into Town	certification needs to be submitted
7/16/2013	R02 Lot 10	Standards	MS4 areas.	November 2014.
		CMP transmission line and	Extension was granted for	
	R02, Lot 31, and R04,	substation work.	work to be conducted	Property will be part of the Raven
	Lots 26, 27, 28, 36,		because of project delays.	Farm Substation. One maintenance
	R06A, Lot 35 and R08,		Most parcels are within the	agreement can be signed for both
7/16/2013	Lot 28		UA.	projects. Still under construction.
			located on Sturdivant Island -	
9/16/2013	108 Lots 07 and 08	Minor Subdivision	outside the UA.	None
			Add standard to Article 1 SS	
			250-1 "proposed subdivision	
			will not result in undue water	
10/15/2013	Subdivision Ordinance	Subdivision Ordinance Change	or air pollution"	None
		Congregational church parking	538 square feet and outside	
11/19/2013	U11 Lot 48	and driveway expansion	UA.	None

Meeting Date	Map/Lot	Site Name/Description	Notes	Action to take?
			Inside UA - Major Site Plan Review. 16 developed acres which includes five acres of parking and playing fields.	Construction inspections are ongoing, (Bill Shane has done the first and will do the last inspection, as no third party inspector has been hired. Contractor's engineer, Blaise, is providing inspection reports after each rain event.) Post Construction ordinance will be triggered. Need
			in the future (a gym and	agreement signed and certifications
11/19/2013	R01 Lot 10	Friends School 11 US Route 1	playing fields 2 and 3).	moving forward (by July 1, 2015).
			Located on the west side of Rt 1, near the Falmouth border, this site is just outside the UA. Major site plan review for medical	
12/17/2013	R01 Lot 11	Sky View Drive	office.	None
12/17/2013	R08 Lot 60A	79 Orchard Road		None
1/21/2014	U07 Lot 13	120 Longwoods Road	Business expansion from Corey Road - outside UA.	None
	U18 Lot 6, 1-17	Morrisons Hill Subdivision	Located off Route 100 near	None
3/18/2014	None	None	None	None
		78 us Route 1 Construction of a 2,560 sq. ft. Contractors Space in the Office Commercial South district. Owner Florence Nightengale	Development occuring on 2.8 acre of land just outside the Urbanized Area (in between	
4/15/2014	R01 Lot 12A	Corp.	US Route 1 and I-295)	None

Meeting Date	Map/Lot	Site Name/Description	Notes	Action to take?
			Requesting removal 106,099	
			sq. feet from Lot 6 to be	
			added to adjacent property	
			to the west. Development is	
		Major Subdivision	just outside the Urbanized	
		Amendment to Cumberland	Area (in between US Route 1	
4/15/2014	R01 Lot 11B and Lot 6	Foreside Village Subdivision	and I-295).	None
			Sketch Plan Review for three	
			phase subdivision. Phase I	
			was apprvoed on 1/8/2005;	
			Phase II on 1/17/2012. This	
			phase is construction of a 200	
			foot extension of Old Colony	
			Lane and culdesac for 4 single	
			family house lots. Outside	
			the Urbanized Area (south	
		Normand Berube Builders.	west corrner of town off	
4/15/2014	R07 Lot 71	Major subdivision.	Blackstrap Road.	None

Meeting Date	Map/Lot	Site Name/Description	Notes	Action to take?	
			Subdivision of this 50.75 acre		
			lot into three parcels, one of		
			which will have 3 house lots		
			was requested. A portion of		
			the lot is in the Urbanized		
			Area. Single family homes		
			are being proposed on each		
			of the sites. No outside		
		Minor Subdivision Review for	agency approvals are		
		3-lots at 460 Greely Road Ext.	required (disturbance will be		
		Onwers Anthony and Michelle	less than one acre of land).		
		Cardoza. "Break-A-Way"			
5/20/2014	R06 Lot 34	Subdivision.		None	
3/20/2011	1100 200 3 1	Subdivision.		The state of the s	
			Right of way is being offered		
		3 Longwoods Road subdivision			
		of land into two lots and	Harris Road in addition to		
		conveyance of right of way to	subdivision. Site is outside		
5/20/2014	R03 Lot 20A	Town.	the Urbanized Area.	None	
			Development of 2.8 acre lot		
			includes construction of		
			building <1,000 sq. ft. on an		
			area that is already		
			developed. Building will be		
			accessed by an existing gravel		
			drive. Though within the		
			Urbanized Area, the		
		Minor Site Plan Review for 295	disturbance is less than one		
5/20/2014	R04 Lot 3A	Tuttle Road Dog Day Care	acre.	None	

## Cumberland Construction/ Post Construction Review 2013-2018

Meeting Date	Map/Lot	Site Name/Description	Notes	Action to take?	
			ft. building is on site just		
			outside of the Urbanized		
			Area (reviewed during		
			4/15/2014 Planning Board),		
			Lot 6 which was split from		
6/17/2014	R01 Lot 06	Cumberland Foreside Village	11B	None	
			Seven lots with a common		
			open space area of 415,000		
		Major Subdivision on Orchard	sq. ft. This development is		
6/17/2014	R08 Lot 63	Road. Cider Mill, LLC	outside the Urbanized Area.	None	

# Post Construction Tracking Spreadsheet July 1, 2013 through June 30, 2018

Map/Lot	Date First Certification Required	Project Name	Owner/Operator Contact Name, Address, Phone	Discharge to UIS or Lake at Risk? (Provide name of Water if Yes)	Permit Year 1 Certification Information (July 1, 2013 - June 30, 2014)		
					Annual Certification Submitted?	Are all site BMPs functioning as intended?	Maintenance completed (if required)
R02 Lot 10	11/1/2014		221 US Route 1 Maine Standards	No	Not required		
R02 Lots 34B 34C, 34E, 34D, and portion of RR2 Lots 38E and F.	7/1/2015	Raven Farm Substation an Power transmission	Central Maine Power 37 Greely Road	No	Not required		
R01 Lot 10	7/1/2015	Friends School 11 US Route 1	Friends School 11 US Route 1	No	Not required		



#### Cumberland Drainage Repairs completed Permit Year 1: July 1, 2013 – June 30, 2014

- 1. 19 Carriage edge of road erosion
- 2. Carriage and Hallmark catch basin area erosion
- 3. Chet's Way edge of road right up against pavement washed out needs cones
- 4. Conifer Ridge side of road washed away
- 5. 301 Foreside Road Drainage overflow washed out embankment, took down tree materials all washed down gully to ocean
- 6. Town Landing sides of road washed out and
- 7. Corner of Balsam and Hemlock 2.5 foot sink hole on shoulder of road
- 8. 237 Middle Road across from Burr's. Culvert overflow washed out her driveway.

  Madeline Worrey wants us to repair –can't get in and out
- 9. Route 9 near Woody Creek
- 10. 24 Hillside Ave
- 11. Greely Rd by Hillside
- 12. 18 Middle Road
- 13. 248 Middle Road
- 14. Middle Road by Storey Bros
- 15. Route 9 by Syt Design
- 16. Blanchard Road by Mulberry
- 17. Ocean Terrace near Birch 5' X4' sink hole on shoulder going into road
- 18. 12 Pinewood shoulder washing out
- 19. Blanchard Road Cross culvert between Kenney's and Browns clogged
- 20. Branch down by #58 Hawthorne Court #45 ground under gutter washed away