



PERMIT YEAR 6 ANNUAL REPORT
July 1, 2018 through June 30, 2019
MUNICIPAL SEPARATE STORM SEWER SYSTEM
PERMIT

FOR

TOWN OF CUMBERLAND, MAINE

Due to Maine DEP September 15, 2019
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via email to Rhonda.Poirier@maine.gov

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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.

Though the General Permit was due to expire on 6/30/2018, it was administratively continued until another General Permit can be issued. This document constitutes the annual report for Permit Year 6 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 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>The Town is in compliance with the Permit Conditions based on the Stormwater Program Management Plan (revised 4/3/2014) reviewed by the Maine DEP on 4/4/2014, and updated May 2019 to include Permit Years 6 and 7</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>
b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.	<p>No wet weather monitoring data was collected by the Town during Permit Year 6.</p> <p>Any monitoring data collected as a result of illicit discharge investigations is described in Minimum Control Measure 3.</p>
c. A summary of the stormwater activities the town intends to undertake pursuant to its Plan during the next reporting cycle.	<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>

Annual Report Requirement	Cumberland Status
d. A change in any identified BMPs or measurable goals that apply to the Plan.	Changes to the BMPs or measurable goals are identified in Section 2, where the progress is reported.
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).	Section 2 of this annual report contains the details of the Town's progress on the measurable goals for each of the BMPs.

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 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).

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.

Measurable Goal 1.1.1 Continue Awareness Outreach Efforts		
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 thinkbluemaine.org website is posted on the public services web page.	None
2	Same as Permit Year 1 The link to the thinkbluemaine.org website is posted here: 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/	None

Measurable Goal 1.1.1 Continue Awareness Outreach Efforts		
Permit Year	Description of Progress	Changes
3	Same as Permit Year 2.	None
4	Same as Permit Year 2. In addition, CCSWCD updated the thinkbluemaine.org website in Permit Year 4.	None
5	Same as Permit Year 2, except the link to the Think Blue Maine website is located here: https://www.cumberlandmaine.com/stormwater/faq/cumberland-part-'think-blue'-clean-water-program	None
6	No work required this Permit Year. Note the link to the Think Blue Maine website is located here: https://www.cumberlandmaine.com/stormwater	Acknowledging this MG only applied to PY1

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.

Measurable Goal 1.2.1 Create Public Stormwater Awareness Plan		
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.

Measurable Goal 1.2.1 Create Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
2	No work required or completed this Permit Year.	None
3	No work required or completed this Permit Year.	None
4	<p>On behalf of ISWG, CCSWCD worked with representatives from the MS4 regional groups to revise the existing DEP-approved Statewide Awareness Plan throughout PY4. The original DEP-approved Plan called for the statewide public survey to be conducted in PY4; however, DEP felt that the Plan timeline conflicted with the Permit language and required that it be changed. Through official correspondence, phone conversations, and a video conference between DEP and representatives from the MS4 regional groups on 12/5/16, a compromise was reached.</p> <p>The survey component of the Statewide Awareness Plan was modified as follows and approved by DEP in a letter dated 2/21/17:</p> <ul style="list-style-type: none"> • Permit Year 4 requirements: <ul style="list-style-type: none"> ○ Finalize survey tool: incorporate DEP's comments into the survey and circulate it to DEP and regional groups for review and comment circa February 2017 ○ Finalize survey methods: input final survey into an online tool (i.e., Survey Monkey) circa March 2017 ○ Pilot survey: request that statewide partners, municipal staff, and others test the online survey and provide feedback on question language, survey duration, etc. by May 31, 2017; modify survey as needed based on pilot survey feedback on or by June 30, 2017 • Permit Year 5 requirements: <ul style="list-style-type: none"> ○ Implement statewide survey: use targeted online advertising to drive traffic to the statewide survey; also purchase survey responses from Survey Monkey to inform evaluation ○ Analyze survey results: provide a draft analysis/report to regional groups by June 30, 2018 ○ Provide assessment of all awareness activities: finalize analysis based on input from the facilitators of the statewide clusters for inclusion in the PY5 annual report (due September 15, 2018) 	None

Measurable Goal 1.2.1 Create Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
5	No work required or completed this Permit Year.	None
6	<p>The Maine DEP issued guidance to MS4s indicating they should follow their PY4 public education plans during PY6, and contact Maine DEP if they would be deviating from any PY4 activities.</p> <p>On behalf of ISWG, in an email to DEP dated 12/19/2018, CCSWCD proposed the following activities be completed for Stormwater Awareness during PY6, which DEP approved on 12/21/2018:</p> <ul style="list-style-type: none"> Each MS4 cluster (AVSWG, ISWG, and SMSWG) will coordinate an online media campaign in their region through the placement of ads on Facebook. Each cluster (AVSWG, ISWG, and SMSWG) will provide DEP with at least one Facebook ad authorized contact (name and email). The ducky ads will run for six months, from January through June 2019. Ads will be targeted to the identified awareness audience (men and women, ages 25-65+, who live in Maine). These ads will direct viewers via click-throughs to the Think Blue Maine website. This will be done in lieu of television advertising. In addition, ISWG clarified and DEP agreed that no survey related activities needed to be completed, but that one additional awareness activity needed to be completed as was required in PY 4. 	Yes

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.

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
1	<p><i>Television advertising</i></p> <p>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</p>	None

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>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 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.</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 www.ThinkBlueMaine.org equaled 1,365. Hits between November 2013 and February 2014 equaled 794.</p>	
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 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%</p>	None

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>Estimated Frequency: 2.4</p> <p><i>Online advertising</i> CCSWCD 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 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 www.ThinkBlueMaine.org. Between August and October 2013, there were 672 visits, which is almost a twofold increase in Permit Year 2.</p>	
3	<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 March through June 2016 in PY3. The ads were shown on cable television stations most likely to reach the target audience (i.e., homeowners, aged 35-55, in Maine's 30 MS4 communities), including: AMC, Animal Planet, CNN, Discovery, ESPN, Food Network, Freeform (formally ABC Family), FX, Fox News, HGTV, NESN, National Geographic, Nickelodeon, Outdoor Network, The Weather Channel.</p> <p>The following television campaign data were provided by Time Warner Cable: Total – 525 runs Estimated reach: 52% Estimated Frequency: 4.3</p> <p><i>Online advertising</i> CCSWCD developed online ads with a clean water message that directed users to the Think Blue Maine website. Time Warner Cable placed the ads on websites most likely to</p>	None

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>reach the target audience (e.g. local and national news websites, outdoor-themed sites). The online ad campaign ran continuously from March through June 2016. The average number of impressions⁴ for two-day periods throughout the online ad campaign was approximately 4,500. Time Warner Cable also placed a full-screen advertisement and link to www.ThinkBlueMaine.org on their webmail login screen for a specified two-day period in March. During this time period, ad impressions spiked to nearly 32,000.</p> <p>The following online campaign data were provided by Time Warner Cable:</p> <p>628,789 impressions were run Click through rate = 0.22% (national average is 0.04%).</p> <p>Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign were more than five times higher than hits during the same three-month time period in 2015 when the online ad campaign was inactive. Between March and June 2016, there were 3,347 visits to the Think Blue Maine website. Between March and June 2015, there were 614 visits.</p>	
4	<p><i>Television advertising</i></p> <p>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 2016 in PY4. The ads were shown on cable television stations most likely to reach the target audience (i.e., homeowners, aged 35-55, in Maine's 30 MS4 communities), including: AMC, Animal Planet, CNN, Discovery, ESPN, Food Network, Freeform, FX, Fox News, HGTV, NESN, National Geographic, Nickelodeon, Outdoor Network, The Weather Channel.</p> <p>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 2016 in PY4. The ads were shown on cable television stations most likely to reach the target audience (i.e., homeowners, aged 35-55, in Maine's 30 MS4 communities), including: AMC, Animal Planet, CNN, Discovery, ESPN, Food Network, Freeform, FX, Fox News, HGTV, NESN, National Geographic, Nickelodeon, Outdoor Network, The Weather Channel.</p>	See Measurable Goal 1.2.1 for changes to survey requirements.

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>The following television campaign data were provided by Time Warner Cable:</p> <p>Television Airplay Est. Reach 644 (19.3%) Est. Frequency 2.8</p> <p><i>Online Ads</i> Time Warner Cable placed online ads with a clean water message that directed users to the Think Blue Maine website. Ads were placed 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 2016. The following online campaign data were provided by Time Warner Cable: Impressions – 316,255 Click through: 683 (rate 0.21% compared to industry average of 0.04 to 0.08%)</p> <p>Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign were more than nine times higher than hits during the same three-month time period in 2015 when the online ad campaign was inactive. Between August and October 2016, there were 3,528 visits to the Think Blue Maine website. Between March and June 2015, there were 381 visits.</p> <p><i>Survey:</i> Per the new DEP-Approved Awareness Plan requirements, CCSWCD incorporated comments and feedback from DEP and the MS4 clusters to finalize the statewide public survey for evaluating impact of our awareness activities. CCSWCD also compiled the methods and determined the target sample size for the survey. This information was provided to DEP and the MS4 clusters for their review on 5/12/17. If an additional copy is required, please contact jfitch@cumberlandswcd.org.</p>	
5	<p><i>Television advertising: Not required this year</i></p> <p><i>Online campaign:</i> CCSWCD coordinated an online media campaign in the ISWG region through the placement of ads on Facebook. The devil ducky ad ran for six months, from January through June</p>	

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>2018. Ads were targeted to the identified awareness audience (homeowners, aged 35-55).</p> <p>The following online campaign data were provided Facebook: Reach: 15% Frequency: 3.1 Impressions: 35,149 Link clicks: 171 Click through rate: 0.49% compared to industry average of 0.04 to 0.08%)</p> <p>Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign were more than nine times higher than hits during the previous 6-month period when the online ad campaign was inactive. Between January and June 2018, there were 1,399 visits to the Think Blue Maine website. Between July and December 2017, there were 153 visits.</p> <p><i>Final Evaluation of Awareness Activities:</i> On behalf of the statewide MS4 clusters, CCSWCD implemented the statewide evaluation survey between November 13 and December 18, 2017. The assessment is available for download here: http://cumberlandswcd.org/site/wp-content/uploads/2018/07/Survey_Summary-FINAL.pdf</p> <p>ISWG implemented the process components of the Plan and its revisions in Permit Years 1 through 5 as approved by DEP. Based on the PY5 evaluation survey, as a result of the awareness outreach efforts, 47%¹ of our target audience understands the awareness message, that water runs off their property, not all is absorbed, and carries with it pollutants, such as lawn chemicals, pet waste and oil drops. This polluted water enters the storm drain system and discharges, untreated, directly to water bodies used for drinking, fishing, and swimming. The goal of the Plan was to have 50% of the target audience understand the awareness message. It's worth noting that 50% is within the survey's confidence interval of +5%.</p> <p>The evaluation data also suggest great strides in the target audience's awareness and action from the previous permit</p>	

¹ Statewide and ISWG confidence interval = $\pm 5\%$; Statewide and ISWG confidence level = 95%

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	cycle (2008 – 2013) and this current permit cycle. For example, nearly 70% of respondents understand (by indication that they strongly agree) that actions taken at their residence can affect how clean the rivers, lakes, and streams are in their community. In 2013, only 32% of respondents reported that they strongly agreed with that statement. In addition, in 2013, 25% of the target audience was very willing to take action to reduce polluted runoff. In 2018, this number jumped to 48%.	
6	<p><i>Television advertising: Not required this year</i></p> <p><i>Online advertising:</i> CCSWCD coordinated an online media campaign through the placement of ads on Facebook. The original ducky ad ran for six months, from December 27, 2018 through June 30, 2019. Ads were targeted to the identified awareness audience (homeowners, aged 35-55). The following data were selected from Facebook's advertising metrics:</p> <ul style="list-style-type: none"> • Reach 21,083 • Frequency 2.93 • Impressions 61,846 • Post Engagement 11,219 • Unique 10-second Video Views 2,304 • Link Clicks 777 • Link click-through rate 1.26% <p>Based on Google Analytics, visits to the Think Blue Maine website during the online media campaign were 1.6 times higher than hits between July 1, 2018 and December 31, 2018 when the online ad campaign was inactive. Between July 1, 2018 and December 31, 2018, there were 776 visits. Between January 1, 2019 and June 30, 2019, there were 1,273 visits.</p> <p><i>Promotion/participation in local public events:</i> USM Sustainability Fair: Promotion for this event was conducted by the University of Southern Maine. Participation CCSWCD sent staff to the event on September 7, 2018 to provide stormwater educational activities, demonstrations, and take-home information. Over 60 people attended the fair. The fair also featured local food samples, sustainable living giveaways like bamboo utensils, DIY workshops to make your own household cleaning and beauty products, smoothie bikes, music, and multiple vendors from USM and the community at large who are passionate about sustainability.</p>	None

Measurable Goal 1.2.2 Implement Public Stormwater Awareness Plan		
Permit Year	Description of Progress	Changes
	Urban Runoff 5k and Green Neighbor Family Fest: ISWG community members assisted CCSWCD with the promotion of their 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, 348 posters were distributed throughout the 14 ISWG communities by ISWG representatives. Radio ads aired on 98.9 WCLZ during the month of April and WMTW/CW Channel 8 developed a 15 second ad that ran on their station throughout the month of April. They also conducted six live interviews the morning of the event and covered the race and festival on April 20, 2019. See MCM2 for more details about this event.	

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.

Measurable Goal 1.3.1 Develop Municipal/Permit Awareness Plan		
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	No work required or completed this Permit Year.	None

Measurable Goal 1.3.1 Develop Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
4	No work required or completed this Permit Year.	None
5	No work required or completed this Permit Year.	None
6	The Maine DEP issued guidance to MS4s indicating they should follow their PY4 public education plans during PY6, and contact Maine DEP if they would be deviating from any PY4 activities.	None

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.

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
1	<p>The Plan's PY1 activities and the progress completed for each activity is described below:</p> <p><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.</p> <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</i></p>	The survey of awareness is being developed and will be carried out in Permit Year 2.

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<p><i>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 municipal councils' awareness of their stormwater program. PY2 results will be compared to future years' data.</p>	None
3	<p><i>Permit Awareness materials:</i> CCSWCD modified the "Clean Water is Everyone's Job" poster that was developed in PY2 to create a tri-fold brochure for distribution at annual trainings and events (e.g. Highway Congress). Similar to the poster, the brochure outlines important good housekeeping and pollution prevention practices, including proper vehicle washing, chemical storage, and spill response.</p>	

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<p><i>Council Presentation:</i> A presentation on the MS4 program was given to Town Council on 6/21/2016</p> <p><i>Partner Organization Presentation:</i> ISWG/CCSWCD partnered with BASWG, MaineDOT, and the Long Creek Watershed Management District to provide a winter maintenance roundtable (9/10/2015) for municipal public works staff. The day-long event provided an introduction to the new Maine Winter Maintenance BMP Manual, training on winter maintenance operations outlined in the manual, winter maintenance case studies, and a roundtable discussion. Two people attended from the Town of Cumberland.</p> <p><i>Maine Stormwater Conference:</i> The Public Services Administrative Assistant attended the conference.</p> <p><i>Survey:</i> The CCSWCD administered a survey to ISWG representatives to assess municipal awareness in their Town. Generally, the responses show for the ISWG group: the Town/City Council as a whole knows that the municipality has an MS4 permit, that the majority of the Councilors or Selectmen are aware of the Permit, and that Code Enforcement, Planning, Engineering (if applicable), Public Safety, Parks and Recreation and Public Services has a role in MS4 compliance, and the Town/Councilors/Selectmen are aware there are consequences associated with non-compliance. These results are improved over last year's results.</p>	
4	<p><i>Council Presentation and CCTV:</i> The CCSWCD worked with the Stormwater Coordinator to present MS4 information to the Town Council on 5/22/2017. CCTV slides were also developed by CCSWCD and provided to the town for airing beginning 6/13/2017.</p> <p><i>Partner Organization Presentation:</i> <u>Green SnowPro Workshop – 09/22/16</u> ISWG/CCSWCD partnered with the Long Creek Watershed Management District and experts from New Hampshire's Green SnowPro program to provide training and certification to area winter maintenance workers. Attendees learned winter maintenance techniques that help keep our water resources clean, including:</p> <ul style="list-style-type: none"> • Environmental & infrastructure concerns 	

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<ul style="list-style-type: none"> • Pre-season prep • Site inspection & expectations • Calibration • Pre-treatment: before the storm • During the storm activities • Recordkeeping & salt accounting system <p><u>Regional Clean Water Collaborative:</u> Cumberland County Government, the Greater Portland Council of Governments, CCSWCD and municipal partners have formed the Regional Clean Water Collaborative, aimed to be a comprehensive resource for municipalities for clean water topics. (Cumberland – 1 attendee 5/2/2017)</p> <p><u>Highway Congress: 6/1/17</u> An interactive educational booth about spill response procedures was staffed at APWA's annual Highway Congress, held on June 1, 2017. Time out for Training, a program coordinated by Maine Local Roads, ensured that 76 people visited the booth. Note: attendance in PY4 was lower than in past years due to an error related to the location of the booth.</p> <p><i>Training:</i> see MCM 6</p> <p><i>Survey:</i> The survey was administered to ISWG representatives in PY4. Generally, the responses show for the ISWG group: the Town/City Council as a whole knows that the municipality has an MS4 permit, that the majority of the Councilors or Selectmen are aware of the Permit, and that Code Enforcement, Planning, Engineering (if applicable), Public Safety, Parks and Recreation and Public Services have roles in MS4 compliance, and the Town/Councilors/Selectmen are aware there are consequences associated with non-compliance. The results are equal to or slightly improved over last year's results.</p>	
5	<p>In Permit Year 5, the following activities were completed:</p> <p><i>Talking points / meeting script:</i> CCSWCD developed a meeting script that was customized for each ISWG municipality. The script covered highlights of municipal stormwater programs, current permit requirements, and anticipated new permit requirements in 2018.</p>	

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<p><i>Watershed inventory:</i> CCSWCD compiled quality data for all watersheds in the ISWG municipalities and summarized the data into maps and tables. Data included known impairments (where applicable); restoration or protection work planned or implemented within the watershed; and the status of TMDLs, management plans, and protection plans. The inventory was intended to help municipal managers better understand the water quality needs in their communities.</p> <p><i>Outreach to municipal managers:</i> CCSWCD met with the Cumberland Town Manager, Public Works Director, Stormwater Coordinator and Consultant on 3/29/2018 to review the MS4 program.</p> <p><i>Outreach to Partner Organizations:</i> Not required this permit year.</p> <p><i>Posters:</i> Town office, library, recreation department, schools, post office, convenience stores, coffee shops</p> <p><i>Stormwater Conference:</i> The Town Manager, Assistant Town Manager and Stormwater Coordinator attended the October 2017 Stormwater Conference.</p> <p><i>Permit Awareness Evaluation:</i> On behalf of the statewide MS4 clusters, CCSWCD implemented the statewide evaluation survey between November 13 and December 18, 2017.</p> <p>ISWG implemented the process components of the Plan and its revisions in Permit Years 1 through 5 as approved by DEP. Based on annual surveys of ISWG representatives, municipal councilors have increased their understanding of their municipality's MS4 permit, the requirements within the permit, and the municipal departments that play a role in permit compliance.</p> <p>While municipal councilors' and staff awareness had increased as a result of these outreach efforts, the outreach has also resulted in behavior change in some municipalities. For example:</p> <ul style="list-style-type: none"> • Windham and Gorham hired a shared Stormwater Compliance Officer. Similarly, Portland continues to grow their Water Resources Division within the Department of Public Works. • ISWG representatives have reported that they have 	

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>received more notifications of spills and illicit discharges from municipal staff since municipal outreach began.</p> <ul style="list-style-type: none"> All ISWG municipalities are participating in and providing funding to support the Regional Clean Water Collaborative to address clean water challenges beyond the MS4 permit requirements, as part of a 2-year workplan. With the demonstrated success of the Municipal Permit Awareness Plan, ISWG intends to continue providing outreach to municipal staff and elected officials either as a permit requirement or a separate regional effort in collaboration with Cumberland County Government, CCSWCD and GPCOG. 	
6	<p><i>Outreach to municipal managers:</i> CCSWCD met with the Cumberland Town Manager, Public Works Director, Stormwater Coordinator and Consultant on 2/4/2019 to review the MS4 program. CCSWCD provided the Cumberland MS4 Fact Sheet, updated information on MS4 compliance to ISWG nested and municipal administrators or equivalent in PY6. These meetings focused on identifying ISWG member strengths and areas for improvement in MCMs 1-6. These conversations led to an increase in inter-community collaboration and sharing of ideas.</p> <p><i>Outreach to Town Council:</i> The Stormwater Coordinator provided an overview of the MS4 program to Town Council on 3/19/2019. The Council was engaged during the presentation.</p> <p><i>Outreach to Partners:</i> <u>New England Environmental Finance Center:</u> ISWG/CCSWCD partnered with the New England Environmental Finance Center to provide additional digital stormwater education and outreach resources on common stormwater pollutants. Attendees provided feedback on the resources at the January and May meetings. Drafts of the storymaps were live during PY6. https://neefc.org/tools-resources/</p> <p><u>Highway Congress:</u> An interactive educational booth about identifying common illicit discharges and reporting IDDE events was staffed at APWA's annual Highway Congress, held on June 6, 2019. Time out for Training, a program coordinated by Maine Local Roads, ensured that a total of 125 people visited the booth, including 17 staff members from ISWG communities. Two</p>	None

Measurable Goal 1.3.2 Implement Municipal/Permit Awareness Plan		
Permit Year	Description of Progress	Changes
	<p>Cumberland Public Works employees visited the booth.</p> <p><i>Permit Awareness Evaluation:</i> CCSWCD administered the Permit Awareness Survey for ISWG. Cumberland participated in the survey. The municipal staff and Town Council are aware of the permit.</p>	

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.

Measurable Goal 1.4.1 Continue Targeted BMP Adoption Efforts from Previous Permit		
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	Same as Permit Years 1 and 2	None
4	Same as Permit Years 1 and 2 and 3	None
5	Same as Permit Years 1 through 4	None
6	Same as Permit Years 1 through 5	None

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.

Measurable Goal 1.5.1 Create BMP Adoption Plan		
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	No work required or completed this Permit Year.	None
4	No work required or completed this Permit Year.	None
5	No work required or completed this Permit Year.	None
6	The Maine DEP provided guidance to implement activities required in PY4.	None

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 6. There were no changes to the Measurable Goal.

Task	Status	Details
Summarize plan implementation to date	Complete	Plan goal: As a result of our efforts, at the end of this permit cycle, 15% of college-educated homeowners, aged 35-55, residing in the urbanized area and/or the priority watershed within the ISWG communities and who currently apply fertilizers and pesticides to their lawns will reduce their use of lawn chemicals.

Point of Sale

Retain 21 Point of Sale locations in the	Complete	The ISWG YardScaping Point of Sale Program continued to be maintained at more than the 21 locations required. Twenty-three stores
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ISWG communities		participated in PY6. The distribution of the stores in PY6 is as follows:
		Biddeford: 1
		Cape Elizabeth: 0
		Cumberland: 1
		Falmouth: 3
		Freeport: 1
		Gorham: 2
		Old Orchard Beach: 0
		Portland: 3
		Saco: 1
		Scarborough: 1
		South Portland: 3
		Westbrook: 2
		Windham: 3
		Yarmouth: 2
Maintain Point of Sale program in Home Depot stores within ISWG communities	Complete	<p>The ISWG YardScaping Point of Sale program continued to be maintained in the four Home Depot stores located in ISWG municipalities (Biddeford, Portland, South Portland, and Windham). Program components include distribution of educational materials to the general public and an educational event for customers and staff at each store.</p> <p>Home Depot acknowledged our YardScaping partnership in their 2019 national Responsibility Report (page 66) as a way they are educating customers about reducing polluted runoff.²</p>

Adult Education

Offer a minimum of seven adult education events per year on YardScaping practices	Complete	Once again, the number of YardScaping educational events offered in the ISWG municipalities exceeded the minimum required in the Plan. In PY6, 17 YardScaping events were provided as follows:
		Portland: 8/6/18, Wayside's Riverton Pop Up Picnic, 10 interactions
		Portland: 9/8/18, GreenFest, 63 interactions
		Yarmouth: 9/13/18, Yarmouth Water District community workshop, 4 participants
		South Portland: 9/15/18, Home Depot community education event, 4 interactions
		Scarborough: 9/19/18, adult education class, 22 participants
		Biddeford: 9/29/18, Home Depot community education event, 5 interactions
		Portland: 9/29/18, Home Depot community education event, 3 interaction
		Windham: 10/13/18, Home Depot community education event, 4 interactions
		Scarborough: 3/28/19, adult education class, 8 participants
		Portland: 3/29/19, Maine Flower Show panel presentation, 34 participants
		Windham: 4/3/19, Windham Public Library community workshop, 10 participants
		South Portland: 4/9/19, adult education class, 11 participants
		Falmouth: 4/10/19, Lunt Auditorium community workshop, 24 participants

² 2019 The Home Depot Responsibility Report (page 66) <https://cloud.3dissue.net/17127/17182/17296/18142/index.html>

		Old Orchard Beach: 5/1/19, adult education class, 20 participants
		Portland: 6/22/19, Home Depot community education event, 2 interactions
		South Portland: 6/22/19, Home Depot community education event, 3 interactions
		Windham: 6/29/19, Home Depot community education event, 5 interactions
Promote adult education classes	Complete	Information on YardScaping classes was published in local adult education catalogs, in local newspapers and online calendars, 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 PY6 classes intend to implement below.

Adult Education Behavior Change Tracking

During the fall of 2018, phone calls were made to participants of YardScaping adult education classes held in the fall of 2017 and spring of 2018 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. Our follow-up provided an anticipated rate of compliance for the YardScaping practices that class participants intended to implement.

Follow up from Permit Year 5 Adult Education Classes			
Lawn Care Practice	Plan to implement	Implemented Practice	% behavior change
Set Mower to a height of 3"	20	7	35.0%
Leave grass clippings	6	2	33.3%
Sharpen mower blades	29	8	27.6%
Aerate	40	7	17.5%
Topdress	47	6	12.8%
Overseed	38	9	23.7%
Use low maintenance seed	41	12	29.3%
Weed Control	50	7	14.0%
Get a soil test	47	5	10.6%
Use nitrogen-only fertilizer	39	1	2.6%
Use compost tea	48	8	16.7%

As part of follow up behavior change tracking, CCSWCD asked past participants about barriers to implementing YardScaping practices, if they did not adopt the practices as indicated on their post-class evaluation. The following were common responses:

- *Practices were too expensive*
- *Lack of time to implement practices*
- *Lawn care company would not leave clippings on the lawn, as requested*
- *Chose to not use fertilizers at all*

A total of 99 people participated in the YardScaping adult education classes in PY6. Below are the results of the Permit Year 6 post-class evaluations completed by the YardScaping class participants.

Permit Year 6 Post-Class Evaluations			
Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement
Set Mower to a height of 3"	32	32	100.0%
Leave grass clippings	21	22	95.5%
Sharpen mower blades	32	34	94.1%
Aerate	49	61	80.3%
Topdress	58	76	76.3%
Overseed	51	61	83.6%
Use low maintenance seed	63	76	82.9%
Outcompete weeds	65	78	83.3%
Get a soil test	51	71	71.8%
Use nitrogen-only fertilizer	49	72	68.1%
Use compost tea	44	79	55.7%

CCSWCD staff will contact the class participants from the Permit Year 6 classes in Permit Year 7 to determine which behaviors have been adopted.

Targeted Information Distribution

Distribute lawn care information in one targeted neighborhood per ISWG community	Complete	ISWG used online Facebook ads directed at the target audience for behavior change (college educated homeowners, aged 35-55) in each of the ISWG impaired watersheds. The ads discussed lawncare product impacts in watersheds, provided a YardScaping tip, and directed people to CCSWCD's YardScaping program. The following data were selected from Facebook's advertising metrics:						
		Watershed	Reac h	Frequenc y	Impressions	Post Engagem ent	Link Click s	Link Click-Through Rate
		What is a watershed? ³	3,711	2.78	10,320	765	22	0.21%
		Brickyard Hollow (Yarmouth)	988	1.46	1,442	95	1	0.06%
		Capisic Brook (Portland)	921	1.42	1,306	100	2	0.15%
		Concord Gully Brook (Freeport)	1,370	1.39	1,899	108	2	0.17%
		East Brach Piscataqua River (Cumberland)	697	1.44	1,004	88	2	0.20%
		Goosefare Brook (Old Orchard Beach & Saco)	836	1.45	1,211	103	1	0.08%
		Mill Brook (Westbrook)	1,139	1.31	1,487	115	2	0.13%

³ This ad was targeted to all the ISWG communities during its run time (April 2, 2019 through June 26, 2019).

		Mill Creek (Falmouth)	800	1.46	1,171	112	0	0%
		Pleasant River (Windham)	1,662	1.42	2,362	126	3	0.13%
		Red Brook (Scarborough)	853	1.36	1,156	107	2	0.17%
		Tannery Brook (Gorham & USM)	1,000	1.24	1,244	110	4	0.32%
		Thatcher Brook (Biddeford)	1,266	1.32	1,673	100	4	0.24%
		Trout Brook (Cape Elizabeth & South Portland)	1,411	1.33	1,874	115	3	0.16%

Websites & Free Media

Maintain and monitor CCSWCD YardScaping website	Complete	The YardScaping page on CCSWCD's website is up to date with partner stores and updated fact sheets. YardScaping event information is posted on both CCSWCD's website and Facebook page.
Newspaper coverage related to YardScaping activities and healthy lawn care	Complete	<p><u>Portland Press Herald: Letter to the editor: Careful use of fertilizer helps protect ocean from harmful runoff (August 10, 2018)</u></p> <p><u>South Portland Sentry: Our Sustainable City-Take simple steps this fall to manage your lawn (September 14, 2018)</u></p> <p><u>Portland Press Herald: Portland site part of pesticide collection (September 17, 2018)</u></p> <p><u>South Portland Sentry: Our Sustainable City-What do goats and organic yogurt have in common? (September 28, 2018)</u></p> <p><u>Portland Press Herald: Maine Voices: Use your voice and your vote to protect Casco Bay this election (November 2, 2018)</u></p> <p><u>Portland Press Herald: Wood ash from fireplaces, stove can help the soil (November 13, 2018)</u></p> <p><u>Portland Press Herald: Falling on the ice is bad for you. But ice-melting salt is bad for your garden. (January 20, 2019)</u></p> <p><u>Portland Press Herald: You can – and should – be in the clover (March 24, 2019)</u></p> <p><u>Portland Press Herald: Portland's ban on synthetic pesticides goes into effect (March 25, 2019)</u></p> <p><u>Lancaster Farming: Native plants promote healthy landscapes in Maine (April 5, 2019)</u></p> <p><u>The Forecaster: South Portland considers limits on fertilizer use (April 12, 2019)</u></p> <p><u>The Windham Eagle: "YardScape" for a healthy, safer lawn (April 12, 2019)</u></p> <p><u>Portland Press Herald: Letter to the editor: Ban on chemical fertilizers in line with South Portland's climate goals (April 18, 2019)</u></p> <p><u>South Portland Sentry: Letter to the editor: City pesticide ordinance should have been two-fold (April 19, 2019)</u></p> <p><u>The Forecaster: Algae at Falmouth Town Landing not an issue (yet) (May 14, 2019)</u></p> <p><u>Portland Press Herald: Letter to the editor: Pesticides pose threat to Maine's coastal economy (May 29, 2019)</u></p>

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.

Measurable Goal 1.6.1 Develop Plan for Targeted Outreach in Priority Watershed		
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	ISWG and the York County MS4s submitted the status report to DEP on January 29, 2016. The report summarized the tasks completed to date and provided proposed revisions to the Plan, which included: <ul style="list-style-type: none">1. Revising the message used to reach legislators to address issues raised in the opposition's 2015 testimony.2. Updating the coal tar fact sheet based on the opposition's testimony.3. Conducting proactive outreach to members of the Environment and Natural Resources Committee (e.g. inviting them to attend MEWEA's legislative breakfast on March 3, 2016 and other events as applicable).4. Meet with Representative Daughtry to plan for the next session. ISWG and the York County MS4s received written notification of approval of the Plan revisions on April 8, 2016.	None
4	No work required this permit year.	None
5	Because LD 1235 failed, the ISWG and SMSWG proposed an updated set of tasks to complete for PY 5 to the Maine DEP on 10/12/2017. The DEP responded on 1/30/2018 that the proposed activities were acceptable.	None
6	On behalf of ISWG and SMSWG, the SMSWG consultant provided the DEP with two sets of proposed activities for PY6 via email on	None

Measurable Goal 1.6.1 Develop Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes
	<p>12/18/2018. One proposed set of actions would be implemented if the DEP opposed the proposed Coal Tar Ban, the other would be implemented if the DEP supported the Coal Tar Ban. The DEP accepted the proposed activities on 12/21/2018 and asked that the MS4s provide a check-in mid-March in the event no decision had been made on whether DEP would support or oppose the Bill.</p> <p>DEP did support the bill. The MS4s notified the DEP stormwater contacts of this on 2/22/2019.</p> <p>Measurable Goal 1.6.2 provides details of the proposed activities and how they were implemented.</p>	

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.

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
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	<p>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.</p> <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</p>	None

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes
	<p>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	<p>The status on items completed to fulfil the Plan is as follows:</p> <p><i>Revise Outreach message:</i> Testimony from the 2015 LD1208 hearing was reviewed. The talking points developed in 2015 were updated to address issues raised in the opposition testimony. Information relating to availability of preferred asphalt-based products and municipal support of the coal tar ban was added.</p> <p><i>Update coal tar fact sheet:</i> Testimony from the 2015 LD1208 hearing was reviewed. The talking points developed in 2015 were updated to address issues raised in the opposition testimony. Information relating to availability of preferred asphalt-based products and municipal support of the coal tar ban was added.</p> <p><i>Conduct outreach to Environment and Natural Resources Committee:</i></p>	None

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes
	<p>Representatives from ISWG/CCSWCD and the York County MS4s invited legislators to attend MEWEA's Legislative breakfast on March 3, 2016. Staff attended the breakfast and provided the coal tar fact sheet to interested parties. In addition, staff spoke directly with legislators about the impact coal tar-based sealers have on water resources.</p> <p><i>Meet with Rep. Daughtry:</i> Representatives from ISWG/CCSWCD and the York County MS4s reached out to Rep. Daughtry to discuss plans to reintroduce the bill in the 2016/2017 legislative session. Rep. Daughtry confirmed that she is planning to reintroduce the bill and requested the assistance of ISWG and the York County MS4s to provide educational materials and outreach to the legislators. A meeting to discuss roles and responsibilities is planned for the fall of 2016.</p> <p><i>Additional Activities not identified in Plan:</i> ISWG/CCSWCD met with Mickey Kuhns, DEP Water Bureau Director, and other representatives from DEP to discuss various MS4-related topics. ISWG/CCSWCD sought Mr. Kuhns' input regarding how to successfully achieve a ban on coal tar-based sealers. Mr. Kuhns suggested that successful efforts on the local level would help influence the legislature. He also suggested obtaining more local water quality data that indicates coal tar products and PAHs are impacting Maine's water resources.</p>	
4	<p>As required by the status report, the Towns and ISWG completed the following activities:</p> <p>ISWG and SMSWG met with the LD 1235 Bill sponsor, Rep. Daughtry on 11/29/2017 to review prior efforts for the bill, update each other on research and knowledge of new studies and state's actions, and determine next actions.</p> <p>The revised message to the legislators was determined to be focused in two parts:</p> <ol style="list-style-type: none"> 1. presentation of data collected in the Augusta area by the US Geologic Survey regarding PAHs in areas that had and had not been seal coated. 2. addressing issues described in previous testimony against the legislation. <p>ISWG and SMSWG worked with USGS to download the study data, provide tables and figures summarizing the data obtained, and preparing testimony (neither for nor against) addressing some of the misinformation provided in prior years' testimony. The testimony was provided at the ENR committee on 4/27/2017 by both ISWG and SMSWG.</p> <p>It should be noted that the USGS data was not available for review and</p>	None

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes
	<p>download until 4/11/2017. Therefore, it was not possible to provide the data to the legislators at the MEWEA Legislative Breakfast. However, the Fact Sheet (which was updated in June 2016, prior permit year) was offered to the MEWEA Legislative Breakfast on 3/9/2017 and to legislators at "District Day at the Hall of Flags" on 5/17/17.</p> <p>Additional outreach to one ENR committee member, Representative Volk from Scarborough, consisted of providing the testimony via email. This member voted against the bill.</p> <p>The Maine DEP again testified against the legislation. Though the vote by the ENR committee was 7-6, Ought not to Pass, this result was slightly closer to passing than prior votes which resulted in Ought not to Pass (in 2013, Votes were 7-5-1 and in 2015, votes were 8-4). The bill failed on the floor 74 against the bill to 71 for the bill.</p>	
5	<p>The activities approved by the DEP for Permit Year 5 and their implementation status are as follows:</p> <ol style="list-style-type: none"> 1. <u>Proposed</u>: contact local paving contractors to assess if they already have access to and offer asphalt and/or latex/acrylic sealants (SMSWG Contractors: Libby Scott, Pike (3 locations contacted), Boulangers, Dixon, Shoreline, Pratt Freeman and KC. ISWG Contractors not specified in proposed activities) <ol style="list-style-type: none"> a. <u>Completed</u> – all SMSWG contractors listed were contacted and one additional was contacted. Of these, only three apply seal coating: one uses only coal tar, one uses both coal tar and latex, and one uses only latex or non-coal tar products. Of these three, only one (the one that uses only coal tar) was interested in getting public education materials they can pass on to their clients about the benefits of non-coal tar sealants. The other contractors did not apply seal coating because they stated it is a cosmetic enhancement and does not increase the life of the pavement. b. <u>Completed</u> - ISWG attempted to contact 33 contractors and was able to speak with 12 of them (one phone number was not in service, and two messages were left with each of the other 20 contractors not able to be reached). Of the contractors that were contacted, two do not seal coat, 5 were not interested in hearing about or receiving additional information on alternative (non-coal tar) products. Of the 5 who stated they were interested in receiving additional information on non-coal tar products, 3 were already using non-coal tar products exclusively, one was not sure what kind of product they used and the other one only used the coal-tar product when a client specifically requested it. c. Based on these findings, only two applicators would benefit from public education materials showing the benefits of non-coal tar sealants (the SMSWG contractor who uses coal tar exclusively now and the ISWG client 	None

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes
	<p>who was not sure what they were using).</p> <p>2. <u>Proposed</u>: If they need access to the alternative products, we will provide them with contact information for purchasing (which will vary depending on volume).</p> <p>a. <u>Completed</u> - Based on the information provided, the two contractors that would benefit from information were provided with information on two products that they could use that were alternatives.</p> <p>3. <u>Proposed</u> - We would also offer language for their websites and print advertising regarding the alternative products.</p> <p>a. <u>Completed</u> - Because there were only two contractors that were interested in public education materials, no new materials will be developed.</p> <p>4. <u>Proposed</u> - We will add a pavement sealant component to our YardScaping workshops</p> <p>a. <u>Completed</u> - The Coal Tar Sealant Fact Sheet was offered as a handout at the Lawns to Lobsters and South Berwick workshops and discussed at the end of the Workshops. Fewer than 10 handouts were taken by 33 participants at these workshops.</p>	
6	<p>Because the DEP supported the Bill, the following actions were taken:</p> <p>1. The Towns offered to meet with the bill's sponsor Matthea Daughtry via email on 12/28/2018 and 3/4/2019. Ms. Daughtry could not meet, but did call on 3/5/2019 in preparation for testimony on 3/7/2019.</p> <p>2. The USGS study of runoff in Augusta from coal tar-coated parking lots and non-coal-tar coated parking lots was not published due to a lack of funding. The Towns coordinated with the USGS on several occasions between 11/30/2018 and 3/6/2019 to ensure their data tables and figures from the 2017 testimony were accurate. The communications included emails to the Maine DEP to inform them of the USGS study in Augusta.</p> <p>3. CCSWCD updated the Coal Tar Fact Sheet, and provided it to legislators at the MEWEA legislative breakfast 2/28/2019 along with a copy of the bill. The Town's consultant announced the bill to the attendees and referenced the handouts.</p> <p>4. Both CCSWCD (on behalf of ISWG) and the Town's consultant testified neither for nor against the bill, but provided the ENR Committee members information about the environmental and health effects of Coal Tar Sealants. The Town's consultant reviewed the USGS data tables and figures in detail for the committee.</p> <p>5. The Coal Tar Bill passed the ENR Committee with a recommendation "Ought to Pass", and passed the House, but failed in the Senate during its first vote. The Bill passed both the House and Senate in subsequent votes.</p> <p>6. The Coal Tar Bill passed in the legislature and was signed into Law by the Governor.</p>	None

Measurable Goal 1.6.2 Implement Plan for Targeted Outreach in Priority Watershed		
Permit Year	Description of Progress	Changes

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 – Beginning in Permit Year 2, and annually thereafter, as funding permits, continue to offer the “It’s all connected” school curriculum to elementary and/or middle schools.

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

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.

Measurable Goal 1.7.1 and 1.7.2 Offer “It’s All connected” school curriculum to elementary/middle schools		
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>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, macroinvertebrate sampling, streamside assessment. Schools: Greely Middle School, Greely High School Educator: PWD, CCSWCD</p>	None
2	<p>Cumberland 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 prevention⁴; 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;</p>	None

⁴ Additional funding for groundwater lessons provided by Yarmouth Water District

Measurable Goal 1.7.1 and 1.7.2 Offer “It’s All connected” school curriculum to elementary/middle schools		
Permit Year	Description of Progress	Changes
	<p>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</p> <p>Schools: Greely High School, Greely Middle School</p> <p>Educator: CCSWCD, PWD</p>	
3	<p>Total students: 167 (CCSWCD & PWD: 100, PWD: 67)</p> <p>Total contact hours: 1,320 (CCSWCD & PWD 200, PWD: 1,120)</p> <p>Lesson topics: TroutKids: brook trout habitat requirements and life cycle, water quality monitoring, trout releases at local water body, water quality testing, macroinvertebrate sampling, streamside assessment hike; HydroLogics program: water movement, nonpoint source pollution, water quality, best management practices, and stewardship</p> <p>Schools: Greely Middle School</p>	None
4	<p>Total students: 294 (CCSWCD: 112, PWD: 182)</p> <p>Total contact hours: 720 (CCSWCD: 112, PWD: 608)</p> <p>Lesson topics: Honey Bee life cycle and adaptations, pollination, pollinator importance, pesticides impact; water movement and watersheds; nonpoint source pollution; bioassessment; WaterWays Program, Brook Trout Theme/Trout Kids Program: nonpoint source pollution and impacts, water quality, brook trout habitat requirements and life cycle, stewardship, water chemistry, biological, and streamside assessments;</p> <p>Schools: Mabel I. Wilson Elementary School, Greely Middle School, Friends School of Portland</p>	None
5	<p>Total students: 276 (CCSWCD: 128, PWD: 148)</p> <p>Total contact hours: 765 (CCSWCD: 96, PWD: 669)</p> <p>Lesson topics: Honey Bee life cycle and adaptations, pollination, pollinator importance, pesticides impact; water movement and watersheds; nonpoint source pollution; bioassessment; WaterWays Program, Brook Trout Theme/TroutKids Program: nonpoint source pollution and impacts, water quality, brook trout habitat requirements and life cycle, stewardship, water chemistry, biological, and streamside assessments</p> <p>Schools: Mabel I. Wilson Elementary School, Greely Middle School</p> <p>Cumulative (PY 1-5) total students: 1,477(CCSWCD: 621, PWD: 674)</p> <p>Cumulative (PY 1-5) total contact hours: 4,934 (CCSWCD: 650, PWD: 4,244)</p>	None

Measurable Goal 1.7.1 and 1.7.2 Offer “It’s All connected” school curriculum to elementary/middle schools		
Permit Year	Description of Progress	Changes
6	<p>Total students: 362 (CCSWCD: 209, PWD: 153) Total contact hours: 809.5 (CCSWCD: 249.5, PWD: 560)</p> <p>Lesson topics: Honeybee life cycle and adaptations, pollination, pollinator importance, pesticides impact; water movement and watersheds; nonpoint source pollution; water quality and nonpoint source pollution and prevention; groundwater model; groundwater resources and pollution prevention ; TroutKids Program: nonpoint source pollution and impacts, water quality, brook trout habitat requirements and life cycle, macroinvertebrate identification and bioassessments, stewardship, water chemistry, biological, and streamside assessments</p> <p>Schools: Mabel I. Wilson Elementary School, Greely High School, Greely Middle School</p>	None

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.

Measurable Goal 2.1.1 Public Notice		
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	The Town posts its SWPMP on its website (Public Services Stormwater Information Page).	None
4	Same as Permit Year 3.	None
5	The Town continues to post its SWPMP on its website: https://www.cumberlandmaine.com/stormwater/pages/permits-presentations	None
6	Same as Permit Year 5	None

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.

Measurable Goal 2.1.2 Involve Stakeholders/Open Meetings		
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 removed from the Annual Report.
3	The ISWG meetings are open to the public. Cumberland staff attended 5 meetings, and the Cumberland stormwater consultant attended 3 meetings. The Town posts its annual reports on its website (Public Services Stormwater Information Page).	None
4	The ISWG meetings are open to the public. Cumberland staff attended 5 meetings, and the Cumberland stormwater consultant attended 4 meetings. The Town posts its annual reports on its website (Public Services Stormwater Information Page).	None
5	The ISWG meetings are open to the public. Cumberland staff attended 4 meetings, and the Cumberland stormwater consultant attended 3 meetings. The Town posts its annual reports on its website: https://www.cumberlandmaine.com/stormwater/pages/storm-water-reports-2013-2018	None
6	The ISWG meetings are open to the public. Cumberland staff attended 4 meetings, and the Cumberland stormwater consultant attended 7 meetings. The Town posts its annual reports on its website: https://www.cumberlandmaine.com/stormwater/pages/storm-water-reports-2013-2018	None

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.

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
1	<p>Urban Runoff & Green Neighbor Family Fest</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 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</p>	None

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>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</i> 5K and <i>Green Neighbor Family Fest</i> on Saturday, April 25, 2015.</p>	
2	<p>Urban Runoff & Green Neighbor Family Fest</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 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 25th, 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</p>	None

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>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</i> 5K 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 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	<p>2016 marked the fifth 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. The race and festival, held on April 23, 2016, served as the Public Involvement and Participation event for all ISWG communities. Each community’s participants are summarized in the table below.</p> <p>By all accounts, the event continues to be a huge success. Over 700 runners and walkers registered for the race, and many local businesses supported the race through sponsorships, in-kind</p>	None

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>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. Channel 8 WMTW developed and ran a 20-second ad promoting the events throughout the month of April, and they attended the race and festival to provide news coverage of the events, including 6 live interviews on the morning of April 23rd, 2016. 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>The Green Neighbor Family Fest was held after the race at Deering High School. The event ran for three hours and was attended by approximately 900 people. Scheduled events included the awards ceremony and live music. A total of 29 exhibits were set up by local nonprofit, governmental organizations, and businesses to provide hands-on, educational activities for children and families. These activities included a marine touch tank, making mini ecosystems, water quality experiments, and more. Children also took part in face painting, an obstacle course moon bounce, and water related prize giveaways.</p> <p>Plans are underway to host the sixth annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 22, 2017.</p> <p><i>Promotion</i></p> <p>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.</p> <p>Cumberland placed 19 posters throughout Town advertising the event, and had 29 participants in the race.</p>	
4	<p>Urban Runoff & Green Neighbor Family Fest</p> <p>2017 marked the sixth 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 support ISWG's in-school youth education program. The race and festival, held on April 22, 2017, served as the Public Involvement and</p>	None

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>Participation event for all ISWG communities. Participation by each ISWG municipality is summarized in the table below.</p> <p>Despite the (appropriately) rainy weather, the event was a great success in 2017. Over 720 runners and walkers registered for the race, and more than 100 of those registered on race-day. 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 month of April by 98.9 WCLZ. Channel 8 WMTW developed and ran a 20-second ad promoting the events throughout the month of April, and they attended the race and festival to provide news coverage of the events, including 6 live interviews on the morning of April 22, 2017. 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>The Green Neighbor Family Fest was held after the race at Deering High School. The event ran for two and a half hours and was attended by approximately 850 people. Scheduled events included the awards ceremony and live music. A total of 28 exhibits were set up by local nonprofit, governmental organizations, and businesses to provide hands-on, educational activities for children and families. These activities included an aquaculture display, paper making, experimenting with stormwater runoff, and more. Children also took part in face painting, a moon bounce, and water-related giveaways.</p> <p>Plans are underway to host the seventh annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 21, 2018.</p> <p>The Town of Cumberland had 27 race participants in the event.</p>	
5	<p>Urban Runoff & Green Neighbor Family Fest</p> <p>2018 marked the seventh 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 support ISWG's in-school youth education program. The race and festival, held on April 21, 2018, served as the Public Involvement and</p>	Activities were updated to include Prescription Drug takeback programs as noted in response to DEP comments

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>Participation event for all ISWG communities. Participation by each ISWG municipality is summarized in the table below.</p> <p>Over 650 runners and walkers registered for the race with more than 50 of those registering on race-day. 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 month of April by 98.9 WCLZ. Channel 8 WMTW developed and ran a 20-second ad promoting the events throughout the month of April. Social media, paid online advertising, 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>The Green Neighbor Family Fest was held after the race at Deering High School. The event ran for two and a half hours and was attended by approximately 900 people. Scheduled events included the awards ceremony, live music, and a performance depicting the effects of stormwater in Casco Bay. A total of 30 exhibits were set up by local nonprofit, governmental organizations, and businesses to provide hands-on, educational activities for children and families. These activities included a paper making, experimenting with stormwater runoff, visiting with baby goats and more. Children also took part in face painting, a moon bounce, and water-related giveaways.</p> <p>There were 21 Cumberland participants in the race.</p> <p>Plans are underway to host the seventh annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 20, 2019.</p> <p><u>Update based on Annual Report comment from DEP:</u> Prescription Drug Takeback Program: Town offered Prescription Drug takeback programs on 10/28/2017 (233.7 lbs collected) and 4/28/2018 (389.5 lbs collected).</p>	on PY5 Annual Report.
6	<p>Urban Runoff & Green Neighbor Family Fest</p> <p>2019 marked the eighth year ISWG supported, 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,</p>	None

Measurable Goal 2.2.1 Host Public Events		
Permit Year	Description of Progress	Changes
	<p>funds raised from the Urban Runoff help support in-school youth education programs in Cumberland and part of York Counties. The race and festival, held on April 20, 2019, served as the Public Involvement and Participation event for all ISWG communities. Participation by each ISWG municipality is summarized in the table below.</p> <p>Despite the (appropriately) rainy weather, over 650 runners and walkers registered for the race. 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 month of April by 98.9 WCLZ. Channel 8 WMTW/CW developed and ran a 15-second ad promoting the events throughout the month of April, and they attended the race and festival to provide news coverage of the events, including six live interviews on the morning of April 20, 2019. 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>The Green Neighbor Family Fest (GNFF) was held after the race at Deering High School. The event ran for two and a half hours and was attended by approximately 850 people. Scheduled events included the awards ceremony and live music. A total of 34 exhibits were set up by local nonprofit, governmental organizations, and businesses to provide hands-on, educational activities for children and families. These activities included a scavenger hunt, paper making, visiting with baby goats, experimenting with stormwater runoff, and more. Children also took part in face painting, a moon bounce, and water-related giveaways.</p> <p>Plans are underway to host the ninth annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 25, 2020.</p> <p>There were 17 Cumberland residents in the race. The Stormwater Coordinator volunteered by assembling street closure letters prior to the race, and placing posters around town.</p> <p>Prescription Drug Takeback Program: The Town offered Prescription Drug takeback programs on 10/27/2018 and 4/27/2019 (total of 437.5 lbs collected).</p>	

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 its GIS maps to reflect new infrastructure and changes to the infrastructure.

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.

Measurable Goal 3.1.1 Maintain Watershed-Based Stormwater Infrastructure Map		
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,	None

Measurable Goal 3.1.1 Maintain Watershed-Based Stormwater Infrastructure Map		
Permit Year	Description of Progress	Changes
	399 culverts, 50,700 feet of storm drain pipe, and 86,000 feet of ditches.	
3	During Permit Year 3, a public works employee physically crossed checked the outfalls in the MS4. In addition during the Maine DEP Audit on May 25, one outfall was identified to be private (not MS4), and several ditch outfalls were identified that were not previously in the system. As a result, in the MS4 area, the Town's active infrastructure is as follows: 56 piped outfalls, 26 ditch outfalls, 318 catch basins, 47 drain manholes, 382 culverts, 77,800 feet of storm drain pipe, and 86,200 feet of ditches.	None
4	<p>In the MS4 area, the Town's active infrastructure is as follows:</p> <ul style="list-style-type: none"> • 62 piped outfalls (outfalls at Val Halla were added to the map), • 26 ditch outfalls, • 339 MS4 catch basins (changes based on new construction projects), • 48 drain manholes, • 352 culverts (decreased because in PY 3 some DOT culverts were counted), • 48,793 feet of storm drain pipe (pipes were adjusted for new construction projects in the MS4 but overall, # feet decreased from PY 3 because in PY3, DOT pipes were counted), • 15 detention ponds and • 88,525 feet of ditches. • 19 Private pipes (residential and commercial) are included on the Town's MS4 system. <p>Changes from PY 3 infrastructure counts are due to changes mapped as part of a capital project for drainage repairs.</p>	Comments from the DEP on Annual Report for PY3 require reporting the number of private pipes that have been mapped.
5	<p>The Towns Infrastructure Counts at the end of Permit Year 5 were as follows:</p> <ul style="list-style-type: none"> • 57 piped outfalls • 24 ditch outfalls • 341 catch basins • 50 drain manholes • 352 culverts • 50,285 feet of storm drain pipe • 16 detention ponds and • 89,545 feet of ditches <p>No additional private pipes were added to the system this year. The changes in infrastructure counts were due to construction projects.</p>	None
6	<p>The Towns Infrastructure Counts at the end of Permit Year 6 were as follows:</p> <ul style="list-style-type: none"> • 54 piped outfalls 	This MG has been updated to reflect that

Measurable Goal 3.1.1 Maintain Watershed-Based Stormwater Infrastructure Map		
Permit Year	Description of Progress	Changes
	<ul style="list-style-type: none"> • 21 ditch outfalls • 340 catch basins • 53 drain manholes • 361 culverts • 50,198 feet of storm drain pipe • 16 detention ponds and • 89,827 feet of ditches <p>No additional private pipes were added to the system this year. The changes in infrastructure counts were due to construction projects and field QC of construction projects completed by the Public Works department and the Town's consultant in May and June 2019. The Public Works employees also update the GIS during catch basin cleaning when needed.</p>	the Town relies on the GIS for its mapping, and does not print paper maps unless requested by Public Works.

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.

Measurable Goal 3.2.1 Enforce Illicit Discharge Ordinance		
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 planned for these outfalls. The third outfall is continuing to be monitored, but has not been sampled because no flow is present.	Per DEP request, appendices have been removed from the Annual Report.

Measurable Goal 3.2.1 Enforce Illicit Discharge Ordinance		
Permit Year	Description of Progress	Changes
3	No NOVs were issued during Permit Year 3.	None
4	No NOVs were issued during Permit Year 4.	None
5	No NOVs were issued during Permit Year 5.	None
6	No NOVs were issued during Permit Year 6, but several potential illicit discharges were investigated as identified in MG 3.3.1	None

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 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 in a prioritized manner.

The program was updated in Permit Year 6 to include Permit Years 6 and 7.

The schedule is as follows:

Inspection Year	Watershed	Subwatershed/ Drainage Areas	Description/Outfalls
Permit Years 1 and 2 (7/1/2013 – 6/30/2015)	Presumpscot River	East Branch of Piscataqua River PISC 1 PISC 2 PISC 3 PISC 4 PISC 5 PISC 6	All areas north and west of Middle Road. Includes outfalls on Greely Road, Greely Road Ext., Crossing Brook, Hill Road, etc.
Permit Year 3 (7/1/2015 – 6/30/2016)	Casco Bay	Casco Bay Frontal Drainages	All areas north of Tuttle Road and east of I-295 Includes outfalls on Fern Lane, Ebb Tide Road, Ledge Road, and York Road.
Permit Year 4 (7/1/2016 – 6/30/2017)	Casco Bay	Casco Bay Frontal Drainages	All areas south of Tuttle Road and east of I-295 Includes outfalls on Spruce Lane, Stony Ridge Road, Long Meadow Road, Sea Cove, and Lantern.

Permit Year 5 (7/1/2017 – 6/30/2018)	All Areas	All Areas	Outfalls that were inspected during wet weather during years 1-4 will be re-inspected.
Permit Year 6 (7/1/2018 – 6/30/2019)	Same as Permit Year 1	Same as Permit Year 1	Same as Permit Year 1
Permit Year 7 (7/1/2019 – 6/30/2020)	Same as Permit Year 2	Same as Permit Year 2	Same as Permit Year 2

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.

Measurable Goal 3.3.1 Implement IDDE Program		
Permit Year	Description of Progress	Changes
1	<p>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.</p> <p>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).</p>	None
2	<p>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.</p> <p>No public reports of illicit discharges were received and no new</p>	Per DEP request, appendices have been removed from the Annual Report.

Measurable Goal 3.3.1 Implement IDDE Program		
Permit Year	Description of Progress	Changes
	illicit discharges were identified by public works employees during their regular work duties.	
3	<p>The Town inspected 50 of the 56 outfalls. The remaining 6 outfalls are scheduled to be inspected in PY4. All catch basins were inspected during cleaning.</p> <p>No new potential illicit discharges were identified during the outfall or catch basin inspections.</p> <p>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).</p>	None
4	<p>The Town inspected the 6 remaining piped outfalls and 7 others that had received wet weather inspections during prior permit years. The PY 4 inspections were all conducted in dry weather. All catch basins were inspected during cleaning.</p> <p>No new potential illicit discharges were identified during the outfall or catch basin inspections.</p> <p>No public reports of illicit discharges were received, and no illicit discharges were identified by the public works employees during their regular work duties.</p>	None
5	<p>The 18 outfalls that previously were inspected only during wet weather in prior years were re-inspected this permit year.</p> <p>All catch basins were inspected during cleaning.</p> <p>No new potential illicit discharges were identified during the outfall or catch basin inspections.</p> <p>No public reports of illicit discharges were received, and no illicit discharges were identified by the public works employees during their regular work duties.</p>	None
6	<p>The Town inspected 70 outfalls (piped and ditch outfalls) in PY6. 32 of these outfalls were inspected within 48 hours of a rain event, and were flowing, and so will be inspected again during PY7 during dry weather.</p> <p>Five outfalls were observed to have evidence of high nutrient flow. The outfalls were sampled for E. coli (for discharges to a fresh water source), or Enterococci and Fecal Coliform (for discharges to marine waters). Field kit sampling for detergents, ammonia, pH and conductivity was also conducted. Additionally, the outfall area</p>	None

Measurable Goal 3.3.1 Implement IDDE Program		
Permit Year	Description of Progress	Changes
	<p>on Longmeadow drive was investigated because Friends of Casco Bay identified an algal bloom in the area.</p> <p>No parameters indicated the presence of an illicit discharge and the high nutrient condition is believed to be from naturally occurring sources. The highest concentration detected was at ledge-05, and outfall that discharges to a marine environment. Enterococci was detected at 10 MPN/100 ml at this outfall, Fecal Coliform was detected at 5 MPN/100 ml, and no human bacteroides was detected.</p> <p>All catch basins in the UA were inspected during cleaning. One catch basin was observed to have toilet paper and sanitary waste. A private home was discovered to be connected to the storm drain line. The sanitary line was connected to the sanitary system, and the storm drain line and catch basin were cleaned. No other evidence of illicit discharges were detected, though some yard waste was observed in catch basins on Oak, Hawthorn and Friar.</p>	

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.

Measurable Goal 3.4.1 Ditch Inspections		
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	None

Measurable Goal 3.4.1 Ditch Inspections		
Permit Year	Description of Progress	Changes
	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.	
3	An additional 2% of ditches were inspected during Permit Year 3 bringing the total to 87% of all ditches inspected. The Town is still on target to complete all ditch inspections by the end of Permit Year 5 as described in their ditch SOP. The remaining ditches to be inspected are located in the Casco Bay Frontal Drainages Subwatershed which includes Spruce Lane, Stony Ridge Road, Long Meadow Road, Sea Cove and Lantern Lane.	None
4	The remaining MS4 ditches were inspected in Permit Year 4 and additional inspections were completed on Middle Road, Fryer Road, Hawthorn, Red Mill, Crossing Brook, Acorn Crystal, Wood, Lawn, Greely road Extension, Phillips and Shady Run (locations where wet weather inspections were completed in prior years. A total of 39,000 feet of ditch line was inspected in Permit Year 4. Excess vegetation, litter and Yard waste were observed in several of the ditches. These maintenance items have been added to the maintenance list.	None
5	No ditches in the MS4 required inspection. The Town began mapping and inspecting ditches outside the urbanized area in PY5. No evidence of maintenance or illicit discharges were identified during non-MS4 inspections.	None
6	The Town updated their Ditch Inspection SOP to include Permit Years 6 and 7 and will only conduct ditch inspections during normal maintenance of ditches. Opportunistic inspections were completed during normal ditch maintenance for Range Road, Pleasant Valley Road and Bruce Hill Road. No potential illicit discharge issues were identified during ditching.	None

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.

Measurable Goal 3.5.1 Develop List of aging septic systems		
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	The Town completed the mapping of the leachfields and tank accesses. Based on the mapping, 158 parcels have insufficient town data available to assess the age of the septic system and 251 parcels have septic systems that are older than 1997. These 409 system will need to be inspected using a drive by inspection in Permit Year 4.	None
4	No work required or completed this Permit Year.	None
5	No work required or completed this Permit Year.	None
6	As identified in the Maine DEP Guidance on Implementation of the Administratively continued MS4 General permit dated 3/18/2019, no work required or completed this Permit Year.	None

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.

Measurable Goal 3.5.2 Inspect aging septic systems		
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	No work required or completed this Permit Year.	None

Measurable Goal 3.5.2 Inspect aging septic systems		
Permit Year	Description of Progress	Changes
4	During the Town's attempts to conduct the drive by inspections, of the 409 systems that had either aged (>20 years old) systems or insufficient data to determine the age of the system: a. Drive-by inspections of 120 septic systems were completed, and no septic systems were observed to have evidence of failure of some sort. b. No systems were determined to be on vacant lots c. 289 systems were not accessible or not visible from the public right of way.	None
5	Because no evidence of failed systems was discovered during the Permit Year 4 inspections, no work was required to be completed this permit year.	None
6	As identified in the Maine DEP Guidance on Implementation of the Administratively continued MS4 General permit dated 3/18/2019, no work required or completed this Permit Year.	None

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.

Measurable Goal 3.6.1 Meet with Water Utility		
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	None

Measurable Goal 3.6.1 Meet with Water Utility		
Permit Year	Description of Progress	Changes
	0106000103) on June 3, 2014.	
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	No work required or completed this Permit Year.	None
4	No work required or completed this Permit Year.	None
5	No work required or completed this Permit Year.	None
6	No work required or completed this Permit Year.	None

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.

Measurable Goal 3.6.2 Add Hydrants to GIS		
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	The 264 Portland Water District hydrants and 14 private hydrants are still part of the Town's GIS map.	None
4	The Portland Water District and private hydrants are still part of the Town's GIS.	None
5	The Portland Water District and private hydrants are still part of the Town's GIS.	None
6	The Portland Water District and private hydrants are still	None

Measurable Goal 3.6.2 Add Hydrants to GIS		
Permit Year	Description of Progress	Changes
	part of the Town's GIS.	

Measurable Goal 3.6.3 - Permit Years 2 – 6, 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.

Measurable Goal 3.6.3 Request Annual Water Quality and BMP Report		
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	The Town requested a report from the Portland Water District on water testing results and best management practices in use during hydrant flushing. The Portland Water District reported they are dechlorinating all hydrants to meet the field standard specified by the DEP of 50 ug/l TRC, and they provided a summary memorandum describing their best management practices.	None
4	Though Cumberland hydrants are not due to be flushed until 2019, on February 10, 2017 the PWD prepared a memorandum summarizing the BMPs they use during hydrant flushing. The memorandum also described that in some instances, when stream flow allows, they perform dilution calculations to assess whether they can discharge and meet the Maine DEP AWQC of 19 ug/l. The Town requested a water quality report. The Portland Water District updated their memorandum summarizing the Best Management Practices that are in use to ensure no hydrant flushing discharges cause or contribute to water quality violations, but indicated that no data was available for transmittal.	In PY3, the PWD notified the Town they would not be conducting water quality tests, rather they would be dechlorinating all hydrants.
5	The Portland Water District provided a Memorandum	None

Measurable Goal 3.6.3 Request Annual Water Quality and BMP Report		
Permit Year	Description of Progress	Changes
	<p>summarizing the hydrant flushing activities during Permit Year 5. Cumberland Hydrants were flushed between July 2017 and December 2017. The memorandum indicated in most instances, they continue to dechlorinate hydrant water during flushing using ascorbic acid one of 4 devices (a Pollard Water diffuser, a Bazooka chemical addition system, an ascorbic pellet pad, or a Dechlor Demon. The PWD uses the Hach Colorimeter II to test the discharge water after dichlorination to be sure it is below 50 ug/L. In a few instances, the PWD uses Land application instead of dichlorination where they have determined the water will need to travel a great distance before reaching a stormdrain or water body.</p> <p>The PWD memo also indicated they were involved in the creation of the Maine Rural Water Association and Maine Water Utilities Association BMP Manual and several staff attended the associated training.</p> <p>As was the case for PY4, PWD does not retain data on chlorination testing for transmittal to the Town.</p>	
6	<p>The Portland Water District provided a Summary of activities for PY6 hydrant flushing which described that the same BMPs and testing in use in PY5 were again being used in PY6.</p> <p>The memo identified that hydrant flushing was conducted in Cumberland during PY6 in April, May and June of 2019, and that discharges were below the 50 ug/l detection limit of their field Hach Colorimeter.</p>	None

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.

Measurable Goal 3.6.4 Update IDDE Ordinance		
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	The Utility provided the Town with a memorandum documenting the BMPs employed during hydrant flushing. Although the utility has voluntarily begun to dechlorinate all hydrants during flushing, the Town updated their ordinance to reflect that the listed allowed non-stormwater discharges are allowed only if they do not cause or contribute to a violation of state water quality standards. The change was made on 3/28/2016.	None
4	No work required to be completed this Permit Year	None
5	No work required to be completed this Permit Year	None
6	No work required to be completed this Permit Year	None

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.

Measurable Goal 3.7.1 Coordinate with DMR		
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

Measurable Goal 3.7.1 Coordinate with DMR		
Permit Year	Description of Progress	Changes
	at DMR locations.	
3	The Town continues to conduct volunteer monitoring at DMR locations.	None
4	<p>The Town continues to conduct volunteer monitoring at DMR locations. The Police Chief has trained two new volunteers to replace the existing volunteers. The Town sends the samples to the DMR lab and DMR processes the results. The results are published on the Maine DMR website at: http://www.maine.gov/dmr/shellfish-sanitation-management/programs/growingareas/reports/index.html#</p> <p>In addition to collecting the samples for DMR, the Town participates in Maine Healthy Beaches program.</p>	None
5	<p>The Town continues to conduct volunteer monitoring at the DMR locations for Broad Cove WI030.00 and WI033.00. The Data is available at the DMR Public Health website: http://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html . Although Broad Cove has been closed for many years seasonally (in the summer) due to poor water quality, in 2017 water quality improved and the area is expected to be upgraded to remove the seasonal restriction for 2018.</p> <p>The Town continues to participate in the Maine Healthy Beaches program also.</p>	None
6	<p>The Town continues to conduct volunteer monitoring at the DMR locations for Broad Cove WI030.00 and WI033.00. The Data is available at the DMR Public Health website: http://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html . Broad Cove (part of Area 14) was opened for shellfishing for the summer of 2019 due to improved water quality.</p> <p>The Town continues to participate in the Maine Healthy Beaches program also.</p>	None

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.

Measurable Goal 4.1.1 Notify Developers of MGCP and Chapter 500 PBR		
Permit Year	Description of Progress	Changes
1	<p>The Town of Cumberland provides notification of Chapter 500 and MGCP 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	Same as Permit Year 1	None
4	Same as Permit Year 1	None
5	Same as Permit Year 1	None
6	Same as Permit Year 1	None

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.

Measurable Goal 4.2.1 Maintain Spreadsheet of Sites		
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	The spreadsheet continues to be maintained and is available upon request.	None
4	The spreadsheet continues to be maintained and is available upon request.	None
5	The spreadsheet continues to be maintained and is available upon request.	None
6	The spreadsheet continues to be maintained and is available upon request.	None

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 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 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	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	There were two sites under construction during Permit Year 3. Inspections conducted on these sites are summarized as follows: Spears Hill subdivision: four inspections were completed, Cumberland Memory Care: one inspection was completed (site began construction 6/28/2016) No significant issues with erosion or sedimentation were observed.	Per DEP request, details on the number of sites under construction and the number of sites inspected are being provided herein.
4	There were 2 sites under construction during Permit Year 4. Inspections conducted on these sites are summarized as follows: Cumberland Memory Care: two inspections were completed, one of which was the final inspection for the site. Solar Way began construction on 6/21/2017 and just this one inspection was completed this permit year. No significant issues with erosion or sedimentation were observed.	None
5	There was one site under construction during Permit Year 5: Solar Way construction continued and at least 3 inspections were completed by the third party inspector and once by the Maine DEP. No significant issues were identified during inspections. This site was still under construction at the end of Permit Year 5.	None

Permit Year	Description of Progress	Changes
6	<p>There were 2 sites under construction during Permit Year 6:</p> <p>Solar Way construction was completed and a final inspection was completed.</p> <p>Ocean View construction began in Permit Year 6. This site is in the drainage area for the East Branch of the Piscataqua River, requiring 3 inspections. More than three inspections were completed by a DEP certified third party inspector during PY6. One inspection identified an issue with the sedimentation pond, which was corrected within one day of identification. Other minor issues were identified and corrected promptly by the contractor. No NOV's were issued. This site will be under construction until approximately 2022.</p>	

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.

Measurable Goal 5.1.1 Develop Post Construction Ordinance		
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	The Town continues to enforce this ordinance. No NOVs were issued.	None
4	The Town continues to enforce this ordinance. No NOVs were issued.	None
5	The Town continues to enforce this ordinance. No NOVs were issued, but an overdue notice letter was sent to one site that had not submitted a certification by the due date. The site submitted the certification within 2 weeks of receiving their warning letter.	None
6	The Town continues to enforce this ordinance. One overdue notice email was sent to one site that had not submitted a certification by the due date. The site contact identified that the inspection and maintenance had been completed in May 2019, but the certification was emailed to an employee that is no longer at the Town of Cumberland. The Engineering firm that completed the inspection provided the inspection to the Town on 8/13/2019, and showed they had inadvertently emailed it to the wrong person on 5/30/2019, so no NOV was issued.	None

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.

Measurable Goal 5.2.1 Track and Report on Post Construction Sites		
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	<p>Two sites were required to submit annual certifications, and did so in Permit Year 3 (note that upon secondary review, Norton Financial Services does not discharge to the MS4, so they are not required to have a maintenance agreement, and as of June 30, 2016 Spear's Hill Subdivision was still under construction). The following is a summary of the information required for this report:</p> <p>2 sites discharged to the Town's MS4 (Maine Standards and Raven's Farm Substation) 2 sites provided their maintenance certifications to the Town 2 sites had fully functioning BMPs 0 sites required routine maintenance.</p> <p>No additional sites were approved during PY3 that will</p>	This section was corrected based on Maine DEP comments to show that no sites required routine maintenance.

Measurable Goal 5.2.1 Track and Report on Post Construction Sites		
Permit Year	Description of Progress	Changes
	require maintenance agreements.	
4	<p>Three sites were required to submit annual certifications (Maine Standards, Raven's Farm Substation, and Spears Hill Subdivision which still has some home sites under construction).</p> <p>3 sites discharged to the Town's MS4 (Maine Standards and Raven's Farm Substation)</p> <p>3 sites provided their maintenance certifications to the Town</p> <p>3 sites had fully functioning BMPs</p> <p>0 sites required routine maintenance</p> <p>One additional site (Solar Way) was approved during PY4 that will require a maintenance agreement.</p>	None
5	<p>Three sites were required to submit annual certifications (Maine Standards, Raven's Farm Substation, and Spears Hill Subdivision).</p> <p>3 sites discharged to the Town's MS4 (Maine Standards and Raven's Farm Substation)</p> <p>3 sites provided their maintenance certifications to the Town</p> <p>3 sites had fully functioning BMPs</p> <p>0 sites required routine maintenance</p> <p>The Solar Way subdivision was still under construction at the end of Permit Year 5. Note also that Cumberland Memory Care does not discharge stormwater to the Town's MS4 and so did not trigger the Post Construction Ordinance.</p>	None
6	<p>Four sites were required to submit annual certifications (Maine Standards, Raven's Farm Substation, and Spears Hill Subdivision, and Solar Way).</p> <p>4 sites discharged to the Town's MS4</p> <p>4 sites provided their maintenance certifications to the Town</p> <p>4 sites had fully functioning BMPs</p> <p>0 sites required routine maintenance</p>	None

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	Same as Permit Year 2	None
4	Same as Permit Year 3	None
5	Same as Permit Year 4	None
6	Same as Permit Year 2	None

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.

Measurable goal 6.1.1 Inventory of Municipal Operations		
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	The inventory was updated to include Broad Cove Reserve, which was purchased by the Town and has walking trails and a restroom.	None
4	The Town reviewed the inventory of facilities on 6/9/2017. No changes to the inventory were deemed necessary. (Knights Pond Reserve is just outside the Urbanized Area so no O&M Plan is required for this facility).	None
5	The Town reviewed the inventory of facilities at the training on 4/12/2018. No changes to the inventory were deemed	None

Measurable goal 6.1.1 Inventory of Municipal Operations		
Permit Year	Description of Progress	Changes
	necessary.	
6	The Town reviewed the inventory of facilities on 2/19/2019 and updated it to acknowledge the Town owns several vacant properties that are undeveloped and do not need O&M Plans or SWPPPs. No other changes were needed.	None

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.

Measurable Goal 6.1.2 Implement SOPs for Municipal Operations		
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	The Val Halla SOP was updated to incorporate rinsing of golf carts at the main club house. The Broad Cove Reserve SOP was created. The Twin Brooks SOP was updated to reflect that spills should be reported to the Parks Superintendent (not the Golf Course Superintendent)	None
4	The Val Halla, Broad Cove Reserve and Twin Brooks SOPs were reviewed on 6/9/2017 and it was determined no changes were necessary.	None
5	The Val Halla, Broad Cove Reserve and Twin Brooks SOPs were reviewed on 4/12/2018 and it was determined no changes were necessary.	None
6	The SOPs were reviewed during the 3/19/2019 training and it was determined no changes were needed.	None

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.

Measurable Goal 6.2.1 Training		
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"> - MS4 Program in general - IDDE procedures for outfall inspections and ditch inspections - Oil Spill Prevention Control and Countermeasure requirements (for DPW facility) - Stormwater Pollution Prevention Plan requirements (for DPW facility) - Operations and Maintenance Procedures for the municipal operations facilities <p>Two public works employees also attended the 6/5/2014 Highway Congress PPGH training provided by CCSWCD.</p> <p>Two public works employees were field trained in illicit discharge inspections on June 17, 2014.</p>	None
2	<ol style="list-style-type: none"> 1) The Public Services Administrative Assistant attended the 5/14/2015 training on PPGH presented by ISWG. 2) All four public works employees, the administrative assistant and the IT Manager attended the Integrated Environmental training on ditch and outfall inspections on 8/7/2014. 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&M Plans on 1/23/2015. 4) The Code Enforcement Officer attended the Maine Coastal Erosion Control Workshop on April 8, 2015. 5) The Parks and Recreation supervisor was trained on 5/27/2015 on Stormwater O&M Procedures for Twin Brooks. 	This BMP was renumbered 6.2. It was incorrectly numbered in the Stormwater Program Management Plan.
3	13 Public Works and Parks and Recreation employees were trained in the DPW SWPPP, the O & M Plans For Val Halla, Twin Brooks, and illicit discharge inspections and tracking on 5/5/2016.	None
4	<ol style="list-style-type: none"> 1) 11 Public Works and Parks and Recreation employees were trained in the DPW SWPPP, the O & M Plans For Val Halla, Twin Brooks, and illicit discharge inspections and tracking on 6/9/2017. 2) The Code Enforcement Officer and Stormwater Coordinator attended an Erosion and Sediment 	None

Measurable Goal 6.2.1 Training		
Permit Year	Description of Progress	Changes
	control training provided by CCSWCD on 12/15/2016 3) The Code Enforcement Officer and a public works employee attended the IDDE Part 2 training for field personnel on 3/21/2017	
5	<p>14 Public Works and Parks and Recreation employees were trained in the DPW SWPPP, the O & M Plans and illicit discharge inspections and tracking on 4/12/2018. The training consisted of a brief review of the overall MS4 program, followed by a Jeopardy style game with questions about each subject area. The questions generated a lot of discussion around the topics. The questions included, "What is wrong with this picture?" where handouts of the O&M plans and site figures were provided and the teams each reviewed their sites to ensure the site figures were right. The training lasted 1.5 hours and the anecdotal feedback was that the training was an effective way to engage the group in discussions and learn about the program.</p> <p>The Stormwater Coordinator and Public Services Director attended the two day Maine Stormwater Conference in October 2017. The presentations were informative.</p>	None
6	<p>10 Public Works and Parks and Rec employees were trained in the DPW SWPPP, the O & M Plans and illicit discharge inspections and tracking on 3/19/2019. The training again consisted of a brief overview of the MS4 program and review of an example SWPPP inspection form, followed by a Jeopardy style game with questions about each subject area. All questions were updated from the PY5 game. The training lasted 1.5 hours and the anecdotal feedback was that the training was an effective way to engage the group in discussions and learn about the program.</p> <p>The Code Enforcement Officer attended a ½ day (4 hour) training related to Maine Coastal Erosion Control on 6/20/2019. The Code Officer noted the training was informative.</p>	None

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. All roads and municipal lots were swept at least once, and some were swept a second time – 203 cy of material was removed from the streets during the sweepings.	This information was corrected as noted in our response to the Maine DEP annual report comments.
3	The Town began street sweeping as soon as possible after snow melt this Permit Year. Most roads were swept twice – 162 cy of material was removed from the streets during the sweepings.	None
4	The Town began street sweeping as soon as possible after snow melt this Permit Year. Most roads were swept twice – 208 cy of material was removed from the streets during the sweepings.	None
5	The Town began street sweeping as soon as possible after snow melt this Permit Year. Most roads were swept twice – 244 cy of material was removed from the streets during the sweepings.	None
6	The Town began street sweeping as soon as possible after snow melt this Permit Year. Most roads were swept twice – 234 cy of material was removed from the streets during the sweepings.	None

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.

Measurable Goal 6.4.1 Catch Basin Cleaning		
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	All of the town-owned catch basins and drain manholes in the urbanized area were inspected. 371 (354 in the MS4 area) of the Town basins were cleaned, and 20.5 cubic yards of material was removed. The Town also removed 2 cubic yards of material from the school district catch basins.	None
4	All of the town-owned catch basins and drain manholes in the urbanized area were inspected. 33 structures did not need cleaning because they had very little sediment. 21.75 cubic yards of material was removed. The Town did not clean the school basins this year.	None
5	All of the town-owned structures in the urbanized area were inspected in June 2018 and July 2018. All of the basins were cleaned even if they had only a minor amount of sediment. 16 cubic yards of material were removed and stockpiled for beneficial re-use. The Town did not clean the school basins this year.	None
6	All of the town-owned structures in the urbanized area were inspected in May and June of 2019. All of the basins were cleaned except for 29 which had only a minor amount of sediment. 29.75 cubic yards of material were removed and stockpiled for beneficial re-use.	None

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.

Measurable Goal 6.5.1 Maintenance of Stormwater System		
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	Forty-six driveway culverts were replaced during permit year 3. Also, due to an extensive paving and drainage project, 3800 feet of underground drainage piping was replaced and 750 feet of ditching was repaired. Other general maintenance was conducted as needed based on public works identification, or based on complaints by citizens.	None
4	A capital project was completed in Town center resulting the repair/replacement of 4,525 feet of storm drain pipe and culverts and 400 feet of ditching. The work was completed on Hillcrest Drive, Longview Street, Linda Street, Carol Street, Woodside Drive, Farwell Avenue, Prince Street, Hemlock Drive, Balsam Drive, and Pinewood Drive. 45 Drainage work orders were fulfilled this permit year to repair culverts, shoulders, drainage ditches, and other stormwater structures.	None
5	71 Drainage work orders were fulfilled this permit year to repair culverts, shoulders, drainage ditches, and other stormwater structures.	None
6	57 Drainage work order were fulfilled this permit year to repair failed catch basins (2), repair culverts (4), complete ditching, cleaning of structures, pot and sink hole repairs and other miscellaneous items.	None

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	The DPW SWPPP was updated to reflect revised stormwater infrastructure based on the 5/24/2016 DEP audit.	None
4	The DPW SWPPP was reviewed on 6/9/2017 and did not require updating.	None
5	The DPW SWPPP was updated on 11/8/2017 to reflect new grading and drainage associated with capping of the former stump dump.	None
6	The DPW SWPPP was updated to reflect that the Administrative Assistant maintains all inspections and monitoring in a separate binder at Town Hall. Additional minor typographic edits were made.	None

MS4 ANNUAL REPORT CERTIFICATION
FOR THE PERIOD JULY 1, 2018 – JUNE 30, 2019

The General Permit requires that this Annual Report 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: 

Printed Name: William Shane

Date: 8/13/19

Title: Town Manager

Municipality: Cumberland