



PERMIT YEAR 4 ANNUAL REPORT
2013-2018 MUNICIPAL SEPARATE STORM SEWER
SYSTEM PERMIT

FOR

TOWN OF CAPE ELIZABETH, MAINE

Due to Maine DEP September 15, 2017
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SECTION 1 INTRODUCTION

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

This document constitutes the annual report for Permit Year 4 of the five-year permit cycle from 2013 to 2018 as required by Part IV Section J Reporting and Record Keeping of the MS4 General Permit.

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

Annual Report Requirement	Cape Elizabeth Status
<p>a. The status of compliance with permit conditions based on the Stormwater Program Management Plan, an assessment of the appropriateness of identified best management practices (BMPs), progress toward achieving identified measurable goals for each of the MCMs, and progress toward achieving the goal of reducing the discharge of pollutants to the Maximum Extent Practicable.</p>	<p>The Town of Cape Elizabeth is in compliance with the Permit Conditions based on the Stormwater Program Management Plan (revised 4/3/2014) approved by the Maine DEP on 5/13/2014.</p> <p>The BMPs identified in the Town’s Plan are still appropriate.</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>b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.</p>	<p>No stormwater monitoring data was collected by the Town of Cape Elizabeth during Permit Year 4.</p> <p>Any monitoring data collected as a result of illicit discharge investigations is described in Minimum Control Measure 3.</p>
<p>c. A summary of the stormwater activities the Town intends to undertake pursuant to its Plan during the next reporting cycle.</p>	<p>Section 2 of this annual report includes the BMPs and measurable goals identified in the Stormwater Program Management Plan that will be implemented in subsequent years.</p>
<p>d. A change in any identified BMPs or measurable goals that apply to the Plan.</p>	<p>Changes to the BMPs and measurable goals are described in Section 2, where the progress is described.</p>
<p>e. A summary describing the activities, progress, and accomplishments for each of the MCMs (including such items as the</p>	<p>Section 2 of this annual report contains the details of the Town’s progress on the measurable goals for each of the BMPs.</p>

<p>status of education and outreach efforts, public involvement activities, stormwater mapping efforts, dry weather inspections, detected illicit discharges, detected illicit connections, illicit discharges that were eliminated, construction site inspections, number and nature of enforcement actions, post construction BMP status and inspections, and the status of the Town's good housekeeping/pollution prevention program).</p>	
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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 ISWG and the Town’s provision of funding to 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 Best Management Practices (BMPs) which reduce polluted stormwater runoff; and
3. To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

Responsible party (for all MCM 1) - Public Services Director (with implementation assistance by Interlocal Stormwater Working Group (ISWG) education coordinator.)

BMP 1.1: Continue Awareness Outreach Efforts.

Measurable Goal 1.1.1 – In Permit Year 1, 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.

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

Permit Year	Description of Progress	Changes
1	<p><i>Link to thinkbluemaine</i></p> <p>A link to the Thinkbluemaine.org website is available from the Town’s Public Works Department page.</p> <p>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.</p>	None
2	<p>No work required to be completed as this measurable goal was a place holder until the 2013-2018 statewide awareness plan under BMP 1.2 was approved. The Town continues to maintain the link to the Thinkbluemaine.org website on their public works department webpage under: related links (click on “stormwater protection maine”).</p>	None

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		

BMP 1.2: Update and implement Public Stormwater Awareness Plan.

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

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

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

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

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

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

Permit Year	Description of Progress	Changes
1	<p><i>Television advertising</i></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 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></p> <p>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:</p> <p>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>	None

Permit Year	Description of Progress	Changes
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% 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> <p>The Town also stencils storm drains with the phrase “Do not dump, Drains to Casco Bay”.</p>	None
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</p>	None

Permit Year	Description of Progress	Changes
	<p>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:</p> <p>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 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> 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</p>	See Measurable Goal 1.2.1

Permit Year	Description of Progress	Changes
	<p>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> <p>The following television campaign data were provided by Time Warner Cable: 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,</p>	

Permit Year	Description of Progress	Changes
	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 .	
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BMP 1.3: Develop and Implement Municipal/Permit Stormwater Awareness Plan.

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

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

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

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

Measurable Goal 1.3.2 – Unless DEP responds in writing or verbally otherwise, then as of March

1, 2014 the Permit Awareness Plan is considered approved and implementation of the Permit Awareness Plan will begin within one week of approval. Reporting - review of Permit Awareness Plan will be included in every Annual Report. The review will include process and impact indicators as outlined in the Permit Awareness Plan. In Permit Year 5 an analysis of the process and impact indicators of the Permit Awareness Plan will be provided.

Responsible Party – Public Works Director (with implementation assistance by ISWG education coordinator)

Overall schedule for raising awareness of the permit will be included as part of the Permit Awareness Plan.

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

Permit Year	Description of Progress	Changes
1	<p>The 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 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. Four Cape Elizabeth 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,</p>	<p>Survey of awareness is being developed and will be carried out in Permit Year 2.</p>

Permit Year	Description of Progress	Changes
	<p>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>Although Cape Elizabeth's municipal outreach was scheduled for Permit Year 3, the Town's consultant provided an overview of the MS4 General Permit requirements and implementation status at a Town council meeting on 11/6/2013.</p>	
2	<p>The Plan's PY2 activities and the progress completed for each activity is described below:</p> <p>The Town's Public Works Director and consultant provided a program update to the Town council on 1/5/2015. A one-page written summary was provided to councilors and reviewed verbally. The Town's Public Works Director also met with the Town council for budgeting on 3/18/2015 and provided the budget committee a written description of the program requirements.</p> <p>ISWG also prepared a poster entitled "Clean Water is Everyone's Job". The poster will be distributed in PY 3.</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>	
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> <p><i>Council Presentation:</i> The Public Works Director reviewed the MS4 program with Town Council on 3/22/2016 as part of the budget discussions.</p> <p><i>Partner Organization Presentation:</i></p>	

Permit Year	Description of Progress	Changes
	<p>ISWG/CCSWCD partnered with BASWG, Maine DOT, 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.</p> <p><i>Maine Stormwater Conference:</i> The Public Works Director attended the conference.</p> <p><i>Highway Congress:</i> An interactive educational booth about spill response procedures was staffed at APWA's annual Highway Congress, held on June 2, 2016. Time out for Training, a program coordinated by Maine Local Roads, ensured that 137 people visited the booth. 7 public works employees from Cape Elizabeth visited the booth.</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:</i> The Public Works Director prepared an MS4 budget summary on 2/17/2017 and reviewed the MS4 program with Town Council on 3/22/2017 as part of the budget discussions.</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 • Pre-season prep 	None

Permit Year	Description of Progress	Changes
	<ul style="list-style-type: none"> • 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. (Cape Elizabeth – 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>	
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BMP 1.4: Continue Targeted Best Management Practices Adoption efforts from previous MS4 permit cycle.

Measurable Goal 1.4.1 – In Permit Year 1, the Town 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, or storm drain stenciling.
- Maintain a mailing list of property owners in the Trout Brook Watershed.

Reporting – A status report of the progress on the activities will be included in each annual report.

Responsible party - Public Works Director (with implementation assistance by ISWG education coordinator)

Permit Year	Description of Progress	Changes
1	The first four bullet 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. The Town planner maintains a list of property owners in Trout Brook.	None
2	Same as Permit Year 1	None
3	Same as Permit Year 1 and 2	None
4	Same as Permit Years 1, 2 and 3	None
5		

BMP 1.5: Update and Implement BMP Adoption Plan

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

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

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

Permit Year	Description of Progress	Changes
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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		

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.

The following is a summary of the activities completed for this Measurable Goal for Permit Year 4. There were no changes to the Measurable Goal.

Point of Sale

Retain 21 Point of Sale locations in the ISWG communities	complete	The ISWG YardScaping Point of Sale Program continued to be maintained at more than the 21 locations required. Twenty-two stores participated in PY4. The distribution of the stores in PY4 is as follows:
		Biddeford: 1
		Cape Elizabeth: 0
		Cumberland: 1
		Falmouth: 2
		Freeport: 1
		Gorham: 2
		Old Orchard Beach: 0
		Portland: 3
		Saco: 1
		Scarborough: 1
		South Portland: 3
		Westbrook: 2
		Windham: 3
Yarmouth: 2		
Maintain Point of Sale program in Home Depot stores within ISWG communities	complete	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 a staff training, distribution of

		educational materials to the general public, and an educational event for customers at each store.
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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 far exceeded the minimum on the Plan. In PY4, 15 YardScaping events were provided as follows:
		Portland: 7/9/16, Peak’s Island Garden Club workshop, 22 participants
		Biddeford: 9/8/16, Home Depot community education event, 7 interactions
		Windham: 9/9/2016, Home Depot community education event, 1 interaction
		Portland: 9/10/2016, GreenFest, 47 interactions
		Gorham: 9/10/2016, O’Donal’s Nursery community workshop, 7 participants
		Portland: 9/15/2016, Home Depot community education event, 10 interactions
		South Portland: 9/16/2016, Home Depot community education event, 3 interactions
		South Portland: 9/20/2016, adult education class, 2 participants
		Scarborough: 9/22/2016, adult education class, 7 participants
		South Portland: 4/4/2017, adult education class, 8 participants
		Yarmouth: 4/6/2017, Yarmouth Water District community workshop, 16 participants
South Portland: 5/17/17, Osewantha Garden Club Annual Meeting, 9 participants		
Promote adult education classes	complete	Information on YardScaping classes was published in local adult education brochures, via direct mail, using social media, and through host locations.
Track behavior change	complete	CCSWCD staff documented class evaluations and contacted past adult education class participants to determine which YardScaping practices were implemented. Please see summary of behavior change reported by participants of PY3 classes, as well as those practices participants of PY4 classes intend to implement below.

Adult Education Behavior Change Tracking

During the fall of 2016, phone calls were made to participants of YardScaping adult education classes held in the fall of 2015 and spring of 2016 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 3 Adult Education Classes			
Lawn Care Practice	Plan to implement	Implemented Practice	% behavior change
Set Mower to a height of 3"	10	10	100.00%

Leave grass clippings ¹	11	Not able to determine	Not able to determine
Sharpen mower blades ⁶	11	Not able to determine	Not able to determine
Aerate	22	13	60.0%
Topdress	20	10	50.0%
Overseed	22	11	50.0%
Use low maintenance seed	23	4	18.2%
Weed Control	23	6	27.3%
Get a soil test	25	5	18.2%
Use nitrogen-only fertilizer	22	4	18.2%
Use compost tea	24	9	36.4%

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
- Companies would not aerate due to the drought
- Lawn care company would not leave clippings on the lawn, as requested

Below are the results of the Permit Year 4 post-class evaluations completed by the YardScaping class participants.

Permit Year 4 Post-Class Evaluations			
Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement
Set Mower to a height of 3"	21	21	100.0%
Leave grass clippings	6	10	60.0%
Sharpen mower blades	26	33	78.8%
Aerate	35	52	67.3%
Topdress	41	52	78.9%
Overseed	44	48	91.7%
Use low maintenance seed	35	41	85.4%
Get a soil test	37	50	74.0%
Use nitrogen-only fertilizer	38	51	74.5%
Use compost tea	34	52	65.4%

CCSWCD staff will contact the class participants from the Permit Year 4 classes in Permit Year 5 to determine which behaviors have been adopted.

Targeted Information Distribution

Distribute lawn care information in one targeted neighborhood per	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 municipalities. The ads promoted the YardScaping program and directed to CCSWCD's YardScaping page.
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¹ Unable to determine based on follow up

ISWG community		The following data were provided by Facebook:		
		Impressions	Frequency	Click Through Rate
		12,189	2.12	0.05% (industry average is 0.04-0.08%)

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	<u>South Portland Sentry: City pushed for no-penalty pesticide ban (August 12, 2016)</u>
		<u>The Forecaster: South Portland Council gives OK to pesticide ban (August 16, 2016)</u>
		<u>South Portland Sentry: South Portland passes first look at pesticide ban (August 19, 2016)</u>
		<u>Portland Press Herald: South Portland passes pesticide ban that puts education over enforcement (September 7, 2016)</u>
		<u>The Forecaster: Falmouth to explore pesticide restrictions (November 8, 2016)</u>
		<u>The Forecaster: South Portland plans to educate residents on pesticide ban (September 15, 2016)</u>
		<u>The Forecaster: South Portland bans pesticides, but skips penalties (September 8, 2016)</u>
		<u>Portland Press Herald: Summer may be over, but your lawncare isn't (September 7, 2016)</u>
		<u>Portland Press Herald: South Portland passes pesticide ban that puts education over enforcement (September 18, 2016)</u>
		<u>The Forecaster: Portland task force weighs ban, restrictions on pesticides (December 13, 2016)</u>
		<u>The Forecaster: Portland task force to keep working on pesticide use (January 3, 2017)</u>
		<u>The Forecaster: Portland panel sends pesticide rules to City Council (March 7, 2017)</u>
		<u>The Forecaster: Falmouth explores limits on pesticides (March 28, 2017)</u>
		<u>Portland Press Herald: Letter to the editor: Back organic lawn care ordinance, not pesticides (April 6, 2017)</u>
		<u>Portland Press Herald: Letter to the editor: Get involved in protecting environment from pesticides (May 9, 2017)</u>
<u>Portland Press Herald: Letter to the Editor: Smart environmentalism means letting grass grow (May 29, 2017)</u>		
<u>Green & Healthy Maine Homes: The lawn that loves you back (spring/summer 2017) (CCSWCD staff were interviewed for this article)</u>		
<u>The Forecaster: Portland city councilors to take up regulation of pesticides (June 13, 2017)</u>		

	<u><i>Portland Press Herald: Pesticide restriction plan to get Portland City Council hearing Wednesday (June 19, 2017)</i></u>
	<u><i>Portland Press Herald: Letter to the editor: Take a stance at Portland workshop for land care using organics (June 20, 2017)</i></u>
	<u><i>Portland Press Herald: Speakers at hearing urge Portland councilors to ban pesticides but differ on best approach (June 21, 2017)</i></u>
	<u><i>The Forecaster: Portland pesticide opponents put pressure on city councilors (June 27, 2017)</i></u>

Additional Activities not Identified in the Plan

Materials development	complete	<p>Tier 2 Construction Inspection Form: Developed erosion and sedimentation control inspection form for active construction sites, intended for frequent use</p> <p>Tier 3 Construction Inspection Form: Developed comprehensive construction inspection form intended to document compliance with MS4 permit, which requires ensuring construction activity is meeting CH500 and MCGP requirements</p> <p>Post-Construction Inspection Form: Developed comprehensive BMP inspection form intended to satisfy the annual post-construction inspection requirements for MS4 and CH500</p>
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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) impact evaluation protocol.

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

Permit Year	Description of Progress	Changes
1	The ISWG education coordinator worked with the York County MS4s to develop a regional MS4 Enhanced Outreach Plan. The draft plan was submitted to Maine DEP on June 25, 2014.	None
2	Comments on the draft plan were received from Maine DEP on 8/11/2014. The comments were addressed, and a	None

Permit Year	Description of Progress	Changes
	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.	
3	<p>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:</p> <ol 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. <p>ISWG and the York County MS4s received written notification of approval of the Plan revisions on April 8, 2016.</p>	None
4	No work required this permit year.	None
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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 with the Permit Year 2 annual report. The review will include process and impact indicators as outlined in the Targeted Outreach in Priority Watershed Plan. In Permit Year 5 an analysis of the process and impact indicators of the Targeted Outreach in Priority Watershed Plan will be provided.

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

Permit Year	Description of Progress	Changes
1	No work required to be completed this Permit Year. The Maine DEP comments will be addressed and finalized by November 1, 2014.	None
2	LR22 – act to Promote Asphalt and Latex Pavement Sealing Products was drafted by Representative Matthea Daughtry in January 2015. The	None

Permit Year	Description of Progress	Changes
	<p>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 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	The status on items completed to fulfil the Plan is as follows:	None

Permit Year	Description of Progress	Changes
	<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> 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>	

Permit Year	Description of Progress	Changes
	<p>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.</p> <p>2. addressing issues described in previous testimony against the legislation.</p> <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 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>	
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BMP 1.7: School Outreach

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

Measurable Goal 1.7.2 – In Permit Years 2 - 5, as funding permits, 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 the Measurable Goals associated with the School Outreach BMP. Any changes to the Measurable Goals are identified in the last column of the table.

Permit Year	Description of Progress	Changes
1	<p>PWD and CCSWCD offered the “Its all connected” program to the Cape school district. The following is a summary of the programming provided to Cape Elizabeth students:</p> <p>Total students: 150 (CCSWCD: 15, PWD: 135) Total contact hours: 718 (CCSWCD: 60, PWD: 658) Lesson topics: Macroinvertebrate sampling and identification & bio assessment, water quality and nonpoint source pollution and prevention, 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. Schools: Pond Cove Elementary School, Cape Elizabeth High School Educator: CCSWCD, PWD Educator contact information CCSWCD: Deb Debiegun, District Educator, Cumberland County Soil & Water Conservation District, ddebiegun@cumberlandswwcd.org, 207-892-4700 x 101 PWD: Sarah Plummer, Environmental Education Coordinator, Portland Water District, splummer@pwd.org, 207-774-5961 x 3324</p> <p>In addition, the public works department continued to support the beach clean-up efforts coordinated by the middle school, which occurred on September 27, 2013. The department provided 8 man hours of labor removing collected rubbish, using two dump trucks, a loader, and a pickup truck.</p>	None
2	<p>Cape Elizabeth Total students: 61 (CCSWCD: 48, PWD: 13) Total contact hours: 133 (CCSWCD: 68, PWD: 65) Lesson topics: Macroinvertebrate sampling and identification & bioassessment; water quality and nonpoint source pollution and prevention; marine debris and ocean currents, nonpoint source pollution and prevention, treatment and laboratory analysis of drinking water and wastewater Schools: Cape Elizabeth High School, Pond Cove Elementary School Educator: CCSWCD, PWD</p> <p>In addition, the public works department continued to support the beach clean-up efforts coordinated by the</p>	None

Permit Year	Description of Progress	Changes
	middle school, which occurred on September 25, 2015. The department provided 12 man hours of labor removing collected rubbish, using a dump truck, and a front end loader.	
3	<p>Total students: 93 (CCSWCD & PWD: 64, PWD: 29) Total contact hours: 250 (CCSWCD & PWD 134, PWD:116) Lesson topics: Macroinvertebrate sampling and identification & bioassessment; water quality parameters and testing, pollution and wastewater; marine debris, nonpoint source pollution and prevention and ocean currents; watershed protection; drinking water and wastewater treatment Schools: Cape Elizabeth High School</p>	None
4	<p>Total students: 75 (CCSWCD: 32, PWD: 43) Total contact hours: 182 (CCSWCD: 32, PWD: 150) Lesson topics: Marine debris, nonpoint source pollution and prevention and ocean currents; watershed protection; drinking water and wastewater treatment facility tours Schools: Cape Elizabeth High School</p>	
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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 ISWG for Public Involvement and Participation services, or through directly fulfilling the requirements.

MCM Goals:

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

BMP 2.1: Public Notice Requirement

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

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

Permit Year	Description of Progress	Changes
1	The Town provided public notice of its NOI and SWPM Plan on the Town website.	None
2	No work required or completed this Permit Year.	None
3	The Town’s SWPMP is available on the Town’s website under the Town Master Plans page https://www.capeelizabeth.com/government/rules_regs/masterplans/home.html	None
4	Same as Permit Year 3.	None
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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.

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

Responsible party - Public Works Director (with implementation assistance by ISWG stormwater program coordinator)

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

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

Permit Year	Description of Progress	Changes
	attended 5 of the meetings.	request, appendix was removed from Annual Report.
3	The ISWG meetings are open to the public. The Public Works Director attended 5 of the meetings. The Town also posts the annual reports on its website, on the Town Reports page: https://www.capeelizabeth.com/government/rules_regs/reports/home.html	None
4	The ISWG meetings are open to the public. The Public Works Director attended 4 of the meetings and additional employees attended one other meeting which was held in conjunction with training. The Town also posts the annual reports on its website, on the Town Reports page: https://www.capeelizabeth.com/government/rules_regs/reports/home.html	None
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BMP 2.2: Host Public Events

Measurable Goal 2.2.1 – ISWG and/or the Town 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 of Cape Elizabeth. The message will be tailored to best reach the target audience given the characteristics of the public event. The ISWG and/or permittee will consult with DEP to ensure the event will satisfy requirements. In particular, the Town of Cape Elizabeth will continue hosting an annual household hazardous waste day to minimize the potential for illegal dumping in Trout Brook.

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 Works Director (with implementation assistance by ISWG education coordinator)

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

Permit Year	Description of Progress	Changes
1	<p data-bbox="451 275 992 306">Urban Runoff & Green Neighbor Family Fest</p> <p data-bbox="451 344 1179 590">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 data-bbox="451 632 1170 1121">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 data-bbox="451 1163 1179 1409">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 data-bbox="451 1451 1166 1871">The <i>Green Neighbor Family Fest</i> was held after the race in Deering High School gymnasium due to weather. The event ran for three hours and was attended by approximately 700 people. Scheduled events included the awards ceremony and a live music. A total of 21 exhibits were set up by local nonprofit and governmental organizations, universities, and businesses to provide hands-on, educational activities for children. These activities included a marine touch tank, making “seed bombs” (seeds rolled in compost), water quality experiments, “poo bag” toss (about proper disposal of pet waste), and many more. Children also took part in face painting and water related prize giveaways.</p>	None

Permit Year	Description of Progress	Changes
	<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> <p>The Public Works Director volunteered at the event.</p> <p>Household Hazardous Waste Day The Town hosted a Household Hazardous Waste Day on May 10, 2014. The estimated cost to the Town to host this collection is approximately \$13,543. This amount indicates a slight decrease over the expenditures for Permit Year 5 of the previous cycle. The Town continues to survey residents in regards to this successful annual event. The Town advertises the event using the announcement contained in Appendix B. A summary of the survey results are also contained in Appendix B. Questions ranged from what types of wastes residents were dropping off to whether or not they would be willing to pay to drop off these wastes and what level of awareness they had about Town, state and other organizations stormwater programs. Results this year indicated that “oil based paint” and “solvents/cleaners” were the most common wastes being dropped off. As has been true of prior years, most residents had heard about the event thru the small weekly newspaper (Cape Courier), 74% of residents had previously participated in this event, 70% said they would be willing to pay a fee and 30% of residents were aware of the stormwater management efforts of the “Think Blue Maine” campaign (down from 35% last year. It should be noted that a car count was not able to be conducted, 329 surveys were received this year.</p> <p>Prescription Medication Drop-off Day The Town hosted a collection of unwanted prescription medications on April 26, 2014. The Town collected 249.6 lbs of medications.</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</p>	None

Permit Year	Description of Progress	Changes
	<p>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 cause: clean water and youth education, was a major reason why they chose to participate.</p> <p>The <i>Green Neighbor Family Fest</i> was held after the race at Deering High School. The event ran for three hours and was attended by approximately 700 people. Scheduled events included the awards ceremony and a live music. A total of 21 exhibits were set up by local nonprofit and governmental organizations, universities, and businesses to provide hands-on, educational activities for children. These activities included a marine touch tank, making “seed bombs” (seeds rolled in compost), water quality experiments, and many more. Children also took part in face painting and water related prize giveaways.</p> <p>Plans are underway to host the fifth annual <i>Urban Runoff 5K</i> and <i>Green Neighbor Family Fest</i> on Saturday, April 23, 2016.</p> <p><i>Promotion</i> With the help of all ISWG representatives, CCSWCD promoted ISWG’s public event, the Urban Runoff 5K and</p>	

Permit Year	Description of Progress	Changes
	<p>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>Cape Elizabeth placed 6 posters throughout the Town advertising the event and had 10 participants in the race.</p> <p>Household Hazardous Waste Day The Town hosted a Household Hazardous Waste Day on May 9, 2015. The estimated cost to the Town to host this collection was approximately \$17,400. This amount indicates a slight decrease over the expenditures for Permit Year 1 of this permit cycle. The Town continues to survey residents in regards to this successful annual event. Questions were the same as asked in prior years and ranged from what types of wastes residents were dropping off to whether or not they would be willing to pay to drop off these wastes and what level of awareness they had about Town, state and other organizations stormwater programs. 306 people completed the survey. This year respondents indicated that “oil based paint” was again the most common waste being dropped off (121 respondents), but only 10 respondents dropped off “solvents/cleaners” (this was one of the more common wastes last year). As has been true of prior years, most residents had heard about the event thru the small weekly newspaper (Cape Courier), 77% of residents had previously participated in this event, 67% said they would be willing to pay a fee and 17% of residents were aware of the stormwater management efforts of the “Think Blue Maine” campaign (down from 30% last year, 35% in Permit Year 5 of the previous permit cycle). It should be noted that a car count was not able to be conducted, 306 surveys were received this year.</p> <p>Prescription Medication Drop-off Day The Town hosted a collection of unwanted prescription medications on April 25, 2015. The Town collected 389 lbs of medications.</p>	
3	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	None

Permit Year	Description of Progress	Changes
	<p data-bbox="451 239 1180 485">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 data-bbox="451 527 1180 1157">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 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 data-bbox="451 1199 1180 1587">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 data-bbox="451 1629 1180 1692">Plans are underway to host the sixth annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 22, 2017.</p> <p data-bbox="451 1755 1180 1877"><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</p>	

Permit Year	Description of Progress	Changes
	<p>ads, and direct email communication to participants.</p> <p>Cape Elizabeth placed several posters throughout Town advertising the event, provided one municipal volunteer, and had 11 participants in the race.</p> <p>Household Hazardous Waste Day The Town hosted a Household Hazardous Waste Day on May 14, 2016. The estimated cost to the Town to host this collection was approximately \$16,319. This amount indicates a slight decrease over the expenditures for Permit Year 1 of this permit cycle. The Town continues to survey residents in regards to this successful annual event. Questions were the same as asked in prior years and ranged from what types of wastes residents were dropping off to whether or not they would be willing to pay to drop off these wastes and what level of awareness they had about Town, state and other organizations stormwater programs. 329 people completed the survey. This year respondents indicated that “oil based paint” was again the most common waste being dropped off (136 respondents). As has been true of prior years, most residents had heard about the event thru the small weekly newspaper (Cape Courier), 79% of residents had previously participated in this event, 68% said they would be willing to pay a fee and 20% of residents were aware of the stormwater management efforts of the “Think Blue Maine” campaign (down from 30% Permit Year 1, but up from 17% last year).</p> <p>Prescription Medication Drop-off Day The Town hosted a collection of unwanted prescription medications on April 30, 2016. The Town collected 334.9 lbs. of medications.</p> <p>Scoop the Poop Day The Town provided disposal bags and free disposal at the transfer station for the April 4, 2016 dog waste cleanup day at the Gull Crest Athletic Fields.</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</p>	

Permit Year	Description of Progress	Changes
	<p data-bbox="451 239 1180 447">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 Participation event for all ISWG communities. Participation by each ISWG municipality is summarized in the table below.</p> <p data-bbox="451 489 1180 1157">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 data-bbox="451 1199 1180 1583">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 data-bbox="451 1625 1180 1724">Plans are underway to host the seventh annual Urban Runoff 5K and Green Neighbor Family Fest on Saturday, April 21, 2018.</p> <p data-bbox="451 1766 1180 1829">The Public Works Director volunteered as a flagger and had 6 participants in the event.</p> <p data-bbox="451 1871 943 1902">1st Prescription Medication Drop-off Day</p>	

Permit Year	Description of Progress	Changes
	<p>The Town hosted a collection of unwanted prescription medications on October 22, 2016. The Town collected approximately 360 lbs. of medications.</p> <p>2nd Prescription Medication Drop-off Day The Town hosted a collection of unwanted prescription medications on April 29, 2017. The Town collected 271.5 lbs. of medications.</p> <p>Household Hazardous Waste Day The Town hosted a Household Hazardous Waste Day on May 13, 2017. The estimated cost to the Town to host this collection was approximately \$18,366. This amount indicates an increase over the expenditures for Permit Years 1, 2 and 3 of this permit cycle. The Town continues to survey residents in regards to this successful annual event. Questions were the same as asked in prior years and ranged from what types of wastes residents were dropping off to whether or not they would be willing to pay to drop off these wastes and what level of awareness they had about Town, state and other organizations stormwater programs. 381 people completed the survey. This year respondents again indicated that “oil based paint” was again the most common waste being dropped off (148 respondents). As has been true of prior years, most residents (299) had heard about the event thru the small weekly newspaper (Cape Courier), 79% of residents had previously participated in this event, 67% said they would be willing to pay a fee and 14% of residents were aware of the stormwater management efforts of the “Think Blue Maine” campaign (down from 30% Permit Year 1 and 17% in Permit Year 2 and 20% in Permit Year 3).</p> <p>Scoop the Poop Day The Town provided disposal bags and free disposal at the transfer station for the April 22, 2017 dog waste cleanup day at the Fort Williams. Approx. 30 dog owners picked up trash and dog waste.</p>	
5		

MCM 3 Illicit Discharge Detection and Elimination

MCM Goals

1. Maintain an updated watershed-based storm sewer system infrastructure map;
2. Continue to enforce the Town’s non-stormwater discharge ordinance;
3. Continue to implement the Town’s illicit discharge detection and elimination program (the program includes a prioritized dry weather outfall inspection plan that will be expanded into watersheds that have not been inspected);
4. Continue to implement the Town’s strategy to detect any illicit discharges to the open ditch system within Trout Brook; and
5. Develop a list of septic systems in Trout Brook that are 20 years old or older and implement a drive-by evaluation and documentation program
6. Work with the Portland Water District to identify if hydrant flushing practices in the MS4 constitute significant contributors of pollutants.

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

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

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

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

Responsible Party - Public Works 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	Watershed based maps that outline the storm sewer system have been developed. The existing maps continue to be updated to reflect changes to the system as they are constructed. Updates are hand notations on paper maps, which are updated electronically by a consultant as time and funds allow.	None
2	The Town converted its paper maps to GIS and conducted a quality control check. The Town has 137 active MS4 outfalls, 1650 catch basins, 163 drain manholes, 251 culverts, 152,122 feet of storm drain pipe (28.8 miles), and 30,500 feet of ditches. The Town also incorporated the infrastructure changes associated with the Charles Road combined sewer	None

Permit Year	Description of Progress	Changes
	separation into GIS.	
3	<p>The Town continued its quality control check on stormwater infrastructure. The Town’s consultant prepared paper maps in April 2016 to assist in the quality control check.</p> <p>The quality control check in combination with infrastructure improvement projects resulted in 97 new outfalls. Approximately 10 were the result of new infrastructure, the remaining were the result of QC.</p> <p>In addition, it was discovered that one layer of catch basins was copied into the GIS twice, duplicating many of the structures (which were laying directly on top of one another making it difficult to see that there were two structures in one location). The duplicates were removed from the GIS system.</p> <p>The Town has the following active infrastructure in the MS4: 234 piped outfalls 9 ditch outfalls 1183 catch basins 172 drain manholes 152 culverts 1366 stormwater pipes (183,675 lineal feet) 66 underdrains (11,168 lineal feet) 2 tree box filters</p> <p>The GIS was updated in July 2016 as a result of the quality control check.</p>	None
4	<p>The Town completed a review of the stormwater infrastructure during permit year 4, including a detailed review of ditch segments and ditch outfalls. Road projects which included stormwater infrastructure changes caused the minor changes to the piped system and structures. The Town’s consultant printed an additional set of paper maps in June 2016.</p> <p>The Town has the following active infrastructure in the MS4: 235 piped outfalls 115 ditch outfalls 84,000 feet of ditch line 1191 catch basins 180 drain manholes 276 culverts 1377 stormwater pipes (185,000 lineal feet) 66 underdrains (11,168 lineal feet)</p>	

Permit Year	Description of Progress	Changes
	2 tree box filters Stormwater subsurface storage unit and StormTreat Filter (newly installed at library) High school detention pond Recycling Center Underdrained grassed biofilter (newly installed)	
5		

BMP 3.2: Continue to Enforce the Non-Stormwater Discharge Ordinance

Measurable Goal 3.2.1 - The Town of Cape Elizabeth adopted and implemented a Non-Stormwater Discharging Ordinance (Article II, Section 18-2-8 Non-Stormwater Regulation of Chapter 18 Conservation) effective July 13, 2005. 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 Non-Stormwater Discharge Ordinance was used as an enforcement tool for the illicit discharges.

Responsible Party - Public Works Director

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. This information will be reported under BMP 3.3 Continue Dry Weather Outfall Inspection Program.

Responsible Party: Public Works Director.

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 annual dry weather inspections in the Town’s two highest priority watersheds (Trout Brook and Spurwink River). Implementation of the IDDE program will continue, and dry weather outfall inspections will be expanded to watersheds that were not previously inspected beginning in 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 Works Director

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

Permit Year	Description of Progress	Changes
1	The Town inspected 115 outfalls in the urbanized area,	None

Permit Year	Description of Progress	Changes
	<p>expanding inspections from the highest priority (Trout Brook and Spurwink River) watersheds to the Casco Bay Watershed.</p> <p>No evidence of illicit discharge was identified except for one outfall on Ocean House Road that discharges to Trout Brook. This outfall has a known illicit discharge, for which a Notice of Violation has been issued. The Town is working with the discharger to correct the issue. The NOV specifies that the discharge discontinue by October 1, 2014.</p> <p>The public called in two additional potential illicit discharges in Permit Year 2.</p> <p>A copy of the inspection record for the outfalls is provided in Appendix C as well as a copy of the NOV that was issued, and a copy of the Illicit Discharge Tracking Sheet that shows the status of those potential illicit discharges identified.</p> <p>The Public Works Director also provided a memorandum to staff on May 17, 2014 reminding them to be on the lookout for illicit discharges when performing their duties. The Town also began preparation of a written document describing the IDDE program that they have implemented over the past two permit cycles.</p>	
2	<p>The Town updated its IDDE Program in December 2014 and provided the Maine DEP with a copy for review. The DEP reviewed the Program and provided comments on 2/17/2015. The Town updated the IDDE program in April 2015 to incorporate many of the comments.</p> <p>The Town inspected 135 outfalls of the 137 outfalls (125 on paper, and 10 electronically). The Two outfalls not inspected were missed during the transition from paper to electronic mapping. The Town also inspected all catch basins during Permit Year 2. Three potential illicit discharges were identified during the outfall inspections, and no potential illicit discharges were identified during catch basin inspections.</p> <p>The illicit discharges are under investigation.</p>	<p>Per DEP request, appendix was removed from Annual Report.</p> <p>In addition, during Permit Year 3, this section was updated to address comments by the DEP.</p>
3	<p>The Town inspected 184 of the 234 piped outfalls in November, February and May of Permit Year 3.</p> <p>The Town also inspected 1141 of its 1183 catch basins during</p>	None

Permit Year	Description of Progress	Changes
	<p>Permit Year 2 (July 2015). The other 42 basins were identified during the winter and spring QC check of the system – and were immediately added to the GIS. No illicit discharges were identified during catch basin inspections.</p> <p>Three potential illicit discharges were identified during the outfall inspections, and no potential illicit discharges were identified during catch basin inspections.</p> <p>The following items were observed during outfall inspections: 004, 011A, 013, 026, 034, 100C, 104A - residents are blowing/raking yard waste into outfall outlet area 008, 014, 015, - a slight sheen was observed 036A – pet waste was being deposited around outfall outlet 096C – a sample was taken for enterococci and E.coli because the outfall was flowing and had a standing foam at the outlet. No bacteria was detected. The discharge is likely from a natural source.</p> <p>The Town is preparing public education materials to address the yard waste and pet waste issues.</p> <p>Additional illicit discharges identified included: An observation of suds at a catch basin that discharges to Outfall 113 on Bayberry Lane which</p> <p>A discharge of drywall compound into a catch basin (the homeowner was contacted by the Public Works Director and instructed not to discharge to the catch basin again).</p> <p>A resident reported discharges of swimming pool draining into the storm drains system. (the homeowner was contacted by the Public Works Director and provided with alternate instructions on discharge of pool water).</p>	
4	<p>The Town inspected 232 of the 235 outfalls between November 2016 and March 2017, and the catch basins in August 2016.</p> <p>No evidence of illicit discharges was identified during catch basin cleaning. No new evidence of potential illicit discharges was observed during outfall inspections.</p> <p>The Town prepared an article which was published in the 3/29/2017 Cape Courier on Pet Waste pickup and Yard</p>	

Permit Year	Description of Progress	Changes
	<p>Waste describing the proper ways to dispose of these items in response to the PY 3 issues identified.</p> <p>The Town also continued to investigate the potential illicit discharge at 11 Bayberry by inspecting the plumbing on 3/23/2017. The home has two sump pumps, but all plumbing was properly connected. Additional inspection of the system On 8/22/2017 showed no evidence of illicit discharge.</p> <p>The outfalls with a sheen from PY 3 inspections were re-inspected. The sheens appear to be from perched groundwater (iron coming out of solution and creating iron floc).</p>	
5		

BMP 3.4: Continue Open Ditch Illicit Discharge Program

Measurable Goal 3.4.1 – During the past permit cycle, the Town developed a strategy for detecting illicit discharges in their open ditch system within their highest priority watershed (Trout Brook). The Town will expand the open ditch inspection program into the second highest priority watershed (Spurwink River).

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 done under BMP 3.3 Continue Dry Weather Outfall Inspection Program.

Responsible Party - Public Works 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	Ditch inspections during Permit Year 1 included Spurwink Road, Gull Crest and the DPW area. The inspections identified two previously unknown drains. No evidence of illicit discharges were observed in or around the drains. The inspections were conducted in conjunction with maintenance work.	None
2	Inspections were completed on 100% of the ditches in the Urbanized Area during Permit Year 2. No illicit discharges were identified during ditch inspections, but maintenance needs were documented on several ditch segments.	None
3	No work required this permit year.	None
4	As part of the mapping QC effort, ditches were mapped and inspected along Sawyer Road, Fowler Road, Mitchell Road,	None

Permit Year	Description of Progress	Changes
	Park Circle, Two Lights Road, and a few other smaller roads.	
5		

BMP 3.5: Document and Evaluate Aging Septic Systems

Measurable Goal 3.5.1 – By June 30, 2016, the Town will develop a list of aging (i.e., greater than 20 years old) septic systems in its two highest priority watersheds (Trout Brook and Spurwink River) that might discharge to the MS4 if they were to fail.

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

Permit Year	Description of Progress	Changes
1	No work was required to be completed this year.	None
2	Although no work was required to be completed this year, the Town began generating a list of properties with aged septic systems. This list will be reviewed and updated during Permit Year 3.	None
3	<p>There are 684 occupied parcels in the Trout Brook Watershed. 564 of these are on sanitary sewer. Of the remaining, Town documents show:</p> <p>29 parcels have septic systems that are newer than 1997 19 parcels have septic systems that were installed in 1997 or earlier 72 parcels had insufficient information to assess if the septic systems were installed, or what age they were.</p> <p>There are 937 occupied parcels in the Spurwink River Watershed. 585 of these are on sanitary sewer. Of the remaining, Town documents show:</p> <p>90 parcels have septic systems that are newer than 1997 42 parcels have septic systems that were installed in 1997 or earlier 220 had insufficient information to assess if the septic systems were installed, or what age they were.</p> <p>The Town is continuing to investigate if additional septic system information can be gained on the 220 parcels in Spurwink River Watershed and the 72 parcels in the Trout Brook Watershed. If the Town cannot gain additional information to determine if there are septic systems on these parcels, and what their age is, these parcels will be “drive by” inspected during Permit Year 4.</p>	None

Permit Year	Description of Progress	Changes
4	No work completed this permit year.	None
5		

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

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

Responsible Party - code enforcement officer

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

Permit Year	Description of Progress	Changes
1	No work required to be completed this permit year.	None
2	No work was required to be completed this year.	None
3	No work was required to be completed this year.	None
4	<p>Drive by evaluations were attempted for all parcels needing inspection as identified during the PY 3 mapping activity. In the Trout Brook Watershed, inspections were completed on 51 of the 92 parcels identified as having older septic systems or insufficient data to determine the date of the system. The other 44 parcels were determined to be condominiums, which were on sanitary sewer.</p> <p>In the Spurwink River Watershed, 195 of the 220 parcels were inspected. Of the other 25 parcels, 5 were not accessible from the public way, 1 was vacant, and the remaining were determined to be either already on sanitary sewer, or were on a common septic system which was not visible from public right of way.</p> <p>None of the systems were observed to have evidence of leakage or failure.</p>	None
5		

BMP 3.6: Coordinate with the water utility regarding water line and hydrant flushing to determine if either is a significant contributor of pollutants to the MS4

Measurable Goal 3.6.1 – By June 30, 2014 (end of 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 and details on water line or hydrant flushing that outlines procedures, including how often flushing occurs, typical flow rates and duration, where the water is conveyed, what the target or actual chlorine concentrations are, and what best practices are employed to prevent erosion and address potential pollutants.

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

Permit Year	Description of Progress	Changes
1	<p>The Town and their stormwater consultant met with the Portland Water District on 10/1/2013 to discuss hydrant flushing in the Town. The PWD informed the Town of the number and location of hydrants, and gave general information on typical flow rates and duration of flushing and where the water is conveyed. The PWD informed the Town that flushing was scheduled to occur in the spring 2014, and that flushing occurs on a three year cycle.</p> <p>The Town also met with the PWD and ISWG communities on 1/17/2014, where further 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.</p> <p>The Town provided the PWD with shape files showing the highest priority watershed – Trout Brook (4/17/2014), information on the types of discharges that might cause exceedances of the Non-Stormwater Discharge Ordinance (4/3/2014 email), and electronic files of the storm drain system (4/17/2014).</p>	None
2	No work was required to be completed this year.	None
3	No work was required to be completed this year.	None
4	No work was required to be completed this year.	None
5		

Measurable Goal 3.6.2 - By no later than December 30, 2014, unless otherwise approved by the Department, using available GIS or other municipal mapping information, the location of hydrants will be added to the storm sewer system infrastructure map to aid in the evaluation; the municipality will work with the water utility to prioritize the hydrants or water lines that have the potential to cause exceedances of the ambient water quality criterion for chlorine when discharged through the MS4. The municipality will request a water quality progress report that documents what best management practices are being implemented for flushing activity at the prioritized hydrants as well as the water

utility’s testing results of the total residual chlorine for any such discharges.

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

Permit Year	Description of Progress	Changes
1	The PWD provided the Town with electronic files showing the locations of the hydrants on 2/21/2014.	None
2	No work was required to be completed this year because the work was completed under 3.6.1 during Permit Year 1.	None
3	No work required to be completed this year.	None
4	No work was required to be completed this year.	None
5		

Measurable Goal 3.6.3: Permit Years 3 – 5, the municipality will request an annual water quality progress report that documents what best management practices are being implemented for flushing activity at the prioritized hydrants as well as the water utility’s testing results of the total residual chlorine for any such discharges.

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

Permit Year	Description of Progress	Changes
1	No work required to be completed this permit year.	None
2	No work was required to be completed this year, however, 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.	None
3	No work required to be completed this permit year.	None
4	The Town requested a water quality report. The Portland Water District provided a 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.	None
5		

Measurable Goal 3.6.4: If it is determined by the end of Permit Year 3, that water line or 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, as soon as practicable or by no later than 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 Works Director.

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

Permit Year	Description of Progress	Changes
1	No work required to be completed this permit year.	None
2	No work was required to be completed this year.	None
3	The PWD provided the Town with a memorandum documenting the BMPs employed during hydrant flushing. The PWD is dechlorinating all hydrants prior to discharge to meet state water quality standards.	None
4	The PWD provided the Town with a memorandum documenting the BMPs employed during hydrant flushing. The PWD is dechlorinating all hydrants that have close proximity to storm drains or small streams. Where there is a significant distance to a water body or storm drain, the PWD will employ land application and diffusion during hydrant flushing.	None
5		

MCM 4 Construction Site Stormwater Runoff Control

MCM Goals

Continue to implement and enforce a program to reduce pollutants in any stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. For specific permit requirements and suggestions, refer to DEP'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.

In addition, the Town will require contractors performing municipal work to be certified in erosion and sediment control through the state program, and the Public Works Director and department supervisor will become certified.

BMP 4.1: Continue notification to construction site developers and operators of the requirements for registration under the Maine Construction General Permit or Chapter 500, Stormwater Management for the discharge of stormwater associated with construction activities;

Measurable Goal 4.1.1 – Continue notifying developers and contractors through the modified building permit and Planning Board review process, and through meetings with code enforcement and planning staff. 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.

Responsible Party - Public Works Director (Planning Board review process), code enforcement officer (building permit)

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 continued notification procedures currently in place using the Town planning staff and code enforcement staff directing construction site developers to Town Subdivision, Zoning and Stormwater, Non-Stormwater Control Ordinances for requirements related to Federal and State regulations. The Planning Board applications have been modified to include notification to applicants of the requirements for registration under the MCGP or Chapter 500 Stormwater Management. The Town continues to evaluate the current system and modifies it if needed.	None
2	The building permit application includes a question about whether the applicant will disturb one or more acres of land to help in tracking sites. The Town added notices to the planning and code enforcement office web pages notifying applicants of the Chapter 500 requirements. http://www.capeelizabeth.com/government/departments/planning/home.html http://www.capeelizabeth.com/government/departments/code_enforcement/home.html	None

Permit Year	Description of Progress	Changes
3	Same as Permit Year 2.	None
4	Same as Permit Years 2 and 3.	None
5		

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

Measurable Goal 4.2.1 – During the previous Permit Cycle, the Public Works Director developed a spreadsheet to document the construction activities that disturb more than one acre of land in the Urbanized Area. The spreadsheet will be updated periodically to include the construction projects in the Urbanized Area that disturbed more than one acre of land as they are identified.

Responsible Party - Public Works 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	Of the 110 building permits that were issued during Permit Year 1, none except those that passed through Planning Board were for projects that would cause one or more acres of disturbance. Only one site which triggered the construction inspection requirements was under construction during Permit Year 1. A spreadsheet is maintained documenting selected site inspections (Appendix D).	None
2	Of the 185 building permits that were issued during Permit Year 2, none except those that passed through Planning Board were for projects that would cause one or more acres of disturbance. Two sites triggered the construction inspection requirements during Permit Year 2.	Per DEP request, appendix was removed from Annual Report.
3	Of the 203 building permits that were issued during Permit Year 3, none except those that passed through Planning Board were for projects that would cause one or more acres of disturbance. One site triggered the construction inspection requirements during Permit Year 3. Two other sites were less than one acre of land, but third party construction inspections were completed anyway.	The Town’s consultant double checked the disturbance threshold and determined two sites were below the threshold.
4	Of the 212 building permits that were issued during Permit Year 3, none except those that passed through Planning	The BMP was adjusted to

Permit Year	Description of Progress	Changes
	<p>Board were for projects that would cause one or more acres of disturbance.</p> <p>One site triggered the construction inspection requirements during Permit Year 4.</p>	<p>state that the spreadsheet is updated periodically as construction projects are identified.</p>
5		

BMP 4.3: Continue implementing the construction site inspection program.

Measurable Goal 4.3.1 – During the previous permit cycle, the Town developed a procedure for construction site inspections by either a municipal official or a contracted third party to meet the terms and conditions of the MS4 General Permit (i.e., to ensure projects are in compliance with the Maine Construction General Permit and Basic Standards of Chapter 500, Stormwater Management). The program includes three construction inspections for sediment and erosion control issues in those sites that are in the highest priority watershed (Trout Brook), 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, and will document this information in the Construction Inspection Tracking spreadsheet that is also used to document BMP 4.2.

Responsible Party - Public Works Director (third party inspections), code enforcement officer (when no third party inspections are completed)

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	At least 6 inspections were conducted by a third party contractor for the site that required inspections. Generally issues such as repair of silt fence and maintenance of the construction entrance were recommended and then repaired by the contractor prior to the next inspection. The Maine DEP was not required to be involved in any issues associated with implementation of the Construction SWPPP for the site.	None
2	Both sites are being inspected a third party inspector to ensure contractors are following their Erosion and Sediment Control Plans. Three inspections were completed at each of the two active subdivision sites this Permit Year. The Maine DEP was not required to be involved in any issues associated with implementation of the Construction SWPPP for the sites.	None
3	A third party inspector completed the construction inspections at the sites during construction. During Permit Year 3 the site that disturbed more than one acre and one of the smaller sites each had at least 3 inspections for sediment and erosion control including one at the beginning of each construction project. The other smaller site began construction in June 2016, and had two inspections by 6/30/2016. All projects were still under construction as of 6/30/2016. The Maine DEP was not required to be involved in any issues associated with implementation of the Construction SWPPP for the sites.	The Town’s consultant double checked the disturbance threshold and determined two sites were below the threshold. – but the third party inspector was

Permit Year	Description of Progress	Changes
		reviewing the sites.
4	<p>A third party inspector completed the inspections at the site during Permit Year 4. At least three inspections were completed, including one at the beginning of the project.</p> <p>The final stabilization of the one PY 3 site was inspected during Permit Year 4.</p> <p>The Maine DEP was not required to be involved in any issues associated with implementation of the Construction SWPPP for the sites.</p>	
5		

BMP 4.4: Enhanced Certifications in Trout Brook

Measurable Goal 4.4.1 – By June 30, 2016, the Public Works Director and department supervisor will become certified in sediment and erosion control through the State program.

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 Public Works Director completed the classroom training for certification in sediment and erosion control on 12/2/2013 and completed field training for full certification on 6/24/2014.	None
2	No work required or completed this Permit Year.	None
3	The Town has been tracking trainings for this certification and none were offered this permit year. The Town will continue to attempt to gain this certification for the department supervisor.	None
4	The Town has been tracking trainings for this certification and none were offered this permit year. The Town will continue to attempt to gain this certification for the department supervisor.	None
5		

Measurable Goal 4.4.2 – Whenever the Town undertakes a major project in Town (including Trout Brook), they specify in the bidding documents that the contractor be certified by the state in sediment and erosion control.

Responsible Party: Public Works Director

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

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

Permit Year	Description of Progress	Changes
1	No Town construction was conducted during Permit Year 1 that triggered this requirement.	This measurable goal was expanded to the entire Town (it previously identified that the practice was applicable only to projects in Trout Brook).
2	No Town construction was conducted during Permit Year 2 that triggered this requirement.	None
3	No Town construction was conducted during Permit Year 3 that triggered this requirement.	None
4	No Town construction was conducted during Permit Year 4 that triggered this requirement.	None
5		

MCM 5 Post-Construction Stormwater Management

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 Discharge Ordinance (effective April 8, 2010) which requires that any site that disturbs more than one acre certify to the Town annually by May 1 that they have inspected and maintained their stormwater BMPs. The ordinance is Article IV of Chapter 18 Conservation. The Town will continue to enforce this ordinance.

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

Permit Year	Description of Progress	Changes
1	The Town continues to enforce this ordinance.	None
2	The Town continues to enforce this ordinance.	None
3	The Town continues to enforce this ordinance.	None
4	The Town continues to enforce this ordinance.	None
5		

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

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

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

The Town will update the spreadsheet as sites are identified, and when maintenance reports are received.

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 Party - Public Works Director

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

Permit Year	Description of Progress	Changes
1	<p>The Town updated its Post-Construction Spreadsheet, which is contained in Appendix E. Eastman Meadows is the only project triggering the ordinance where construction has been completed.</p> <p>The Cottage Brook site will not be subject to the Post construction ordinance as it was approved by the Town and the DEP three days before the Chapter 500 changes requiring Post Construction certifications was approved (well before the Town’s ordinance was approved).</p> <p>The following is a summary of the Post-Construction BMPs for the Town:</p> <p>1 Site discharge to the Town’s MS4 1 site provided its maintenance certification to the Town 1 sites had fully functioning BMPs 0 site required routine maintenance.</p>	<p>During permit year 1, the Town reported that the Cottage Brook site would be subject to the Post Construction Ordinance. This site was approved by the DEP and Town 3 days before the 2006 Chapter 500 changes went into effect (well before the Town’s ordinance went into effect). The text has been corrected here.</p>
2	<p>The following is a summary of the Post-Construction sites’ status for Permit Year 2 certifications:</p> <p>1 Site discharge to the Town’s MS4 1 site provided its maintenance certification to the Town 1 sites had fully functioning BMPs</p>	<p>Per DEP request, appendix was removed from Annual Report.</p>

Permit Year	Description of Progress	Changes
	1 site required routine maintenance (catch basin cleaning).	
3	The following is a summary of the Post-Construction sites' status for Permit Year 3 certifications: 1 Site discharge to the Town's MS4 1 site provided its maintenance certification to the Town 1 sites had fully functioning BMPs 1 site required routine maintenance (catch basin cleaning).	None
4	The following is a summary of the Post-Construction sites' status for Permit Year 3 certifications: 1 Site discharge to the Town's MS4 1 site provided its maintenance certification to the Town 1 sites had fully functioning BMPs 1 site required routine maintenance (catch basin cleaning). The other sites that disturbed more than one acre of land turned their stormwater infrastructure over to the Town for maintenance.	This BMP was modified to state that the tracking spreadsheet is updated as sites are identified and when maintenance reports are received.
5		

BMP 5.3: Develop LID notification procedures for developers

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

Responsible Party – Town planner

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

Permit Year	Description of Progress	Changes
1	No work required 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

Permit Year	Description of Progress	Changes
		measurable goal were added and completed this permit year.
3	Same as Permit Year 2	None
4	Same as Permit Year 2	None
5		

MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations

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

MCM Goals:

- Maintain an updated inventory of all municipal operations conducted in, on, or associated with facilities, buildings, golf courses, cemeteries, parks and open space owned or operated by regulated MS4s that have the potential to cause or contribute to stormwater or surface water pollution.
- Continue to implement written operation and maintenance procedures for the facilities in the inventory to ensure long term operation of structural and non-structural controls that reduce stormwater pollution to the maximum extent practicable.
- Train employees on ways to prevent and reduce stormwater pollution from municipal operations and facilities.
- Continue to implement a program to sweep all publicly accepted paved streets and publicly owned paved parking lots as well as cleaning catch basins and other stormwater structures.
- Continue to maintain the conveyances, structures and outfalls of the regulated MS4.
- Continue to implement the Stormwater Pollution Prevention Plan for the Department of Public Works and Recycling Center sites.

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

BMP 6.1: Operations at Municipally Owned Grounds and Facilities

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

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

Permit Year	Description of Progress	Changes
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Permit Year	Description of Progress	Changes
1	The Inventory of Municipal Operations was updated in March of 2014. The Inventory is attached as Appendix F.	None
2	The Inventory was updated in March 2015, to include mowing and internments in the Riverside Cemetery, to clarify that annual mowing is done at the Thomas Jordan Trust area, and that fertilizer is applied at the Public Works facility.	Per DEP request, appendix was removed from Annual Report.
3	The inventory was reviewed and updated on 4/15/2016 to reflect additional fields in Town and several storage buildings and activities at Fort Williams Park.	None
4	The inventory was reviewed and updated on 11/22/2016 and 6/21/2017. Updates included correction of typos, notes that each location is subject to the Ground Maintenance Procedures to protect stormwater, and a new listing of stormwater quality treatment infrastructure that the Town maintains (Shore Road Path infrastructure, 2 tree box filters, a subsurface storage and infiltration unit and detention pond and biofilter). The Town has been maintaining this added infrastructure, but had not added them specifically to the list.	None
5		

Measurable Goal 6.1.2 – The Town relies on the Standard Operating Procedures which are revised as necessary. The Town will continue to implement these SOPs at the inventoried facilities in Town. Where the Public Works Director is not responsible for implementing the SOPs (i.e., at the police and fire departments), those facilities will maintain copies of their SOPs on-site.

Reporting - Annual reports to DEP each year will include a status report on the progress of implementing the SOPs.

Responsible Party – Public Works Director

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

Permit Year	Description of Progress	Changes
1	The Town updated its Police, Fire and Grounds Maintenance SOPs in April 2014. Copies of the updated SOPs are contained in Appendix G.	None
2	No changes to the SOPs were required. (Even though the Inventory was updated to show the activities at the Riverside Cemetery and Thomas Jordan Trust area, the Grounds and Maintenance SOPs for these facilities and personnel already contained practices for these activities.)	None
3	The Grounds Maintenance and Operations procedures to protect stormwater were updated to reflect the Town's	None

Permit Year	Description of Progress	Changes
	<p data-bbox="451 239 919 268">Integrated Pest Management Program.</p> <p data-bbox="451 310 1170 554">In November 2015, the Town created a guideline for Salting and Sanding based on information provided by MDOT at the Snow & Ice Control Workshop. The guideline was provided to supervisory winter staff to assist them in application of deicing materials pre-storm, post storm, at varying temperatures and conditions to minimize the use of deicing materials, while providing safe roads.</p> <p data-bbox="451 596 1170 835">In May 2016, the Town created an SOP for transfer of magnesium chloride from the auxiliary truck to the tank in response to a release at Public Works. The discharge was reported to the Maine DEP Stormwater Coordinator as soon as the Public Works Director became aware of it, and the Town had addressed the requests made by the DEP because of the release.</p>	
4	The SOPs continue to be implemented as written. No changes were made to the SOPs.	None
5		

BMP 6.2: Training

Measurable Goal 6.2.1 – Formal stormwater pollution prevention employee training is completed annually. Refresher trainings occur on an informal basis whenever deemed necessary by the Public Works Director. The trainings cover such topics as spill prevention and response, good housekeeping, and materials management practices. The Town will train other employees in the Standard Operating Procedures during Permit Year 2.

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

Responsible Party - Public Works Director.

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

Permit Year	Description of Progress	Changes
1	<p>Thirteen public works employees were trained in IDDE and Pollution Prevention Good Housekeeping (SWPPP and SPCC Plan) on 8/15/2013.</p> <p>The two Recycling Center employees and the Public Works Director were trained on the SWPPP on 9/23/2013.</p> <p>Four additional public works employees were trained in pollution prevention Good Housekeeping at the Highway Congress on 6/5/2014.</p> <p>The Public Works Director received his Tank Smart training on 6/19/2014.</p> <p>The Public Works Director and planner also attended the Maine Stormwater Conference on November 21 and 22, 2013.</p>	None
2	<ol style="list-style-type: none"> 1) Thirteen (13) Public Works and Parks/Recreation employees attended the 5/14/2015 training on PPGH presented by ISWG. 2) Three Public Works employees were trained in outfall and ditch inspections on 10/10 and 10/15/2015 by Integrated Environmental Engineering. The training included classroom training on the IPAD and field training on inspections. 3) Five (5) Cape Elizabeth Public Works employees attended the educational display booth at the APWA Highway Congress on 6/4/2015. 	
3	<ol style="list-style-type: none"> 1) The Public Works Director and Operations Manager 	None

Permit Year	Description of Progress	Changes
	<p>attended Maine DOTs Training for Snow and Ice Control on 11/10/2015.</p> <p>2) 15 public works employees were training in the Public Works Garage Oil SPCC Plan, SWPPP, IDDE, PPGH SOPs, and the MS4 program in general on 6/1/2016.</p> <p>3) The two recycling center/transfer station employees and the Public Works Director were trained on the Public Works Garage Oil SPCC Plan, SWPPP, IDDE, PPGH SOPs, and the MS4 program in general on 6/4/2016.</p>	
4	<p>1) 11 public works employees were training in the Public Works Garage Oil SPCC Plan, SWPPP, IDDE, PPGH on 6/21/2017.</p> <p>2) The Code Enforcement Officer attended an Erosion and Sediment control training provided by CCSWCD on 12/15/2016</p> <p>3) Two public works employees attended the IDDE Part 1 training for managers provided by CCSWCD on 1/19/2017</p> <p>4) Two public works employees attended the IDDE Part 2 training for field personnel on 3/21/2017</p>	
5		

BMP 6.3: Continue Street Sweeping Program

Measurable Goal 6.3.1 - Each permit year the Town will continue to sweep all publicly accepted paved streets and publicly owned paved parking lots at least once a year as soon as possible after snowmelt. Additional street sweeping will be conducted in the Trout Brook Watershed to minimize pollutant transport.

Reporting - Annual reports to DEP each year will include a status report on street sweeping. To track the additional street sweeping in the Trout Brook Watershed, number of hours of sweeping will be reported.

Responsible Party - Public Works Director.

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

Permit Year	Description of Progress	Changes
1	All municipal streets that have winter sand accumulation are swept three to four times per year. Streets are swept in early spring and usually completed by mid-May/June depending on the spring rains. Approximately 738 hours were logged and ~300 cubic yards of material was collected through street sweeping. Materials collected are stockpiled at the Public Works/Transfer Station for later removal.	None
2	All municipal streets and parking lots that have winter sand accumulation are swept three to four times per year. Streets are swept in early spring and usually completed by mid-May/June depending on the spring rains. Approximately 290 hours were logged and ~250 cubic yards of material was collected through street sweeping. Materials collected are stockpiled at the Public Works/Transfer Station for later removal. These go to a local contractors for reuse (LP Murray)	This entry was updated to address MDEP comments on the annual report (materials quantity and final disposition was added).
3	All municipal streets and parking lots that have winter sand accumulation are swept three to four times per year. Streets are swept in early spring and usually completed by mid-May/June depending on the spring rains. Approximately 466 hours were logged and ~395 cubic yards of material was collected through street sweeping. The sweepings were stockpiled at the Public Works/Transfer Station until they were removed by the local contractor for re-use.	None

Permit Year	Description of Progress	Changes
4	All municipal streets and parking lots that have winter sand accumulation are swept three to four times per year. Streets are swept in early spring and usually completed by mid-May/June depending on the spring rains. Approximately 295 hours were logged and ~1240 cubic yards of material was collected through street sweeping. The sweepings were stockpiled at the Public Works/Transfer Station until they were removed by the local contractor for re-use.	
5		

BMP 6.4: Cleaning of Stormwater Structures Including Catch Basins

Measurable Goal 6.4.1 - Each permit year the Town will continue to inspect all catch basins and will clean catch basins and other stormwater structures that accumulate more than three inches of sediment. The Town will clean catch basins more frequently if inspections indicate excessive accumulation of sediment. Excessive accumulation is greater than or equal to 50 percent filled.

Reporting - Annual reports to DEP each year will include a status report on cleaning of stormwater structures.

Responsible Party - Public Works 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 checked and accompanied its third party contractor who cleaned 412 catch basins in July/August of 2013. Approximately 114 cubic yards of catch basin grit was collected and deposited at CPRC Group in Scarborough. All basins are inspected and only cleaned if more than 3 inches of material exists.	None
2	The Town checked and accompanied its third party contractor who cleaned 429 catch basins between 8/14/2014 and 9/8/2014. Approximately 126.84 tons of catch basin grit was collected and deposited at CPRC Group in Scarborough. All basins are inspected and only cleaned if more than 3 inches of material exists.	Permit Year 1 text was revised to reflect the 2013 date and that a contractor cleaned catch basins, accompanied by a public works

Permit Year	Description of Progress	Changes
		employee.
3	The Town checked and accompanied its third party contractor who cleaned 456 catch basins between 7/13/2015 and 8/5/2015. Approximately 126.84 tons of catch basin grit was collected and deposited at CPRC Group in Scarborough. The basins are inspected and only cleaned if more than 3 inches of material exists.	None
4	The Town checked and accompanied its third party contractor who cleaned 416 catch basins between 8/8/2016 and 8/25/2016. Approximately 89.13 tons of catch basin grit was collected and deposited at CPRC Group in Scarborough. All MS4 basins are inspected and only cleaned if more than 3 inches of material exists	None
5		

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

Measurable Goal 6.5.1 – The Town will continue to maintain and upgrade the stormwater conveyance systems based on the results of the catch basin, outfall, and ditch inspections, in accordance with the urgency of the repair. The Town continues to perform systematic upgrades of the storm drain system in correlation with the road paving program for the Town.

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

Responsible Party - Public Works 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 expended 48 hours on outfall inspections, 237.5 hours on maintenance and repairs, 130 hours on mechanical cleaning of catch basins, and 672 hours manually cleaning infrastructure (raking debris and leaves) between July 1, 2013 and June 30, 2014. Drainage repairs completed included: <ul style="list-style-type: none"> • Brush removal on the detention ponds in the Cross Hill Area • Third Party maintenance on the filterra[®] units at the high school and Fort Williams • Repairs to drainage swales, and culverts in and around Gull Crest and the Public Works Garage • Repairs to outfalls identified during outfall inspections (e.g., riprap placement, clearing of 	None

Permit Year	Description of Progress	Changes
	vegetation) <ul style="list-style-type: none"> • Chimney Rock Road received new drainage infrastructure (~\$130,000) 	
2	<p>No major drainage projects were completed during Permit Year 2. The following maintenance was completed:</p> <ul style="list-style-type: none"> • Installed a new Type "F" catch basin in front of 3 Pine Point Road and installed the outlet (12" ADS N-12) into an existing drainage easement in July 2014 • Replaced a failed cross pipe between two catch basins at the terminus of Fenway Road, cleaned out and opened the storm drain for the outfall, build a new protective headwall around the outfall, and stabilized the ditch with erosion control matting in June 2015. • With the help of a local contractor, replaced the northern most of three 36" cross culverts on Shore Road at Pond Cove with an aluminized Type II corrugated metal pipe in June 2015. <p>Maintenance needs identified during inspections include: approximately 10 of the outfalls need vegetation trimming for improved access, approximately 10 need jetting and or plunge pool repair, and the remaining outfalls (13) require varying degrees of maintenance (e.g., clearing of vegetation, headwall repair, jetting and cleanout at the invert, plunge pool construction or repair) which have been added to the Public Works maintenance list and will be addressed as time and budgets allow.</p> <ul style="list-style-type: none"> • 	None
3	<p>The following maintenance was completed:</p> <ul style="list-style-type: none"> • Third party maintenance on the filterra® units at the high school and Fort Williams (10/5/2015) • Culverts at Gull Crest Fields were cleaned out • The outlets at 4 outfalls were dug out to remove accumulated sediment. • Removal of leaves, brush and/and rocks was completed at three outfalls. 	None

Permit Year	Description of Progress	Changes
	<ul style="list-style-type: none"> • A plunge pool was constructed at one other outfall. • The buffers at the Public Works Facility were repaired from winter plowing. 	
4	<p>The following maintenance was completed:</p> <ul style="list-style-type: none"> • Third party inspections and maintenance were completed on the filterra units (inspections 11/18/2016 and 4/28/2017 and tree replacement 5/23/2017) and the library subsurface storage system and stormtreat® units (inspection 6/23/2017). • Ditching was completed on Woodland Road, and at the transfer station and a sand pile • Four (4) culverts were cleaned, jetted and rip rap replaced on Mitchell Road, Columbus Road and Fowler Road. The Fowler Road pipe was also extended 20 feet to improve hydraulics. • Outfall maintenance was completed on the following outfalls: <ul style="list-style-type: none"> ○ 030 and 016 (removal of vegetation and replacement of riprap) ○ 013 vegetation and excess sediment removed 	
5		

BMP 6.6: Stormwater Pollution Prevention Plans (SWPPPs)

Measurable Goal 6.6.1 – During Permit Year 1, the Town will update the SWPPP for the Public Works Facility and Recycling Center 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.

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 and Recycling Center was updated in September 2013 to conform to the requirements of the MSGP.	None.
2	No work was required or completed this Permit Year.	None

Permit Year	Description of Progress	Changes
3	The SWPPP for the Public Works/Transfer Station Facility was updated in January 2016 to incorporate updated infrastructure from the GIS, and to add outfall-specific drainage areas.	None
4	No updates to the SWPPP were required in PY 4. However, the Recycling Center is being reconfigured and the SWPPP will be updated in Permit Year 5.	None
5		

Measurable Goal 6.6.2 – Although the public works garage does not exceed the 1,320 gallon threshold requiring an Oil Spill Prevention Control and Countermeasure Plan, the Garage holds a Site Location of Development Permit requiring a Spill Plan. The Town will update the Spill Plan during Permit Year 1.

Reporting - Annual reports to DEP each year will include a status report on the development of the SWPPP and SPCC Plans.

Responsible Party: Public Works 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 SPCC Plan for the Public Works Facility was updated in September 2013.	None
2	No work was required or completed this Permit Year.	None
3	No work was required or completed this Permit Year.	None
4	No work was required or completed this Permit Year.	None
5		

SECTION 3 CERTIFICATION

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

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

Signature: Matthew Sturgis
Matthew Sturgis

Date: August 28, 2017.

Title: Town Manager