

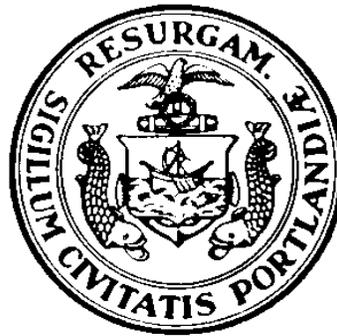
**2013 MS4 GENERAL PERMIT
STORMWATER PROGRAM
MANAGEMENT PLAN**

ANNUAL REPORT

PERMIT YEAR 1 (JULY 1, 2013 TO JUNE 30, 2014)

FOR

CITY OF PORTLAND, MAINE



Original Date of SWPMP: February 28, 2014
Permit Year 1 Annual Report Date: October 1, 2014

MINIMUM CONTROL MEASURES

INTRODUCTION

Actions completed for the permit year are provided in this Annual Report for each best management practice (BMP). Actions completed or status updates for the permit year being reported on are indicated in bold italics for each applicable BMP. If no action was required during the permit year, none are listed. A general status of compliance with the permit conditions should be assumed, unless otherwise indicated in the actions completed or status update statement; any applicable changes to the identified BMPs or measurable goals are indicated in the actions completed or status update statement.

I. PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

The City of Portland will fulfill the requirements for Public Education and Outreach through participation in the Interlocal Stormwater Working Group (ISWG) and the permittee's provision of funding to the ISWG for Public Education and Outreach services, as described in this section of the plan.

Responsible Party: Portland Public Services in cooperation with ISWG Education Coordinator.

A. *Goals*

1. To raise awareness that polluted stormwater runoff is a 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.

B. *Required Best Management Practices*

1. **Raise Awareness.**

Each permittee or stormwater group of which the permittee is a member shall have a new Awareness Plan or revise an existing Plan to raise awareness of stormwater issues for a target audience outside of municipal government. The permittee shall submit draft Stormwater Awareness Plan to the Department for review and approval by December 1, 2013. The Stormwater Awareness Plan is considered approved as of February 1, 2014, unless the permittee receives written communication from the Department indicating non-approval.

Completed

- i. In Permit Year 1, the City and ISWG will continue select awareness activities from previous permit cycle which will include; maintaining a

link to www.thinkbluemaine.org on municipal website; participation 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.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

Completed

- ii. In Permit Year 1, the City and ISWG will refine and revise the Awareness Plan.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

- iii. In Permit Year 1-5, the City will implement Awareness Plan elements internally or through ISWG partnerships consistent with the Awareness Plan.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

- iv. In Permit Year 5, the City with its ISWG partners will evaluate Awareness Plan and prepare to modify for next permit cycle.

Reporting: The permittee shall include a review of the Stormwater Awareness Plan outreach efforts in each of its Annual Reports.

2. Raise Municipal Permit Awareness.

Permittee shall develop and implement an education program aimed at municipal staff, employees or volunteers. The permittee shall begin implementation of the Permit Awareness Plan within one week of its approval. The permittee shall submit the draft Permit Awareness Plan to the Department for review and approval. The Permit Awareness Plan is considered approved as of March 1, 2014, unless the permittee receives written communication from the Department indicating non-approval.

Completed

- i. In Permit Year 1 and by January 6, 2014 the City will submit a plan to DEP through ISWG to raise permit awareness. Unless DEP responds in writing or verbally otherwise, as of March 1, 2014 the Awareness Plan is considered approved and implementation of the Permit Awareness Plan will begin.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

- ii. In Permit Year 1, the City and ISWG will assess or utilize existing assessments of the target audience to document baseline level of action by

which the implementation of the Permit Awareness Plan can be measured.
Actions Completed Permit Year 1: This measurable goal was erroneously included and is not applicable to this best management practice. Since the Municipal Permit Awareness Plan is a new Plan, a pre-survey of ISWG representatives will be conducted this fall in Permit Year 2 for the baseline measure.

- iii. In Permit Year 2-4, the City will implement Permit Awareness Plan elements internally or through ISWG partnerships.
- iv. In Permit Year 5, the City with its ISWG partners will evaluate Permit Awareness Plan and prepare to modify for next permit cycle.

Reporting: The permittee shall include a review of the Permit Awareness Plan outreach efforts in each of its Annual Reports.

3. Target BMP Adoption

Each permittee or stormwater group of which the permittee is a member shall have a new or revised Adoption Plan with the goal of promoting behavior change through the implementation of BMPs. The permittee shall submit the draft BMP Adoption Plan to the Department for review and approval by November 1, 2014. The BMP Adoption Plan is considered approved as of, January 15, 2014 unless the permittee receives written communication from the Department indicating non-approval.

Completed

- i. In Permit Year 1, the City and ISWG will assess or utilize existing assessments of the target audience to document baseline level of action by which the implementation of the BMP Adoption Plan can be measured.
Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

Completed

- ii. In Permit Year 1, the ISWG will continue BMP adoption activities carried out in Permit Year 5 (2008-2013) of the previous BMP Adoption Plan. Activities include: Providing a minimum of six adult education classes throughout the ISWG region per year; Work with a minimum of 21 retail locations to provide healthy lawn care education to consumers; Maintain the YardScaping website hosted on CCSWCD's website; and Provide information to targeted neighborhoods via direct mail, neighborhood canvassing, socials or other means.
Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

Completed

- iii. In Permit Year 1 and by November 1, 2013 the City will submit a plan to DEP through ISWG to encourage the targeted audience to adopt or practice specific BMPs that will reduce stormwater pollution.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

- iv. In Permit Year 2-4, the City will implement BMP Adoption Plan elements internally or through ISWG partnerships.
- v. In Permit Year 5, the City with its ISWG partners will evaluate BMP Adoption Plan and prepare to modify for next permit cycle.

Reporting: The permittee shall include a review of the BMP Adoption Plan in each of its Annual Reports.

4. Enhanced Education and Outreach

Permittees will enhance their education and outreach effort in their impaired or priority watershed or work to address a stormwater pollutant issue of regional or statewide significance. Permittees with an impaired waterbody may either target a specific activity that if successfully addressed will improve and/or protect water quality in the priority or impaired watershed(s) or the permittee may choose instead to work singly or collaboratively on a common regional or statewide stormwater pollutant issue. The goal of the effort should be to reduce or eliminate the pollutant(s) of concern.

Completed

- i. In Permit Year 1 and by July 1, 2014, the City shall develop a draft plan on how it plans to meet either permit requirement as stated above.

Actions Completed Permit Year 1: Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A.

- ii. In Permit Year 2-4, in conjunction with the ISWG the City will implement the Priority Watershed Plan.
- iii. In Permit Year 5, the City with its Salt Manager partners will evaluate program and prepare to modify for next permit cycle.

Reporting: Review of Targeted Outreach in Priority Watershed Plan will be included in Annual Reports starting in permit year two. The review will include process and impact indicators as outlined in the Targeted Outreach in Priority Watershed Plan. In permit year five an analysis of the process and impact indicators of the Targeted Outreach in Priority Watershed Plan will be provided.

C. *Additional Best Management Practices*

1. School Outreach

Completed

- i. In Permit Year 1, continue the incorporation and implementation of “It’s all connected” school curriculum in elementary and/or middle schools.

Actions Completed Permit Year 1: School outreach was conducted by Deb Debiegun, District Educator, Cumberland County Soil & Water Conservation District, ddebiegun@cumberlandswcd.org, 207-892-4700 x 101 and Sarah Plummer, Environmental Education Coordinator, Portland Water District, splummer@pwd.org, 207-774-5961 x 3324. The following is a summary of youth education activities completed in Portland during the 2013-2014 school year:

Total students: 464

Total contact hours: 675 (CCSWCD: 300, PWD: 375)

Lesson topics: Watersheds, water cycle and distribution, watershed delineation, nonpoint source pollution, stormwater, stewardship, water quality testing, geology and erosion, soil as water pollution, Forestry Day: forest’s ability to filter water, ocean’s currents and earth’s rotation.

Schools: Lincoln Middle School, State Street Preschool, Presumpscot Elementary School, Catherine McAuley High School, Learning Works program participants at Presumpscot, Ocean Avenue and Reiche Elementary Schools

Educator: PWD, CCSWCD

In addition, the Stormwater Program Coordinator met with students at the following three schools to talk about stormwater and water pollution prevention: King Middle School on 3/7/14, Lyseth Elementary School on 5/8/14, and Reiche Community Elementary School on 7/17/14. The City also participated in storm drain stenciling events with students from the Lyseth Elementary School on 5/12/14 and King Middle School on 5/20/14 (50 catch basins stenciled on 5/20/14).

- ii. In Permit Years 2-5, as funding permits, continue the incorporation and implementation of “It’s all connected” school curriculum in 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.

II. PUBLIC INVOLVEMENT AND PARTICIPATION

The City will fulfill the requirements for Public Involvement and Participation through participation in and partial funding of the Interlocal Stormwater Working Group (ISWG) for Public Involvement and Participation services, or through directly fulfilling

the requirements, as described in this section of the plan. The City will involve the public in both the planning and implementation process of improving water quality and reducing quantity via the stormwater program.

Responsible Party: Portland Public Services in cooperation with ISWG Education Coordinator.

A. Goal

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

B. Required Best Management Practices

1. Public Notice Requirement

The permittee shall comply with applicable state and local Public Notice requirements using effective mechanisms for reaching the public, and comply with the public notice requirements of the Maine Freedom of Access Act, 1 M.R.S.A. §§ 401 et seq. (“FOAA”) when the permittee involves stakeholders in the implementation of this General Permit. The permittee shall document the meetings and attendance through the annual report as a way of measuring this goal.

Completed

- i. The City and ISWG will follow state and local Public Notice requirements for both ISWG and individual Stormwater Program Management Plan elements.

Actions Completed Permit Year 1: The Plan was approved by City Council on December 16, 2013 after the second reading (following the usual City notification process). The final version dated February 28, 2014 incorporated minor changes requested by the DEP and did not require further public notice. The final Plan was posted on the Maine DEP’s website.

- ii. The City and ISWG will follow state and local Public Notice requirements when involving stakeholders in the implementation of the Small MS4 General Permit.

Actions Completed Permit Year 1: No public notice requirements were invoked.

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

2. Host Public Event

The permittee or regional stormwater group of which the permittee is a member shall annually host/conduct or participate in a public event. The event must include

a pollution prevention and/or water quality theme. The target audience does not need to be the entire urbanized area but should be aimed at a segment of the population that the permittee wishes to reach. The permittee shall include a report of the public event in each of its Annual Reports.

- i. The City and/or City with ISWG will support/host/conduct an annual public event.

Actions Completed Permit Year 1: The City hosted the third annual Green Neighbor Family Fest, which was held in conjunction with the ISWG-sponsored Urban Runoff 5K race and walk on April 26, 2014. Refer to the Permit Year 1 Summary of Minimum Control Measures 1 & 2 in Appendix A for a summary of this event. The Green Neighbor Family Fest is part of the City's overall Greener Neighborhoods Cleaner Streams Program. A summary of the Greener Neighborhoods Cleaner Streams program for 2013-2014 as well as the Green Neighbor Guide (artistic watershed map) and educational sign that were created as part of the program are also included in Appendix A.

Reporting: The annual report will include description of the event. The report will include process indicators which assess the permittee's planning and execution, as well as impact indicators which assess the effectiveness of the event. The permittee shall also include a comprehensive review of the public events in its fifth year Annual Report that must include an analysis of the process indicators and impact indicators. The Permit Year 5 report will include a comprehensive review of the public event, including an analysis of the process and impact indicators.

C. Additional Best Management Practices

1. Household Hazardous Waste Collection

The City will continue to offer weekly collection of Household Hazardous Waste between April and November via drop-off at the Riverside Recycling facility. This service is also made available to other communities. Additionally, we accept Universal Waste six days a week year round. This includes fluorescent tubes, compact fluorescents, CRTS & TVs, mercury added items, batteries, and electronics.

Actions Completed Permit Year 1: The Household Hazardous Waste (HHW) collection program runs from April through November. HHW quantities are reported based on the size of the container used to collect the material (whether or not the containers were filled or partially filled). The total volume of HHW containers paid for during the permit year was 11,613 gallons. The quantity of universal waste that was collected during the permit year includes a total of 5,841 TVs and monitors, 6,383 computers and peripherals, 95,377 feet of fluorescent lamps, 1,911 units of U&O lamps, 6,158 units of other fluorescent lamps, 28,293 pounds of batteries, 4,624 pounds of PCB ballasts, 2,597 pounds of other ballasts, 1,070 pounds of capacitors, and 133 pounds of other mercury containing devices.

III. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City of Portland shall develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges within the non-combined sewer MS4 area.

Responsible Party: Portland Department of Public Services.

A. *Goal*

Develop, implement and enforce a program to detect and eliminate illicit discharges and non-stormwater discharges.

B. *Required Best Management Practices*

1. **Revise and Refine a Storm Sewer System Infrastructure Map.**

Permittees subject to the 2008 MS4 General Permit shall continue to keep their map(s) current and ensure that maps are reviewed for any updates at least annually.

- i. By the end of Permit Year 1, the City will review its respective storm sewer infrastructure maps in order to identify key storm sewer attributes and identify targeted geographic or data attributes for revision. Attributing will likely focus on identifying and clarifying MS4 outfalls and state, City or private ownership.

Actions Completed Permit Year 1: Mapping of both the storm drain and sewer systems is ongoing. The City is in the process of reviewing its storm sewer infrastructure maps. During Permit Year 1, the City hired Woodard & Curran to assist in the development of a comprehensive stormwater/drainage CMOM plan that includes a GIS data gap analysis (e.g. missing data, attributes, need for database improvements, etc.), system condition assessment (based on sample investigations), drainage system CIP, O&M program, and staffing/work flow analysis, etc. This process has continued into Permit Year 2.

- ii. In Permit Years 2-5, the City will continue to update both geographic and data attributes of its MS4 storm sewer system GIS geodatabase (as necessary).

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

2. **Maintain Non-Stormwater Discharge Ordinance.**

Permittees subject to the 2008 MS4 General Permit shall to the extent allowable under State or local law, continue to implement, and provide annual reporting of the permittee's non-stormwater discharge ordinance that effectively prohibits,

unauthorized non- stormwater discharges into the permittee’s storm sewer system. This BMP will also include coordination with the Portland Water District regarding water line and hydrant flushing to determine if either is a significant contributor of pollutants to the MS4.

- i. In Permit Year 1, coordinate with the Portland Water 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:
 - o Provide the Portland Water District with a location map showing the extent of the municipal urbanized area, and the highest priority watershed(s).
 - o Gather information from the Portland Water District, 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.

Actions Completed Permit Year 1: A meeting with the Portland Water District (PWD) to begin developing an ISWG-wide hydrant flushing policy was held at the PWD on January 17, 2014 (Doug Roncarati attended). The PWD was provided with a map showing the urbanized area for all the ISWG communities. The meeting included introductions and overview, PWD practices, and a discussion regarding procedures to determine hydrant significance. As a result of the meeting, PWD was planning to meet with each community, starting with the 2014 target communities and to develop GIS maps with their specific hydrants, infrastructure, and stream locations.

PWD contacted the City to request the latest data, including storm drains, catch basins, and priority/sensitive surface waters. Using the available PWD data and its own GIS data, the City identified 123 hydrants that are located within the Capisic Brook watershed with an additional 57 hydrants located within 250 feet of that boundary. It should be noted that not all of these hydrants are likely to discharge to the separated storm drain system that discharges to Capisic Brook. The City’s GIS Steering Committee is working on a means to more formally and regularly share GIS data between City departments and PWD; this will help keep available data current so any required analysis can be done more effectively and efficiently by both parties. The City and

PWD have an on-going working relationship and will ensure that PWD has the necessary information to move toward formalizing a process for hydrant flushing in a manner acceptable to DEP.

- ii. 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 City will work with the Portland Water District 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 City will request a water quality progress report that documents what best management hydrants as well as the Portland Water District's testing results of the total residual chlorine for any such discharges.
- iii. Permit Years 3-5, the City 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 Portland Water District's testing results of the total residual chlorine for any such discharges.
- iv. 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 Portland Water District has demonstrated that it will not voluntarily implement BMPs in order to reach ambient water quality criteria for chlorine, the City 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.
- v. Permit Year 1-5, continue to maintain and enforce non-stormwater discharge ordinance.

Actions Completed Permit Year 1: The City continued to implement their non-stormwater discharge ordinance. Although seven spills and complaints were received (from City staff, Dispatch, or residents), logged and investigated, no enforcement under the non-stormwater discharge ordinance was required. Most of the events that were logged occurred in combined system locations and were contained so that they had little or no impact on the system.

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.

3. Continue IDDE program for MS4.

Permittees subject to the 2008 MS4 General Permit shall continue to implement its prioritized dry weather outfall inspection plan based on drainage areas such as an urban impaired stream watershed, or based on a watershed or sub-watershed that the permittee has identified as having the greatest potential threat to the receiving water.

Permittees subject to the 2008 MS4 General Permit shall revise their outfall inspection plan and continue conducting dry weather inspections in different watersheds or sub-watersheds as approved by the Department and evaluate discharges for illicit connections.

The municipality must have a defined procedure/policy or protocol in place that details the steps that must be taken when an illicit discharge is identified during these inspections to locate the source of the illicit discharge and eliminate it.

- i. By end of Permit Year 1, refine and revise outfall inspection plan, inspection areas and timeline.

Actions Completed Permit Year 1: The outfall inspection plan will be part of the stormwater/drainage CMOM plan that the City is developing. The City conducted dry weather outfall inspections in Capisic Brook, Fall Brook, and Dole Brook watersheds. The following is a summary of dry weather outfall inspections:

- ***Thirty one stormwater outfalls were inspected in Capisic Brook, 21 stormwater outfalls were inspected in Dole Brook, and 16 stormwater outfalls were inspected in Fall Brook.***
- ***No significant issues were noted. Some maintenance needs were identified, such as sediment build-up, damaged outfall pipe, need for brush removal, etc. In addition, minor foam was observed at six outfalls and minor floating scum was visible in the standing water below two outfalls. It is unclear whether the foam was residual from residential car washing or indicative of a larger issue. These outfalls will be monitored to determine if these are persistent issues.***
- ***Grass clippings, brush and yard waste were sometimes observed dumped down ditches, stream embankments, or on outfalls, making inspection and maintenance difficult. Staff talked with one homeowner about the problem on their property and asked them to remove the yard waste and refrain from dumping in the outfall or in the water resource. In light of this growing maintenance problem, the Stormwater Program Coordinator plans to renew discussions with the Solid Waste Coordinator and Director about expanding the yard waste pick-up program.***
- ***The City conducted follow-up investigation on an outfall to Capisic Brook based on an EPA Notice of Violation No. 2013-NOV-05. EPA thought they were investigating an inactive CSO outfall that was still showing activity (#40 Sagamore Village at the end of Pinecrest Rd), but the outfall had been entirely removed during a sewer separation project. They were actually taking samples from the new storm drain outfall located in the same vicinity as the old CSO outfall. EPA water quality testing at the storm drain outfall revealed high levels of bacteria, which they thought indicated the presence of CSO activity but that was not the case. DPS staff***

televised the entire separated storm drain system and nearby sewer system upstream of the outfall and no cross-connections were found. As it turns out, a family of raccoons had constructed a den inside the storm drain and a large amount of scat was present, apparently accounting for the high bacteria counts.

- ii. By end of Permit Year 1, refine and revise (as needed) SOP(s) for dry weather outfall inspection program and opportunistic catch basin investigations.

Actions Completed Permit Year 1: The SOPs will be revised as needed through the development of the stormwater/drainage CMOM plan. In addition, the SOP will be revised based on the ISWG's process of reviewing/updating the SOPs in Permit Year 2.

- iii. By end of Permit Year 1, refine and revise (as needed) forms and data collection system in place for dry weather outfall inspections.

Actions Completed Permit Year 1: See III.B.3.ii.

- iv. By end of Permit Year 1, refine and revise (as needed) policy/procedure or protocol that identifies the steps that must be taken when an illicit discharge is encountered in order to locate the source of the illicit discharge and eliminate it.

Actions Completed Permit Year 1: See III.B.3.ii.

- v. In Permit Years 2-5, conduct annual dry weather outfall inspections and opportunistic catch basin inspections within the areas identified in the inspection plan.

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

4. Open Ditch Illicit Discharge and Septic System Assessment

Permittees subject to the 2008 MS4 General Permit shall continue to implement an illicit discharge/illicit connection detection program based upon a schedule approved by the Department. Each permittee shall develop a list of septic systems in its highest priority watershed that are 20 years old or greater and which may discharge to the MS4 if the system fails. By June 30, 2017, each permittee shall implement a drive-by evaluation and documentation program of septic systems in its highest priority watershed that are 20 years old or greater and which have the potential to discharge into the MS4. This septic system inspection and documentation program must include a mechanism for addressing any discharges to the MS4 from malfunctioning septic systems.

- i. During Permit Year 1, the City will incorporate a strategy in its overall IDDE plan, for detecting illicit discharges in their open ditch system.
Actions Completed Permit Year1: The City is reviewing its overall IDDE plan as part of the drainage/stormwater CMOM and will revise its program to include an open ditch IDDE strategy, noting that only a relatively small portion of the MS4 uses open ditch drainage. Also, the City is engaged in a city-wide review of commercial and residential water and sewer services, which will identify properties that are on septic systems. This information will be compared with existing data for the few septic systems already identified in the priority watershed. It will also help the City to determine which septic systems in other watersheds, due to age and location, might pose a risk to the open ditch system.

- ii. During Permit Year 1-3, the City will document known septic system areas and include in overall watershed map.
Actions Completed Permit Year 1: The City has been studying water and sewer connections city-wide to clean up connection records and investigate where properties are on septic systems, or have switched from septic to sewer systems. This information will be used to update the list of septic systems in Capisic Brook watershed and inform follow-up inspections to ensure that any septic systems are operating properly.

- iii. During Permit Year 4, the City will conduct drive by evaluation of septic areas within it highest priority watershed.

Reporting: Annual reports to DEP will include a status report on the development and implementation of the Open Ditch Illicit Discharge and Septic System Assessment.

IV. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Each permittee shall develop, implement, and enforce a program, or modify an existing 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. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

Responsible party: Portland Planning and Urban Development with support from Public Services

A. Goals

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. Per General Permit Part IV(H)(4a.), the City will rely on either the Maine Construction General Permit or Chapter 500, Stormwater Management.

B. Required Best Management Practices

1. Notification to Developers.

The City of Portland will maintain procedures for notifying 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.

- i. During Permit Year 1-5, continue notification procedures currently in place using check-off box notices on building permit applications that notify applicants of the registration requirements.
Actions Completed Permit Year 1: In addition to the notification described above, the City carefully reviews all development applications as part of their delegated stormwater review authority, to determine whether or not they require stormwater permitting under the MCGP and the City's stormwater standards (based on Chapter 500).

Reporting: Any system modifications will be summarized in our annual reports.

2. Document every construction activity that disturbs one or more acres in the City.

Completed

- i. In Permit Year 1, refine and revise tracking system (as needed) to record every activity that disturbs one or more acres
Actions Completed Permit Year 1: No revisions to the tracking system were necessary. Tracking is built into the City's development review and inspections process.

The City documented 23 construction sites that disturbed greater than or equal to one acre. Thirteen of these projects did not require inspections because they were considered stable, idle, complete, or construction had not started yet. The remaining ten projects were inspected a total of 71 times. Erosion and sediment controls were requested at nine sites; no DEP enforcement was required.

Reporting: The system will be used to summarize construction activity to be included in annual reports submitted to the DEP.

3. Implement a construction site inspection program.

Implement site inspections procedures to ensure projects are in compliance with the MCGP and Chapter 500, Stormwater Management. In watersheds of Urban Impaired Streams, and in the permittee's highest priority watershed, inspect the construction activity at least three times with one inspection at project completion to ensure that all post construction BMPs were properly installed, and that final

stabilization of the site has been completed. All construction inspections must be properly documented. For other watersheds, inspect the construction activity a minimum of twice, with one inspection at project completion to ensure that all post construction BMPs were properly installed, and that final stabilization of the site has been completed.

Completed

- i. By the end of Permit Year 1, refine and revise procedures for construction site inspections.

The City is implementing a Construction Site Inspection Program to control site runoff. It outlines the required inspections, procedures for non-compliance, third-party reviews, and includes the City's Erosion and Sedimentation Control Handout and Sample Inspection Report. These procedures will be updated as necessary.

Completed

- ii. By the end of Permit Year 1, refine and revise (as needed) a standardized inspection form to ensure documentation of all required inspections.

Actions Completed Permit Year 1: The City formalized a standardized inspection report that is used for construction sites equal to or greater than one acre. The use of the inspection form is referenced in the Construction Site Inspections Program referenced in BMP IV.B.3.i.

Completed

- iii. By the end of Permit Year 1, refine and revise (as needed) a process for tracking.

Actions Completed Permit Year 1: No revisions were necessary. The Development Review Services Coordinator from Planning conducts and tracks inspections on private projects.

Reporting: Inspections will be documented in a database management system or other recordkeeping system and a summary will be reported in annual reports submitted to the DEP.

V. POST-CONSTRUCTION STORMWATER MANAGEMENT

Each permittee shall develop, implement, and enforce 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 MS4. This program shall ensure that controls are in place that will prevent or minimize water quality impacts.

Responsible Party: Portland Public Services with support from Planning and Urban Development

A. Goal

Implement and enforce a program to address stormwater runoff from new development and redevelopment projects that discharge into the City’s MS4.

B. Required Best Management Practices

1. Maintain stormwater management ordinance

To ensure adequate long-term operation and maintenance of post construction BMPs, each permittee subject to the 2008 MS4 General Permit shall continue to implement the latest revision of the post-construction discharge ordinance, effective September 17, 2009, or similar measure approved by the Department.

- i. Permit Year 1-5, continue to maintain and enforce Stormwater Management ordinance.

Actions Completed Permit Year 1: The City continues to implement the post-construction discharge ordinance.

Reporting: Annual reporting of the City’s stormwater management discharge ordinance and any achievements associated with the ordinance, as applicable.

2. Manage inspection program for post construction

Each permittee shall annually inspect a percentage of post construction BMPs located in the direct watershed of a lake most at risk from new development or in watersheds of an urban impaired stream. If the owner or operator of a post construction BMP hires a qualified third party inspector, the permittee will have no inspection requirements. If the owner or operator of a post construction BMP does a “self” inspection, the permittee is required to conduct the inspection schedule as shown on schedule in H.5.a.iii.

- i. Permit Year 1-5, the City will continue to rely on third-party inspections consistent with its ordinance and will conduct annual inspections of a percentage of post construction BMPs owned by the City and within its Urban Impaired Stream watersheds, in accordance with schedule outlined in the General Permit.

Actions Completed Permit Year 1: The City uses a Stormwater Management Device Tracker in the form of an Excel spreadsheet to track projects applicable to the post-construction discharge ordinance; however, the City is in the process of developing a new approach to tracking, mapping, and communicating with BMP landowners using an iPad app that will link with the City’s GIS and Cityworks. The new approach should help DPS and Planning coordinate data collection on projects that have been approved and completed and which require annual report reminders. In addition, as part of the stormwater/drainage CMOM, the City is working to map all city-owned water quality treatment structures, which will improve tracking and maintaining of this infrastructure.

In Permit Year 1, 37 sites were required to submit an annual certification, and the City received only one. The one site that submitted their annual report had documented functioning post-construction BMPs, and only routine cleaning of their system was required. For the city-owned post-construction BMPs, staff made visual inspections during maintenance but formal inspections were not conducted. Modifications to the GIS are needed to accommodate a variety of the new green infrastructure systems, so they can be tracked and maintained through the Cityworks work-order system, which is being completed under the stormwater/drainage CMOM.

- ii. In Permit Year 2, refine and revise notification program for third-party inspections of private post-construction BMPs.
- iii. In Permit Year 2, refine and revise tracking system (as needed).

Reporting: Documentation of all inspections will be maintained by the City. Information to be collected includes:

- The cumulative number of sites that have post construction BMPs discharging into the City's MS4;
- A summary of the number of sites that have post construction BMPs discharging into the City'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.

3. Develop and Implement LID notification procedure.

Each permittee shall develop and implement a procedure for notifying site developers to consider incorporating low impact development techniques.

Completed

- i. Permit Year 1, the City will outline a procedure to notify developers on about LID.

Actions Completed Permit Year 1: Both Planning and DPS encourage the use of LID practices and green infrastructure at multiple phases of the development review/site planning process. This generally includes one or more pre-application meetings and often one meeting specific to stormwater management, impaired streams, wetlands, and other water quality issues. Although no formal procedure was outlined to date, the intent of this BMP has been completed.

- ii. In Permit Year 2-5, the City will implement relevant changes to notify developers of LID.

Reporting: The City will provide updates on implementation and any changes to procedure in its Annual Report.

Additional Best Management Practices

1. Stormwater Control Ordinance

The City currently utilizes a more stringent version of Chapter 500 that applies post-construction stormwater management BMPs to a broader category of projects (i.e., not limited to activities that result in a land disturbance of greater than or equal to one acre) and applies them city-wide.

Actions Completed Permit Year 1: No specific actions were required under this BMP; however the City continues to utilize this Ordinance.

VI. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Responsible Parties: Portland Department of Public Services

A. Goal

Prevent or reduce pollutant runoff from municipal operations and facilities.

B. Required Best Management Practices

1. Operations at municipally owned grounds and facilities.

Permittees subject to the 2008 MS4 General Permit shall continue to maintain their inventory of properties, facilities and activities, and continue implementation of their operation and maintenance plans. Copies of the operation and maintenance plans, including vehicle washing BMPs, shall be kept on-site at each facility.

- i. By the end of Permit Year 1, the City will refine and revise its list of and SOPs for municipal facilities, buildings, golf courses, cemeteries, parks and open space owned or operated by the City that have the potential to cause or contribute to stormwater or surface water pollution.

Actions Completed Permit Year 1: The SOPs were not refined or revised; however, this has been identified as a need in the stormwater/drainage CMOM. Additionally, the ISWG has also recognized the need to update the Pollution Prevention/Good Housekeeping SOPs, and the City will be working with them to do so, after which the City will adapt them to meet their needs.

- ii. Permit Years 1-5. Update list of facilities and SOPs as needed.

Reporting: Annual reports to DEP each year of the permit will include a status report on the facilities and operations and maintenance procedures.

2. Municipal employee training.

The permittee shall report annually on the types of stormwater-related trainings presented, the number of municipal and contract staff that received training, the length of the training, and training effectiveness.

- i. By end of Permit Year 1, revise and refine training needs and materials (as needed).

Actions Completed Permit Year 1: The determination of what types of training and materials are needed is a focus of the stormwater/drainage CMOM effort that is currently underway.

- ii. In Permit Years 1-5 implement municipal employee training program to reduce stormwater pollution potential from municipal operations.

The following municipal training was attended:

- *Eight City staff attended portions of the Maine Stormwater Conference held at the Marriott at Sable Oaks in South Portland on November 21 and/or 22, 2013.*
- *Twenty one staff attended the training opportunity given by the Cumberland County Soil and Water Conservation District (on behalf of ISWG) at the APWA Highway Congress held in Skowhegan on June 5, 2014. The training was related to preventing pollution from public works activities/facilities.*
- *Three staff attended the Annual Public Works Stormwater Management training provided by the Cumberland County Soil and Water Conservation District (on behalf of ISWG). The training was held at the South Portland Recreation Center on June 19, 2014 and covered information about the important role Public Works play in protecting water resources.*

Reporting: Annual reports to DEP each year of the permit will include a status report on training programs, the types of trainings presented, number of employees and contract staff that received training, the length of the training and training effectiveness.

3. Street sweeping.

The permittee shall develop and implement a program to sweep all publicly accepted paved streets and publicly owned paved parking lots maintained by the permittee at least once a year as soon as possible after snowmelt.

- i. Each permit year the City of Portland will continue a program to sweep all publicly accepted paved streets and publicly owned paved parking lots maintained by the City at least once a year as soon as possible after snowmelt.

Actions Completed Permit Year 1: The City continued its sweeping program. All city streets were swept three times for a total of 2,160 lane miles swept. Vacuum sweeping was primarily used in Capisic Brook watershed, but was used in the Portland Downtown District as well. It is estimated that 2,688 tons of material was recovered from the streets through sweeping with a basic characterization of sand, leaves, litter, and cigarette butts.

“Hot spot” areas in Capisic Brook watershed, such as Warren Ave, Brighton Ave, Bishop St, Forest Ave, and Riverside St were swept more frequently (with a vacuum sweeper).

Reporting: Annual reports to DEP each year of the permit will include a status report on street and parking lot sweeping.

4. Cleaning of stormwater structures including catch basins.

The permittee shall develop and implement a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once every other year and dispose of the removed sediments in accordance with current state law. The permittee shall clean catch basins more frequently if inspections indicate excessive accumulation of sediment. Excessive accumulation is greater than or equal to 50 percent filled.

- i. Each permit year the City will continue a program to evaluate and, if necessary, clean catch basins and other stormwater structures within MS4 that accumulate sediment at least once every other year and dispose of the removed sediments in accordance with current state law. The City will clean catch basins more frequently if inspections indicate excessive accumulation of sediment. Excessive accumulation is greater than or equal to 50 percent filled.

Actions Completed Permit Year 1: The City continued its catch basin cleaning program with 3,658 catch basins cleaned city-wide. It is estimated that 1,033 cubic yards of material was removed during catch basin cleaning. A basic characterization of materials removed includes leaves, sediment, sand, cigarette butts, hypodermic needles, pet waste bags, and lawn clippings.

Reporting: Annual reports to DEP each year of the permit will include a status report on cleaning of catch basins and other stormwater structures.

5. Maintenance and upgrading of stormwater conveyances and outfalls.

The permittee shall evaluate and implement a prioritized schedule, as necessary, for repairing or upgrading the conveyances, structures and outfalls of the regulated small MS4.

- i. Permit Years 1-5, the City will continue to develop and manage its storm sewer system through a Capital Improvement Planning process.
Actions Completed Permit Year 1: The City continued to develop and manage its sewer systems through a Capital Improvement Planning process. The majority of the current storm sewer-related work is installation of the new storm drain during sewer separation projects. Maintenance specific to the storm drain system included 12 catch basin repairs. In addition, the City has been using a combination of staff and contracted services to maintain its green infrastructure. The City is using the stormwater/drainage CMOM development efforts to improve both its grey and green infrastructure tracking and maintenance capabilities, and will be developing a capital improvement plan specific to the storm drain system.

As alluded to earlier, the City completed several sewer separation projects within the Capisic brook watershed, which resulted in the installation of new storm drain infrastructure and a variety of structural BMPs designed to treat stormwater. The Broadway-Lexington project included 5,000 linear feet of new storm drain, 38 catch basins, 29 drain manholes, a Hydro International Vorsentry (Model HS72), and a Suntree Systems Nutrient Separating Baffle Box (Model NSBB-5-1-114). The Belfort-Commonwealth project included 5,848 linear feet of new storm drain, 39 catch basins, 33 drain manholes, and three Hydro International Vorsentry units (Model HS48 and Model HS72). These two projects resulted in the separation of 54.6 acres of the Capisic Brook watershed. It was noted that initial observations of the Suntree Systems Nutrient Separating Baffle Box indicate that it will be very effective at removing sediment, organic debris, and trash (including pet waste bags).

Reporting: Annual reports to DEP each year of the permit will include a status report on the City's Storm Sewer CIP effort for the previous year (as applicable).

6. Stormwater Pollution Prevention Plans (SWPPPs)

Permittees subject to the 2008 MS4 General Permit shall continue to implement and update their SWPPP(s) to ensure it meets Maine's April 26, 2011 MSGP requirements including visual monitoring.

- i. Permit Year 1-5, the City will continue to implement and revise SWPPPs for each applicable facility (as needed).

Actions Completed Permit Year 1: The SWPPP is being implemented at the Riverside Recycling facility. Additional coordination and training is needed to fully implement the Fleet Services SWPPP. Both SWPPPs were prepared in accordance with the Maine DEP July 1, 2013 MEPDES General Permit for Small MS4s.

APPENDIX A
Permit Year 1 Summary of
Minimum Control Measures 1 & 2



APPENDIX A: Permit Year 1 Summary of Minimum Control Measures 1 & 2

MCM1: Public Education and Outreach on Stormwater Impacts

(I.B.1) Stormwater Public Awareness Plan

Task	Status	Details ¹				
Develop or revise plan to raise awareness	complete	The Cumberland County Soil & Water Conservation District (CCSWCD) worked with representatives from each of the four MS4 clusters and Maine DEP to revise the Statewide Awareness Plan developed under the 2008 permit. The Plan was submitted to Maine DEP on December 16, 2013. The revised Plan was submitted on January 10, 2014, and notice of plan approval was received on January 15, 2014.				
Summarize plan implementation to date	complete					
Conduct awareness media campaign utilizing television and online advertising	complete	CCSWCD coordinated a television and online media campaign through Time Warner Cable on behalf of ISWG. The original ducky and devil ducky ads ran two weeks per month from March through June 2014. The ads were shown on cable television stations most likely to reach the target audience (e.g. HGTV, The Weather Channel, ESPN, Fox News, DIY).				
		The following television campaign data were provided by Time Warner Cable:				
		Television Airplay (# of times played)				
		Ducky I	Ducky II	Total	Est. Reach ²	Est. Frequency ³
		824	1240	2064	35.9%	3.8
		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 March through June 2014.				
The following online campaign data were provided by Time Warner Cable:						
Impressions	701,137					
Click thru rate	0.04% (on par with national average)					
Based on analytical software installed on the Think Blue Maine website, hits during the online media campaign increased 72% over the previous four month period. Between March and June 2014, there were 1,365 visits to www.ThinkBlueMaine.org . Between November 2013 and February 2014, there were 794 visits.						
Promote and participate in local public event	complete	<i>Promotion</i> ISWG promoted its public event, the Urban Runoff 5K and Green Neighbor Family Fest, via social media, paid online ads, and direct email communication to participants. In addition, more than 300 posters were distributed throughout the 14 ISWG communities; two press releases were submitted to local publications; radio ads and an on-air interview aired on 98.9 WCLZ during the month of April; and News Channel 8 WMTW attended and ran a story after the events.				

¹ CCSWCD has a notebook that includes copies of all submissions, DEP responses, final plans, promotional materials (posters, print ads, online ads, email communications, press releases, and postcards), and data regarding website hits, timing of online ads, and results of the media campaign.

² Reach is the percentage of the viewing audience that saw the ads.

³ Frequency is the number of times the target audience saw the ads.



		<p><i>Participation</i> Representatives from the ISWG municipalities volunteered at the events. Many representatives provided logistical support for the race. In addition, the City of Portland, CCSWCD, and other organizations provided educational activities focused on keeping water clean. Please see the MCM2 summary for more details about the events.</p>
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(I.B.3) Targeted Best Management Practices Adoption Plan

Task	Status	Details
Develop or revise BMP Adoption Plan	complete	CCSWCD revised ISWG's 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.
Summarize plan implementation to date	complete	

Point of Sale

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



Adult Education

Offer a minimum of seven adult education classes per year	complete	Cumberland: 9/21/2013, 5 participants
		Scarborough: 9/25/2013, 7 participants
		Gorham: 9/29/2013, 11 participants
		Falmouth: 3/26/2014, 8 participants (Youth YardScaping teacher training)
		Scarborough: 4/9/2014, 14 participants
		Falmouth: 6/2/2014, 32 participants (Falmouth Middle School Youth YardScaping ⁴ presentation)
		Falmouth: 6/3/2014, 28 participants (Falmouth Middle School Youth YardScaping presentation)
		Falmouth: 6/4/2014, 38 participants (Falmouth Middle School Youth YardScaping presentation)
		Falmouth: 6/5/2014, 35 participants (Falmouth Middle School Youth YardScaping presentation)
Promote adult education classes	complete	Press releases publicizing the available classes were submitted to local publications, additional information was published in local adult education brochures, via direct mail, using social media, and through host locations.
Track behavior change	complete	CCSWCD staff documented class evaluations and contacted past adult education class participants to determine which YardScaping practices were implemented. Please see summary of behavior change reported by participants of PY5 classes, as well as those practices participants of PY1 classes intend to implement below.

Adult Education Behavior Change Tracking

During the fall of 2013, CCSWCD staff made follow up phone calls with participants of YardScaping adult education classes held in the fall of 2012 and spring of 2013 (PY5 who provided their contact information on class evaluations in order to determine the level of follow through of the YardScaping practices class participants intended to use). As expected, it was difficult to reach people, but the information gleaned from those who were reached provided an anticipated rate of compliance for the YardScaping practices that class participants intended to implement.

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

Follow up phone calls are made six months to one year after the class to allow participants a growing season to

⁴ Please see description of Youth YardScaping program on page 7 of Appendix A.



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

2013 PY1 Post-Class Evaluations			
Lawn Care Practice	Plan to implement	Currently do not implement	% planning to implement
Set Mower to a height of 3"	4	4	100.00%
Leave grass clippings	5	5	100.00%
Sharpen mower blades	10	10	100.00%
Aerate	22	23	95.65%
Topdress	21	22	95.45%
Overseed	16	16	100.00%
Use low maintenance seed	15	16	93.75%
Get a soil test	19	20	95.00%
Use nitrogen-only fertilizer	16	20	80.00%
Use compost tea	20	22	90.91%

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

Targeted Information Distribution

One neighborhood per ISWG community distributed targeted lawn care outreach materials	complete	YardScaping information was distributed throughout priority neighborhoods in each ISWG community. The following number of households received information:
		Biddeford: 122
		Cape Elizabeth: 79
		Cumberland: 112
		Falmouth: 95
		Freeport: 40
		Gorham: 68
		Old Orchard Beach: 77
		Portland: 203
		Saco: 107
		Scarborough: 110
		South Portland: 86
		Westbrook: 205
		Windham: 92
Yarmouth: 61		



Websites & Free Media

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

Additional Activities not Identified in the Plan

Neighborhood Socials	One neighborhood social was held in Portland on 9/20/2013. 10 people participated.
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(I.B.2) Municipal Permit Awareness Plan

Task	Status	Details
Develop municipal permit awareness plan	complete	CCSWCD developed ISWG's Municipal Permit Awareness Plan and submitted it to Maine DEP on February 7, 2014. The revised Plan was submitted on March 28, 2014 and notice of plan approval was received on April 24, 2014.
Summarize plan implementation to date	complete	

Materials Development

Develop permit awareness materials	ongoing	CCSWCD developed draft municipal fact sheets that are tailored to the appropriate municipal audience. CCSCWD has also created a draft template PowerPoint presentation following the topics and audiences of the fact sheets. Talking points for newly elected municipal officials will be finalized upon completion of the municipal fact sheets.
Develop survey to gauge municipal awareness	ongoing	CCSWCD 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.

Annual Pollution Prevention Training

Provide pollution prevention training for municipal staff	complete	CCSWCD provided a good housekeeping/pollution prevention training for municipal staff on June 19, 2014. The training covered general SWPPP implementation and was made available to staff of public works, parks & rec, facilities, and other relevant departments.
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Cooperative Outreach

Reach out to partner organizations	complete	CCSWCD worked with the Maine Chapter of the American Public Works Association (APWA) to coordinate participation in their Highway Congress.
Provide display at APWA's Highway Congress	complete	CCSWCD provided an educational display about proper vehicle washing at APWA's annual Highway Congress, held on June 6, 2014.

(I.B.4) MS4 Enhanced Outreach Plan

Task	Status	Details
Develop MS4 enhanced outreach plan	complete	ISWG 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.
Summarize plan implementation to date	complete	



Summary of the Youth YardScaping Program

This year marked the fifth year of Falmouth Middle School's participation in the Youth YardScaping program. This year the program was expanded to include all sixth grade science classes (4 teachers and 8 classes). The program has proven effective at increasing science topic understanding in students, awareness of local stormwater issues, and changing lawn care behaviors.

Through the Youth YardScaping program, clean water lessons with a local focus are interwoven throughout the year-long sixth grade science curriculum. Lessons begin with the basics: the water cycle, water movement, and watershed characteristics. Students then receive reinforcement of these concepts and begin learning about runoff and nonpoint source pollution and its impact on water resources. All classes also participate in long-term experiments to test the effects of different lawn care products on an aquatic ecosystem and use the experiment as part of their research.

In the early spring, the program intensifies to focus on one of the largest threats to local water quality: conventional lawn care methods that use large amounts of pesticides and fertilizer. Students from each teacher's two science classes form a lawn care company and split into groups that are each assigned a lawn care practice to research. As experts on their practice, the students' goal is to fully understand their practice so they are able to make recommendations about the best methods to have a healthy lawn and protect water resources. The practices assigned to students include mowing, aerating, topdressing, overseeding, watering, soil testing, fertilizing, brewing and applying compost tea, and controlling weeds and bugs. Other groups are dedicated to background topics like the soil food web, watersheds, and nonpoint source pollution.

Each group is responsible for researching their practice/topic and answering guiding questions that help direct their research. After researching they implement and experiment with their practice on the school grounds. This step allows students to understand their practice and determine their recommendations from a hands on experience. After implementing their practice, students prepare a public presentation about their topic and make their recommendations. This preparation includes developing visuals and a demonstration.

At the end of the program students present their research and demonstrate their practices at a public presentation. This year, approximately 30 to 50 parents and community members attended each class' presentation. These presentations foster intergenerational learning and provide anecdotal evidence of this transfer of information. After the program most teachers wrap up by asking the audience if they have learned about a new practice they will now incorporate into their own lawn care. A majority of audience members commented that they will try to implement at least one of the recommended practices. One parent of a student from Mrs. Tammen's 2014 class said that their son would not allow them to use the chemicals they had used in the past on their lawn because of what he had learned during this program.

All four teachers who participated in the program are excited to include this program into their curriculum again for the 2014/2015 school year. They are also feeling more confident about taking on a larger role in the implementation portion of this project.



MCM2: Public Involvement and Participation

Urban Runoff & Green Neighbor Family Fest

The third annual *Urban Runoff* 5K race and walk and the *Green Neighbor Family Fest* were held on April 26, 2014. The goal of these events was to raise awareness of polluted runoff and support ISWG's school education program. With approval from Maine DEP, the race and festival served as the Public Involvement and Participation event for all ISWG communities.

By all accounts, the event was a huge success. Approximately 600 runners and walkers registered for the race, and many local businesses supported the race through sponsorships, in-kind donations, and employee participation as race participants and volunteers. Local media outlets advertised the events, including the donation of radio advertisement and an on-air interview during the month of April by 98.9 WCLZ and news coverage by News Chanel 8 WMTW. Social media, paid online advertising, posters, and direct mail and email were also used to promote the race and cause. Stormwater awareness messages were included on the event website, social media, eblasts, and other marketing tools that were sent to all registered participants, sponsors, and partners.

Anecdotes as well as a post-race survey completed by race participants demonstrate the success of the race's planning and implementation. Many participants particularly enjoyed the course, which changed this year to end in front of Deering High School. Many survey respondents indicated the cause of the race, clean water education, was a major reason why they chose to participate.

The *Green Neighbor Family Fest* was held after the race in Deering High School gymnasium due to weather. The event ran for three hours and was attended by approximately 700 people. Scheduled events included the awards ceremony and a live music. A total of 21 exhibits were set up by local nonprofit and governmental organizations, universities, and businesses to provide hands-on, educational activities for children. These activities included a marine touch tank, making "seed bombs" (seeds rolled in compost), water quality experiments, "poo bag" toss (about proper disposal of pet waste), and many more. Children also took part in face painting and water related prize giveaways.

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

Plans are underway to host the fourth annual *Urban Runoff* 5K and *Green Neighbor Family Fest* on Saturday, April 25, 2015.

Greener Neighborhoods Cleaner Streams

2013-2014 Summary Report
Prepared for the City of Portland
July 2014

The Cumberland County Soil & Water Conservation District (CCSWCD) continued to coordinate and implement the Greener Neighborhoods Cleaner Streams (GNCS) program on behalf of the City of Portland in Fiscal Year 2014 (July 1, 2013 – June 30, 2014). The goal of the program is to educate Capisic Brook watershed residents about their role in cleaning up the Brook. The program's current focus is changing residents' lawn care behavior. This report summarizes the work completed during this time period.

Green Neighbor Family Festival

CCSWCD coordinated the third annual Green Neighbor Family Festival, which took place on April 26, 2014. The one day event was held at Deering High School following the Urban Runoff 5k. It served as a platform to raise awareness of GNCS, as well as educate the public about their role in clean water and a healthy environment.

At the Festival, GNCS provided an interactive display that focused on healthy lawn care. Additional activities were also provided by the following organizations:

- Casco Bay Estuary Partnership
- City of Portland
- Coast Encounters
- Flow Fold
- Friends of Casco Bay
- Garbage to Gardens
- IDEXX
- Lamey Wellehan
- Maine Energy Education Program
- Maine Wastewater Control Association
- Natural Resources Council of Maine
- Party Palooga
- Project Learning Tree
- Roots & Shoots
- Sappi Paper
- Sunrise Guide
- Spiral Tree Yoga & Wellness Studio
- Surf Camp Maine
- TREE Center
- Wells Reserve

Marketing efforts for the Green Neighbor Family Festival included a postcard mailing about the event to all watershed residents, email notifications, a press release to Portland area newspapers, posters distributed throughout local municipalities, and information posted on social media. Other media advertising included radio ads and an interview on 98.9 WCLZ and a story on WMTW Channel 8 after the event.

Approximately 700 participants attended the event on a rolling basis. A survey was sent to participating organizations and the following feedback was received:

- Marketing of the event (Question: on a scale of 1 to 4, where 1 is poor and 4 is excellent, how would you rate the marketing of this event?) - 60% of those surveyed rated the marketing done prior to the event at a 4.
- Quality of activities (Question: on a scale of 1 to 4, where 1 is poor and 4 is excellent, how would you rate quality of activities at the event?) 60% of those surveyed rated the activities at the event at a 4.

Mailings

Three mailings were sent to all households in the Capisic Brook watershed. The first focused on the Green Neighbor Family Fest, the second about the lawn care helpline, and the third about the rebate program. The mailings resulted in one request for technical assistance and three requests for trash bag rebates.

One mailing about the two YardScaping socials was sent to households in the targeted neighborhoods, Rosemont and Nason's Corner.

Targeted Outreach (in 2 neighborhoods)

CCSWCD conducted targeted outreach in Rosemont and Nason's Corner based on research about lawn care practices used, done in 2013.

Outreach programs in these targeted neighborhoods included two YardScaping healthy lawn care educational events. The first was held at Rosemont Market on June 21st. Rosemont Market is a central location and very popular with residents in the Rosemont neighborhood and surrounding community. There were many families who participated in this event, and while parents discussed YardScaping, children made muddy buddies (grass planting activity). Through the request of one resident a letter template was developed for residents who wish to do their own outreach to their neighbors to encourage the use of YardScaping practices.

The second YardScaping educational event was held at Capisic Pond Park on June 28th. This was a great location to connect participants with the goal of the program since runoff flows to Capisic Pond. A majority of participants were residents walking their dogs and using the trails. Six participants took the Green Neighbor Pledge at this event and brought Green Neighbor signs back to their yard to be displayed.

Both neighborhoods were canvassed about Greener Neighborhood Cleaner Streams and healthy lawn care. The first canvassing event on May 22nd was carried out with the help of Cheverus High School students. Door hangers about healthy lawn care were hung at each residence within these neighborhoods. The second event took place on June 24th. During this event, brochures about the GNCS program were handed directly to individuals who were outside their homes. This direct distribution of information led to one-on-one conversations about how lawns were being maintained and often resulted in technical assistance being provided.

CCSWCD coordinated with Lincoln Middle School to carry out a storm drain stenciling event in the Rosemont and Nason's Corner neighborhoods, scheduled for May 23rd. Unfortunately, the event was postponed due to inclement weather and was unable to be rescheduled.

General Outreach

CCSWCD maintained the GNCS website and social media accounts. Press releases about the program were sent to local newspapers. Topics included the Green Neighbor Family Fest, GNCS program offerings, storm drain stenciling and canvassing events, and community socials.

CCSWCD hired an artist to develop an artistic Capisic Brook watershed map. This map was used in the *Green Neighbor Guide*, which provides a brief overview of the program and simple steps residents can take to keep Capisic Brook and Casco Bay clean. The Guide will be distributed to residents at events and will be available at local establishments.



CCSWCD designed an educational sign that includes the artistic map that was developed for the *Green Neighbor Guide*, as well as steps residents can take to reduce pollution from their properties. The sign is located at Hall School, as identified in the *Capisic Brook Watershed Management Plan*.

An in-class lesson about the water cycle was provided to 45 students at Longfellow Elementary School on May 30th. The lesson emphasized how pollution is carried to local water bodies through stormwater runoff. At the request of the teacher, additional emphasis was given to the impact of lawn care activities on water, since the students are involved in a service learning project to maintain a portion of the school's lawn using healthy lawn care practices.

CAPISIC BROOK GREEN NEIGHBOR Guide

Annual

URBAN RUNOFF
 and
Green Neighbor Family Fest

- PORTLAND TRAILS**
1. EVERGREEN CEMETERY
 2. CAPISIC BROOK
 3. RIVERTON RAIL
 4. BAXTER WOODS

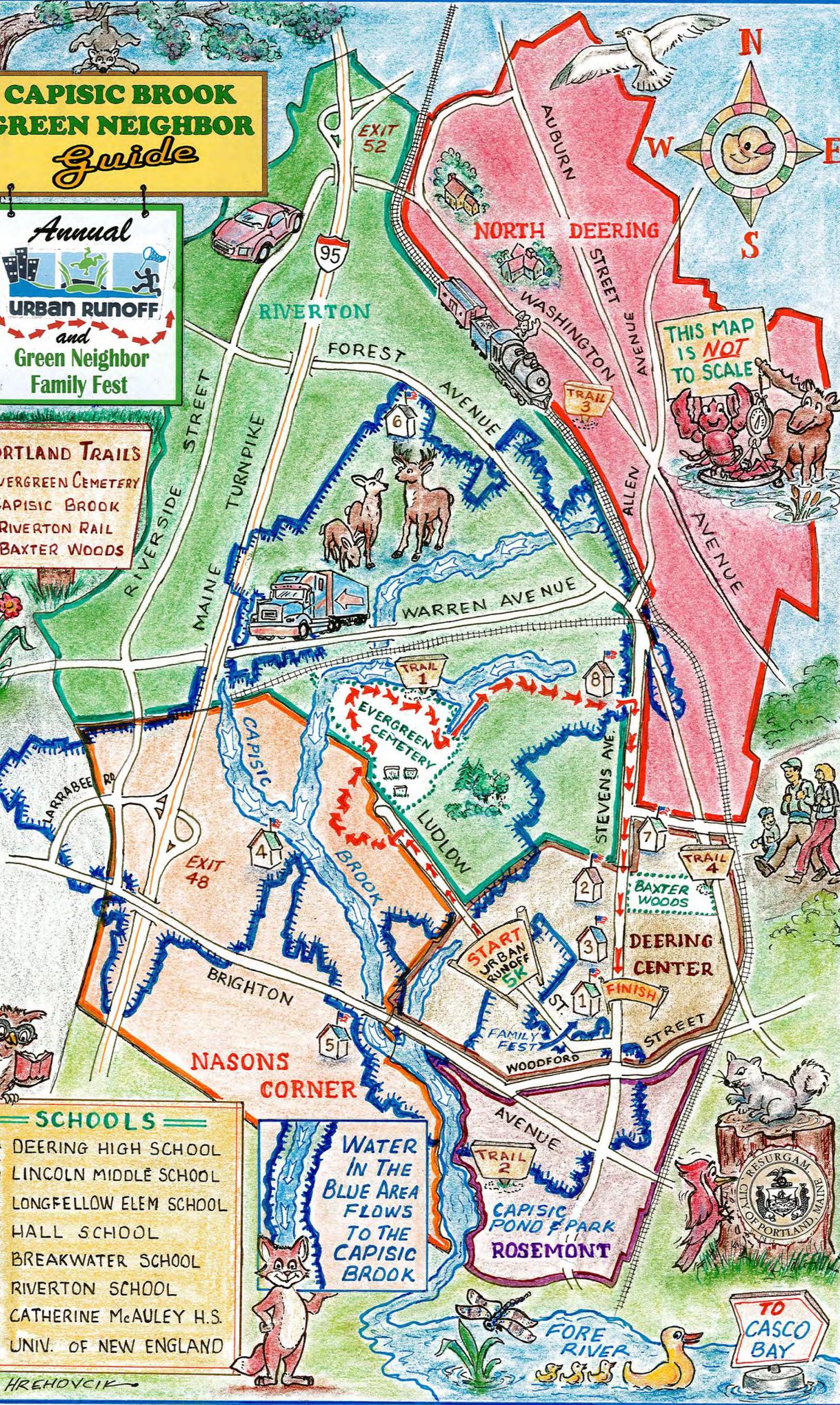
THIS MAP IS NOT TO SCALE

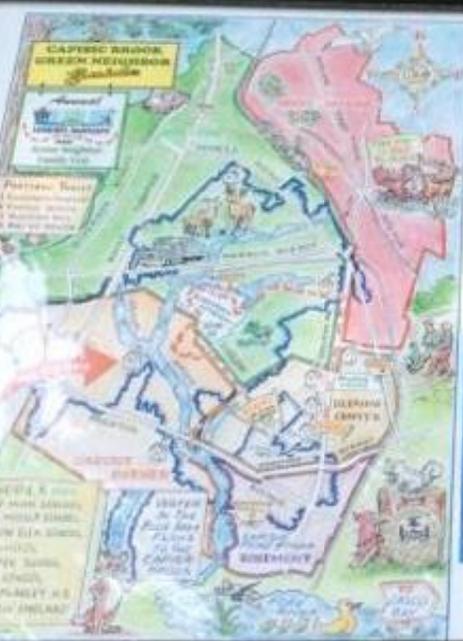
WESTBROOK

- SCHOOLS**
- 1 DEERING HIGH SCHOOL
 - 2 LINCOLN MIDDLE SCHOOL
 - 3 LONGFELLOW ELEM SCHOOL
 - 4 HALL SCHOOL
 - 5 BREAKWATER SCHOOL
 - 6 RIVERTON SCHOOL
 - 7 CATHERINE McAULEY H.S.
 - 8 UNIV. OF NEW ENGLAND

WATER IN THE BLUE AREA FLOWS TO THE CAPISIC BROOK

TO CASCO BAY





Greener Neighborhoods Cleaner Streams

Cleaning up Captive Brook and protecting Coney Bay!

Have a Healthy Lawn

Limit use of pesticides and weed & bug killers.

Use natural lawn care products. Avoid synthetic pesticides and herbicides. They can harm birds, bees, butterflies, and other beneficial insects. They can also pollute waterways.

Use a mulch layer to help retain moisture and suppress weeds.

Water lawns only when necessary. Overwatering can lead to runoff.

Use aeration to improve soil health and reduce the need for fertilizers.



Don't Dump Debris

Keep yard waste off streets, lawns, and out of Captive Brook.

Remove leaves, grass clippings, and other yard waste from your lawn. Do not dump them on the street or in the water. They can block storm drains and pollute the water.

Use a mulch layer to help retain moisture and suppress weeds.

Use aeration to improve soil health and reduce the need for fertilizers.



Wash Cars Wisely

Wash your car at a commercial car wash or on the lawn.

Washing vehicles in a driveway or on the street sends soap, oil, and other pollutants into Captive Brook and Coney Bay.

Use a car wash that recycles water and captures runoff.

Use a lawn to absorb runoff from car washes.



Scoop the Poop

Pick up after your pet and throw waste in the trash.

Pet waste contains harmful bacteria and viruses that can pollute waterways and harm wildlife.

Use a pooper scooper to make it easier to pick up after your pet.

Use a bag to collect waste and throw it in the trash.



APPENDIX B
Urban Impaired Stream Watersheds

APPENDIX B

URBAN IMPAIRED STREAM WATERSHEDS

Portland has four identified Urban Impaired Stream watersheds as defined by Appendix B of the General Permit for Small Municipal Separate Storm Sewer Systems issued in July 2013. During this permit cycle, the City of Portland will continue to focus on the Capisic Brook watershed as its priority watershed. The City has developed a Compensation Fee Utilization Plan for each of its urban impaired watersheds which will allow it to implement structural stormwater retrofits as fees are collected. Currently, the City obligates all new development (beyond single family residential) to meet state stormwater general standards and urban impaired stream standards. These requirements provide additional stormwater controls in all Portland Urban Impaired Stream watersheds.

Actions Completed Permit Year 1: The City continues to implement Appendix B as stated above.