



STORMWATER PROGRAM MANAGEMENT PLAN

FOR

TOWN OF CAPE ELIZABETH, MAINE

Permit Years 1 through 5 (June 1, 2013 to June 1, 2018)
Submitted to Maine DEP December 2013
Revised April 2014

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SECTION 1 INTRODUCTION

Overview of Regulatory Program

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. Discharges must meet the requirements of the General Permit and applicable provisions of Maine's waste discharge and water classification statutes and rules. Compliance with the General Permit authorizes a person to discharge stormwater, pursuant to 38 M.R.S.A. § 413. The General Permit authorizes direct discharges in those parts of Maine for which the Department has received delegated authority under the Federal NPDES program.

The town has been subject to this permitting program since its inception in 2003 when the first General Permit was issued in Maine. General Permits are five (5) years in length. As such, the first General Permit was effective from 2003 to 2008; the second General Permit was effective from 2008 to 2013. There are 29 other municipalities in the State of Maine that are subject to the current General Permit (27 of them have been subject to General Permits since 2003 and two communities became regulated for the first time in July 2013 when the current General Permit was issued). The permit that the town is currently subject to will expire on June 30, 2018.

Communities are regulated under this program when and if they are identified as having "Urbanized Areas" in their municipal boundary. An Urbanized Area is a US Census-defined term, requiring a population density of 1,000 people per square mile, within a Central Place. Central Places consist of an accumulation of 50,000 in adjacent census blocks that each have the density of 1,000 people per square mile. The Greater Portland Area is a Central Place, and the town of Cape Elizabeth has census blocks with the 1,000 people/square mile density; therefore the town is regulated.

Once a community becomes regulated by the General Permit, only the Urbanized Area portions of the town are regulated. As each US Census is published, if the Urbanized Area changes (based on changes to the population), additional areas can be added to the regulated area. Figure 1 shows the Urbanized Area that is regulated by the General Permit in the town of Cape Elizabeth, which is based on the 2000 and 2010 US Census data.

The town was required to file a Notice of Intent to comply with the General Permit in July 2013. A copy of the NOI is provided in Appendix A. Several key requirements of the General Permit are described below.

Stormwater Program Management Plan

Each of the three General Permits that have been issued have required that the town develop, implement, and enforce a 5-year Stormwater Program Management Plan ("Plan") to coincide with the term of the General Permit. This Plan is effectively a revision of the prior Plan, updated to reflect the new General Permit Requirements.

The Plan describes how the town will implement six Minimum Control Measures (MCMs), set forth in Part IV.H of the General Permit. The MCMs are designed to reduce the discharge of pollutants from the town's separated storm drain system that is within the Urbanized Area to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

The term "Maximum Extent Practicable" means available and feasible considering cost, existing technology, and logistics based on the overall purpose of the project. Effectively, the regulated MS4s are allowed to consider these concepts as they select Best Management Practices (BMPs) to meet permit requirements. In addition, the term Maximum Extent Practical allows the regulated MS4s to adjust BMPs throughout the Permit Cycle if needed based on evaluations of their effectiveness, changing conditions, specific local concerns, or changes in other factors.

The Stormwater Program Management Plan describes how the town will reduce or eliminate polluted stormwater runoff to the Maximum Extent Practicable within the Urbanized Area, from its MS4. The Plan must be substantially implemented by June 30, 2018.

Minimum Control Measures (MCMs)

The six MCMs that are required to be addressed in the Plan are:

- 1 Public education and outreach on stormwater impacts
- 2 Public involvement and participation
- 3 Illicit discharge detection and elimination
- 4 Construction site stormwater runoff control
- 5 Post-construction stormwater management in new development and redevelopment
- 6 Pollution prevention/good housekeeping for municipal operations

The General Permit requires that for each MCM, the town must: define appropriate BMPs; designate a person(s) responsible for each BMP; define a time line for implementation of each BMP; and define measurable goals for each BMP.

The prior General Permits also required that the Plan address these six MCMs, but the specific requirements related to each MCM have changed with each permit. In many cases, the current General Permit simply requires that the town continue with a program that a prior

General Permit required that the town develop.

Annual Reporting and Record Keeping

By September 15, 2014, and annually thereafter by September 15, the town must submit a report to Maine DEP for review and approval. The annual report must be sent to:

**Municipal/Industrial Stormwater Coordinator
Department of Environmental Protection
17 State House Station Augusta,
Maine 04333-0017**

The report must include the following:

- a. The status of compliance with permit conditions based on the Plan, an assessment of the appropriateness of identified best management practices, progress towards 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.
- b. Results of information collected and analyzed, including monitoring data, if any, during the reporting period.
- c. A summary of the stormwater activities the town intends to undertake pursuant to its Plan during the next reporting cycle.
- d. A change in any identified BMPs or measurable goals that apply to the Plan.
- e. A summary describing the activities, progress, and accomplishments for each of the MCMs (including such items as the status of education and outreach efforts, public involvement activities, stormwater mapping efforts, dry weather inspections, detected illicit discharges, detected illicit connections, illicit discharges that were eliminated, construction site inspections, number and nature of enforcement actions, post construction BMP status and inspections, and the status of the town's good housekeeping/pollution prevention program).

Changes to the report based on the Maine DEP's review comment(s) must be submitted to the Department within 30 days of the receipt of the comment(s). The Maine DEP has suggested the town provide an estimate of annual expenditures for permit compliance for the reporting period and projected budget for the following year.

The town must keep records required by the General Permit for at least three (3) years following its expiration or longer if requested by the DEP Commissioner. The town must make records, including its Stormwater Program Management Plan, available to the public at reasonable times during regular business hours.

Impaired Waters and Total Maximum Daily Load (TMDL)

The General Permit contains special requirements for waters that are no longer meeting their state water quality classifications if a Total Maximum Daily Load (TMDL) document has been prepared. A TMDL document identifies the sources of the impairments and a plan of action to correct the impairments. In particular, the TMDL document identifies how much of a pollutant a water body can receive and still meet its water quality classification. Typically the units are identified as pounds per day, which is the basis for the term "Total Maximum Daily Load". A TMDL action plan typically describes how to reduce the excess pollutant loadings to the TMDL level.

The following is a summary of the waters in the town's Urbanized Area that receive discharges from the town's MS4 system and their TMDL and impairment status:

- Trout Brook – TMDL finalized 10/25/2007 for aquatic life impairments (Class C water), Watershed Management Plan completed December 2012, Implementation of Watershed Management Plan has begun.
- Spurwink River – Statewide Bacteria TMDL finalized August 2009.
- Willow Brook – No impairments identified.
- Pond Cove Brook – No impairments identified.
- Pollack Creek – No impairments identified.
- Dyer Pond – No impairments identified.
- Atlantic Ocean – No impairments identified this section of ocean.

The following documents were reviewed in making these determinations:

- Statewide Bacteria TMDL (August 2009)
- Chapter 502 Direct Watersheds of Lakes Most at Risk from New Development and Urban Impaired Streams
- Impervious Cover TMDL (September 2012)
- Draft 2012 Maine Integrated Water Quality Report and Appendices (a.k.a. Maine 303(d) list)

The Spurwink River is listed in the Statewide Bacteria TMDL document as impaired for shellfishing because of elevated bacteria. This TMDL document does not specifically identify the source of the bacteria, and identifies an action plan for communities to pursue that is based on investigation of the source.

In Cape Elizabeth, Trout Brook is also impaired and has a stand-alone TMDL document. Most of the developed portion of the Trout Brook Watershed is located in South Portland, but a portion is located in Cape Elizabeth, therefore Cape Elizabeth must comply with the additional TMDL requirements put forth in the General Permit.

Low dissolved oxygen and the presence of toxic pollutants contribute to the aquatic life impairment. The sources and stressors contributing to these impairments identified in the TMDL document include impervious surfaces, winter road salt and nutrients.

Because most of these stressors and sources originate from stormwater runoff, the TMDL document contains a list of stormwater-related general recommendations that can be implemented to improve water quality. The Trout Brook Watershed Management Plan refined those recommendations into a two-phase action plan focused on correcting the stressors and sources of the impairments.

The General Permit requires that the discharges from the town's urbanized area into Trout Brook and the Spurwink River be consistent with their respective TMDL documents.

Appendix B provides a summary of how this Plan is consistent with the TMDLs for Trout Brook and the Spurwink River.

Priority Watersheds

Many of the requirements in the General Permit apply only to the town's highest priority watersheds or to the town's top two highest priority watersheds.

The town's two highest priority watersheds are: Trout Brook and the Spurwink River, because of their impairments.

During the previous permit cycle, the town designated Trout Brook as its first priority and the Spurwink River as its second priority.

General Permit Partners

The town has been a member of the Interlocal Stormwater Working Group (ISWG) since 2003. ISWG formed as a collaborative effort of 14 regulated communities to reduce the overall cost of implementing the permit. ISWG is facilitated and much of the work is completed by the Cumberland County Soil and Water Conservation District (CCSWCD). In particular, the ISWG collaborates on the public education and public participation components of the permit. The ISWG education coordinator, who is responsible for assisting with implementing a number of BMPs contained in this Plan, is an employee of the CCSWCD.

Figure I insert

SECTION 2 MINIMUM CONTROL MEASURES

MCM 1 Public Education and Outreach

The town will fulfill 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, as described in this section of the plan.

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.

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 (see BMP 2.2 Host Public Events).

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)
- 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).

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.

Reporting - review of Stormwater Awareness Plan will be included in every Annual Report. The review will include process and impact indicators as outlined in the Stormwater Awareness Plan. In permit year five an in-depth assessment of both the implementation and the impact of the Stormwater Awareness Plan will be provided.

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

Overall schedule for raising awareness of stormwater will be included as part of the Stormwater Awareness Plan.

BMP 1.3 – Develop and Implement Municipal/Permit Stormwater Awareness Plan.

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

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

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 five 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.

BMP 1.4 - Continue Targeted Best Management Practices Adoption efforts from previous MS4 permit cycle.

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

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

BMP 1.5 – Update and Implement BMP Adoption Plan

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

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

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

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

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

Overall schedule for BMP adoption will be included in the BMP Adoption Plan.

BMP 1.6 – Develop and Implement Targeted Outreach in Priority Watershed Plan.

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

- a) the specific stormwater activity or pollutant to be addressed
- b) the target audience
- c) the outreach tool(s) to be used
- d) the message and the BMPs to be encouraged
- e) the time line and implementation schedule
- f) the person(s) responsible for implementation
- g) the goal of the outreach effort
- h) impact evaluation protocol.

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 two annual report. 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.

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

Overall schedule for targeted outreach in priority watershed will be included as part of the Targeted Outreach in Priority Watershed Plan.

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.

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

MCM 2 Public Involvement and Participation

The town will fulfill 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, as described in this section of the plan.

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.

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)

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)

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 GIS map system will also be updated.

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

Responsible Party - public works director

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

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.

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.

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

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.

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.

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.

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.

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)

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

Responsible Party - public works director

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 by June 30 each year 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)

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.

Measurable Goal 4.4.2 – Whenever the town hires a contractor to do work in Trout Brook, they will hire a contractor 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.

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.

BMP 5.2 – Track Post Construction Sites to ensure proper reporting and compliance with the Ordinance

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

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

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

The town ordinance requires that owners and operators hire a "Qualified Third Party Inspector" to inspect the site, therefore the General Permit requirements related to town inspections in

watersheds of Urban Impaired Streams and Lakes Most at Risk do not apply.

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

Responsible Party - public works director

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 Inventory is attached as Appendix C.

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

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.

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.

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.

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.

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.

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.

SECTION 3 GENERAL REQUIREMENTS

Certification

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

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

Signature: _____ Date: _____
Michael K. McGovern

Title: Town Manager

APPENDIX A

NOTICE OF INTENT

APPENDIX B

TROUT BROOK/SPURWINK RIVER TMDL CONSISTENCY EVALUATION

TROUT BROOK/SPURWINK RIVER TMDL CONSISTENCY EVALUATION

The following is a summary of the BMPs contained in the Cape Elizabeth Stormwater Program Management Plan that are consistent with the Trout Brook Total Maximum Daily Load (TMDL) document, and the Statewide Bacteria TMDL document for the Spurwink River.

BMP	Measurable Goal	Consistency Discussion
1.4 Continue Targeted Best Management Practices Adoption efforts from previous MS4 permit cycle.	Continue providing Point of Sale information, Yardscaping Classes, ad websites and free media as part of the Targeted BMP efforts. Provide information to the Trout Brook neighborhoods via direct mail, or storm drain stenciling. In particular, identify/develop a mailing list of property owners in the Trout Brook Watershed.	The TMDL for Trout Brook identifies that education of homeowners on YardScaping principles needs to be completed to assist in addressing stressors.
BMP 2.2 - Host Public Events	ISWG and/or permittee will annually host/conduct or participate in at least one public event such as storm drain stenciling, stream clean-up, household hazardous waste collection day, volunteer monitoring, neighborhood educational events, conservation commission outreach program, Urban Impaired Stream outreach program, or adopt a storm drain or local stream program).	The TMDL and Watershed Management Plan (WMP) for Trout Brook identify that minimizing discharges of toxins and hazardous substances will assist in reducing stressors on Trout Brook. The town will continue its annual household hazardous waste day to minimize the potential for illegal dumping in Trout Brook.
BMP 3.1-Maintain an updated Watershed Based Storm Sewer System Infrastructure Map	The town will maintain its map of the stormwater infrastructure.	This BMP is important so the town maintains an accurate understanding of the infrastructure in the Spurwink River and Trout Brook watersheds.
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 that includes prioritized annual dry weather inspections in two highest priority watersheds (Trout Brook and Spurwink River). These annual inspections will continue and inspections will be expanded to watersheds that were not previously inspected beginning in Permit Year 2.	Both TMDL documents identify that illicit discharges should continue to be investigated and eliminated.

<p>BMP 3.4: Continue Open Ditch Illicit Discharge Program</p>	<p>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 this program in to the Spurwink River watershed.</p>	<p>Both TMDL documents identify that illicit discharges should continue to be investigated and eliminated.</p>
<p>BMP 3.5: Document and Evaluate Aging Septic Systems</p>	<p>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.</p> <p>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.</p>	<p>Both TMDL documents identify that illicit discharges should continue to be investigated and eliminated.</p>
<p>BMP 3.6: Work with Portland Water District to Assess if Hydrant and Water Line Practices Contribute Significant Pollutants to the MS4</p>	<p>Measurable Goal 3.6.1 – By June 30, 2014, meet with Portland Water District to understand their hydrant flushing and dechlorination practices. Provide Portland Water District with an understanding of the sensitive waters in the Cape Elizabeth MS4.</p>	<p>Informing PWD of Trout Brook’s impairments will help in reducing stressors on the waterbody.</p>
<p>BMP 4.3 - Continue implementing the construction site inspection program.</p>	<p>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. 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</p>	<p>The Trout Brook TMDL and WMP identified that erosion within with the Trout Brook Watershed is a source of impairments.</p>

	<p>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 by June 30 each year will document this information in the Construction Inspection Tracking spreadsheet that is also used to document BMP 4.2.</p>	
<p>BMP 4.4 Enhanced Certifications in Trout Brook</p>	<p>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.</p> <p>Measurable Goal 4.4.2 – Whenever the town hires a contractor to do work in Trout Brook, they will hire a contractor certified by the state in sediment and erosion control.</p>	<p>The Trout Brook TMDL and WMP identified that erosion within the Trout Brook Watershed is a source of impairment.</p>
<p>BMP 6.3 Continue Street Sweeping Program</p>	<p>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 Trout Brook to minimize pollutant transport.</p>	<p>Additional street sweeping will help to reduce the sediment and chloride transport in Trout Brook, both of which were identified as stressors in the TMCL.</p>

APPENDIX C

INVENTORY OF MUNICIPAL OPERATIONS

Inventory of Town-Maintained Facilities
Applicable to Cape Elizabeth Stormwater Management Program
BMP 6.1 Operations at Municipally Owned Open Spaces and Facilities

Athletic Fields	Address	Purpose	Primary Activity	Fertilizer?
Soccer/Track Field	School Campus	Athletic	Mowing, Field Lining	Yes
Turf Field	School Campus	Athletic	Field Lining, Grooming	No
Holman Field	School Campus	Athletic	Mowing, Field Lining	Yes
Soccer/Lacrosse	School Campus	Athletic	Mowing, Field Lining	Yes
Capano Field	School Campus	Athletic	Mowing, Field Lining	Yes
Middle School BB	School Campus	Athletic	Mowing, Field Lining	Yes
Lions Field Rec. Area (2)	Ocean Hse. Rd.	Baseball	Mowing, Field Lining	Yes
Plaisted Park	Shore Road	Baseball	Mowing, Field Lining	Yes
Gull Crest Fields (2)	Spurwink Ave.	Athletic	Mowing, Field Lining	Yes

Open Space	Address	Purpose	Primary Activity	Fertilizer?
Fort Williams Park	Shore Road	Rec.	Mowing	No
School Grounds	Ocean Hse. Rd.	Rec.	Mowing	No
Gull Crest Property	Spurwink Ave.	Pass. Rec.	Mowing	No
Riverside Cemetery	Spurwink Ave.	Mowing	No	
Thomas Jordan Trust	Spurwink Ave.	Pass. Rec.	Mowing	No
Queen Acres Green	Beverly Terrace	Pass. Rec.	Mowing	No
Cross Hill Green	Cross Hill Road	Pass Rec.	Mowing	No

Facilities	Address	Purpose	Primary Activity	Fertilizer?
Public Works Facility	Cooper Drive Ind.	Equip. Stor., Fueling &		n/a
Recycling Center	Dennison Drive	Recycling	Storage of Materials	n/a
Salt Shed	Dennison Drive	Mat. Stor.	Material & Veh.Storage	
Parks Maint. Bldg.	Fort Will. Park	Storage	Equip. Maint., Cleaning	n/a
Heavy Equip. Stor. Bldg.	Fort Will. Park	Storage	Equipment/Veh. Stor.	n/a
Red Cement Stor. Bldg.	Fort Will. Park	Storage	Equipment/Veh. Stor.	n/a
Holman Field Stor. Bldg.	School Campus	Storage	Equipment Storage	n/a
Gull Crest Stor. Bldg.	Gull Crest Drive	Storage	Equipment & E-Waste	n/a
Riverside Cem. Stor. Bldg.	Riverside Cem.	Storage	Tool Storage	n/a
Town Center Fire Station	Jordan Way	Fire Stat.	Vehicle Storage/washing	n/a
Cape Cottage Fire Station	Shore Road	Fire Stat.	Vehicle Storage/washing	n/a
Fort Williams Park Fire Sta.	Fort Will. Park	Storage	Non-Profit Equip. Stor.	n/a