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October 8, 2008

Josh Secunda  
U.S. Environmental Protection Agency (EPA)  
Region 1, New England  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Subject: Quarterly Progress Report for the 2007 State Innovation Grant

Dear Mr. Secunda:

The Maine Department of Environmental Protection and the Massachusetts Department of Environmental Protection are pleased to submit our fourth quarterly progress report for the Stormwater Environmental Results Program. We believe that we have made significant progress this past quarter by completing the groundwork needed to move the project forward substantively.

If this report does not meet EPA's needs or you would like to suggest ways to improve our next quarterly report, please contact me at (207) 287-4432 or [sara.m.lippert@maine.gov](mailto:sara.m.lippert@maine.gov).

Sincerely,

Sara Lippert,  
Environmental Specialist  
Office of Innovation & Assistance

cc: Jerry Filbin (EPA), Scott Bowles (EPA), Anne Leiby (EPA), Marge Miranda (EPA), Sherri Walker (EPA), Fred Civian (MA DEP), David Noonan (MA DEP), Beth Nagusky (ME DEP), Julie Churchill (ME DEP), Don Witherill (ME DEP), Jeff Dennis (ME DEP)

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## **Quarterly Progress Report (7/1/2008 – 9/30/2008)**

Award: 2007 State Innovation Grant  
Recipient: Maine Department of Environmental Protection (ME DEP) and Massachusetts Department of Environmental Protection (MA DEP)  
Project: Stormwater Environmental Results Program (ERP): Voluntary Certification Pilot Program to Reduce Stormwater Pollution from Existing Commercial Businesses' Impervious Surfaces

### **Overview**

Maine and Massachusetts have a clear need to solve existing water quality problems affecting impaired or soon to be designated impaired water bodies. This need is demonstrated by the dramatic increase in development in both states; and the corresponding increase in the number of impaired or soon to be impaired water bodies. An innovative solution such as the Environmental Results Program (ERP) offers an alternative to the traditional enforcement/compliance model that allows us to proactively work with unregulated facilities and encourage upgrades in stormwater Best Management Practices (BMPs). This is important because states are generally not sufficiently staffed to implement traditional permitting programs.

### **Accomplishments During Reporting Period**

#### **ME DEP:**

ME DEP developed a list of Best Management Practices (BMPs) and Environmental Business Practice Indicators (EBPIs) for the Survey checklist that will be used for baseline and post-certification on-site visits. ME DEP has chosen to refer to the on-site visits as "surveys" rather than "inspections," which is the common terminology used with ERPs. Please refer to the attached draft checklist. MA DEP is currently reviewing the checklist and will provide ME DEP with comments. Both states want to have some overlapping BMPs and EBPIs so that comparisons can be made between the two projects.

ME DEP selected watersheds on which to focus the project. The following watersheds have been selected: Penjajawoc Stream (Bangor), Arctic Brook (Bangor), River Road Tributary (Brunswick), Capisic Brook (Portland), and Thatcher Brook (Biddeford). Maine selected multiple watersheds to focus the project on due to the low number of hotspots within each watershed. The hotspot business sector ME DEP is focusing on is: drive-thru restaurants, convenience store/gas stations, and high traffic restaurants. All of these hotspots are small impervious parking lots that contribute a disproportionate stormwater pollutant load compared to that of larger impervious parking lots; this is largely due to the high amount of mobile source traffic. ME DEP has done some preliminary fieldwork and has identified a list of possible businesses in the above listed watersheds to work with. These businesses are: McDonald's, Dunkin Donuts, Citgo, Mobil, Irving, Jiffy Lube, Exxon, Wendy's, Getty, Gulf, Dairy Queen, Denny's, Burger King, Olive Garden, Governor's, KFC and Tim Horton's.

Long Creek (South Portland) was originally listed in the grant proposal and Quality Assurance Project Plan (QAPP) as a possible watershed. Since the grant proposal and QAPP were written, Long Creek has gained attention by EPA and the Conservation Law Foundation as a high priority watershed where Residual Designation Authority (RDA) could be used to restore water quality. Due to the possibility that Long Creek will be subject to RDA, ME DEP has decided not to pursue Long Creek for this project.

If RDA is used in Long Creek, ME DEP may be able to compare a voluntary approach to that of an RDA approach.

ME DEP has determined that large workshops may not be the best solution to assist the hotspot businesses. Each site is unique and the BMP solutions will vary from site to site. One-on-one site visits with each hotspot are likely to be more effective. One-on-one site visits would involve meeting with the business owner and/or manager and discussing the problem, their contribution to it, how they can be an Environmental Leader, and possible solutions. ME DEP could also hold a workshop/educational meeting with the hotspot owners, environmental groups, municipal officials, and others where there would be a discussion of the problem of urban impaired streams, the causes, and the solutions.

ME DEP is developing a strategy for approaching the hotspot businesses. ME DEP is considering contacting chain restaurants and convenience stores (i.e. McDonald's, Irving) at the corporate level to try and gain their support of the project. ME DEP will also contact the local franchise owners and try and set up one-on-one site visits to discuss the problem and possible solutions. ME DEP anticipates baseline surveys will begin in late October and will be completed in November of this year.

ME DEP is developing the workbook and self-certification checklist for the project. Time has been spent researching BMPs and reviewing stormwater workbooks/manuals to find the best layout and information for the workbook.

**MA DEP:**

Massachusetts staff is writing draft regulations for a new statewide Stormwater General Permit (SWGP). The regulations are based upon input from a wide-ranging Stakeholders Group that met March through July of this year. Stakeholders included the Conservation Law Foundation, the Charles River Watershed Association, the Organization for the Assobet River, the National Association of Industrial and Office Properties, Associated Industries of Massachusetts, three different Towns in the Upper Charles River watershed, three colleges/universities, a number of private consultants, the Cities of Boston and Cambridge, the Mass Waterworks Association, Lowe's, and representatives of New England Office of the EPA..

While these draft regulations are being readied for review by DEP Commissioner Laurie Burt, MassDEP is also making appointments with additional organizations to explain the general features of the SWGP. These organizations include the Arc Of Innovation (a public/private partnership for the I495/Metrowest Corridor), Town Administrators of Norfolk County (which encompasses most of the Upper Charles River Basin), various regional Bar Associations, the Massachusetts Homebuilders Association, the Environmental Business Council; and the Greater Boston Realty Board.

The draft regulations have these elements:

- expands responsibility for stormwater management from the municipalities (through the MS4 permit) and a limited number of industries (through the MSGP) to include private owners of larger impervious surfaces (the acreage that would trigger these requirements is still under discussion)

- statewide, private owners of larger impervious surfaces would be required to implement good housekeeping and pollution prevention measures, like sweeping of parking lots, Spill Prevention plans and securing lids of dumpsters
- in the Charles River watershed, where an adopted TMDL requires 2/3 reduction of phosphorus, properties will be required to meet the required TMDL reduction by installing infiltrating BMPs within a certain timeframe
- new developments and redevelopments would also have to meet TMDL reduction requirements

The draft regulations are expected to be presented to the public for review in Fall 2008, with promulgation in early 2009, and initial compliance for the statewide requirements to follow later that year.

**ME DEP and MA DEP**

Both states met with EPA at ME DEP’s Portland office on July 1<sup>st</sup> to discuss the project. Both states have continued to hold monthly conference calls to discuss the progress being made on the project. In addition, the two states routinely communicate informally by e-mail and phone.

**Financial Report**

Please refer to attached Excel spreadsheet for the expenditures for this quarter.

**Annotated Workplan for Quarterly Progress Report (7/1/2008 – 9/30/2008)**

**Schedule of Major Project Tasks**

<b>Task Name</b>	<b>Task Description</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>
Receive funding	Receive EPA grant funding for project.	October 2007	October 2007	Completed
Train staff	Train project staff in stormwater BMPs and hotspot analysis.	October 2007	April 2008	Ongoing
Outreach	Staff assigned to project begins coordinating with stormwater staff.	October 2007	April 2008	Ongoing
Outreach	Develop a list of external stakeholders within each state and begin involvement with them.	November 2007	April 2008	Behind schedule
Monthly meetings	Coordinate and implement monthly meetings/conference calls for Maine and Massachusetts.	October 2007	September 2010	Ongoing
Develop Gantt Chart	Detail workflow and timelines based on logic model.	October 2007	January 2008	Completed
Goals identification	Finalize the goals of this project, upon which metrics will be based	October 2007	January 2008	Completed
Measures identification	Finalize metrics to be tracked by this project.	November 2007	March 2008	Completed

### Schedule of Major Project Tasks

<b>Task Name</b>	<b>Task Description</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>
Watershed identification	Select/confirm target watersheds based on states' draft and final TMDLs	November 2007	January 2008	Completed
Statistical methodology	Develop a statistical methodology to drive performance measurement and analytical tasks.	October 2007	March 2008	Completed
QAPP finalization & approval	Finalize QAPP based upon results of the measures identification, statistical methodology, and data management tasks. Primary data collection will not occur before relevant parts of the QAPP are finalized and approved by EPA.	October 2007	February 2008	Completed
Data input & management	Develop and implement an approach to cost-effectively input and manage ERP data, including primary and secondary data. Primary data consists of data from inspection reports and facility forms (including self-certification forms). Secondary data sources include lists of facilities from regulatory and private-sector databases.	December 2007	March 2008	Completed
Facility identification	Determine the exact characteristics of facilities to be included in this project, and compile a list of facilities from reliable sources.	February 2008	March 2008	Completed
Develop incentives	Develop/implement incentives to attract volunteers into the ERP considering each state's approaches.	December 2007	March 2008	Completed
Develop EBPIs	Develop Environmental Business Practice Indicators (EBPIs), including regulatory, beyond compliance, and social marketing indicators.	December 2007	February 2008	ME DEP finalizing MA DEP developing
Develop list of BMPs	Develop and analyze a list of retrofit "off the shelf" stormwater BMPs and technologies (filtration, bioretention and "biological" technologies); include range of effectiveness for different pollutants and cost and maintenance data.	December 2007	September 2008	ME DEP finalizing MA DEP developing

### Schedule of Major Project Tasks

<b>Task Name</b>	<b>Task Description</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>
Review stormwater BMP technologies	Conduct an independent review of data describing the effectiveness of stormwater technologies utilizing an outside 3 <sup>rd</sup> party to ensure these technologies can, by themselves or as part of a treatment train, at a minimum meet ME's (50-70% phosphorus and 80% TSS volume control) and MA's (80% TSS removal) pollutant removal standards. Both states will be evaluating the emerging EPA/Tetra Tech BMP pollution reduction model. To the extent facilities install BMPs listed in the model, the states will use that model to help estimate pollution reductions.	January 2008	September 2008	Ongoing
Review compliance records	Review existing compliance records within both state departments to avoid inspecting facilities with recently identified or ongoing compliance issues.	December 2007	March 2008	Behind schedule
Develop outreach materials	Develop workbook and self-certification checklist.	January 2008	September 2008	ME DEP developing MA DEP developing
Baseline inspections (establishing a performance measures baseline)	Conduct inspections at facilities to establish a baseline for performance measures. Facilities selected at random from the entire targeted population, based upon sample design from statistical methodology.	May 2008	September 2008	Behind schedule
Baseline analysis	Analyze inspection data to establish a baseline for the project's performance measures.	September 2008	December 2008	Future task

### Schedule of Major Project Tasks

Task Name	Task Description	Start Date	End Date	Status
Evaluate BMP installation	Evaluate number and type of stormwater BMP engineered solutions that should be installed at each target area and their relative cost. Coordinate evaluation with stakeholder/partners and in-house staff.	September 2008	February 2009	Future task
Facility assistance	Deliver compliance/technical assistance to facilities on a site-to-site basis and via workshops.	February 2009	June 2009	Future task
Self-certification	Implement a voluntary facility self-certification approach. Self-certification refers to the submission of a legally binding record of a facility's compliance and beyond-compliance practices.	July 2009	September 2009	Future task
Analysis of self-certification results	Analyze self-certification data, with primary purpose of identifying opportunities for selective follow-up (next step).	October 2009	November 2009	Future task
Selective follow-up	Selective follow-up with self-certifying facilities, based upon analysis of self-certification data. Selective follow-up may include phone calls, inspections and enforcement. Selective follow-up is not typically based upon a random sample.	December 2009	March 2010	Future task
Post-certification inspections	Inspect facilities to establish whether sector performance measures (and other measures) have changed since the baseline. Inspection data also used to cross-check self-certification data at inspected facilities. Facilities selected at random from the entire universe of facilities, based upon sample design from statistical methodology.	March 2010	June 2010	Future task



### Schedule of Major Project Tasks

Task Name	Task Description	Start Date	End Date	Status
Facility recognition	Recognize facilities that were in compliance and implemented beyond compliance and pollution prevention practices. Recognition would be through Environmental Leader branding (ME).	July 2010	August 2010	Future task
Self-certification vs. Inspections	Tabulate accuracy scores for self-certification vs. inspections.	July 2010	September 2010	Future task
Data analysis	Analyze baseline, self-certification, and post-certification data to understand change in facility performance and overall outcomes of interest. Assessment of project efficiency.	July 2010	September 2010	Future task
Information exchange	ME DEP, assisted by Mass DEP, will host at least 2 information exchange meetings for other states, tribes and/or interested stakeholders to facilitate the transfer of information and innovation. These activities will include site visits to Environmental Leader facilities and demonstrations of pollution prevention and BMP solutions.	September 2010	September 2010	Future task
Explore funding opportunities	Explore other grants available through EPA, association resources and potential corporate sponsorships from larger companies to small companies that could be used to assist project partners in the installation of BMPs.	June 2010	September 2010	Future task
Self-certification	Conduct 2 <sup>nd</sup> round of self-certification.	July 2010	September 2010	Future task
Ongoing monitoring	Set up ongoing support and monitoring of installed BMPs.	August 2010	September 2010	Future task
Reporting to EPA	Reporting shall include quarterly and final reports.	October 2007	September 2010	Ongoing