

## **Piscataqua Region Estuaries Partnership**

### **REQUEST FOR PROPOSALS: Improvement of Erosion and Sedimentation Control Programs**

The Piscataqua Region Estuaries Partnership (PREP) is soliciting responses from organizations to conduct a comprehensive review of erosion and sedimentation (E&S) control programs affecting construction sites located in Piscataqua Region communities and to review other programs that have been implemented to improve construction stormwater management.

PREP intends the study to research and evaluate the following focus areas:

- The construction activity in the Piscataqua Region watershed in recent years in terms of the number of construction projects, the cumulative land area disturbed, and the types of applicable permits
- The capacity of town, state, and federal regulators to conduct inspections of construction sites for E&S controls and permit compliance and to follow up on complaints/incidents and enforcement actions
- The barriers to adopting E&S regulations and enforcement by municipalities
- The number of towns in the Piscataqua Region watershed that have regulations (e.g., stormwater ordinances, site plan regulations, subdivision regulations, etc.) that effectively incorporate E&S controls and are consistent with applicable state and federal regulations
- The effectiveness, cost, and administrative considerations of various types of programs implemented in other states or regions to improve aspects of construction stormwater management

The final report will provide detailed information on each of the focus areas listed above and make recommendations for improving stormwater management during construction with the goal of protecting surface water quality from sedimentation. The recommendations should include both ways to improve existing local, state, and federal programs and new programs that could be implemented at a regional or state level to improve E&S controls prior to and during construction activities.

Results of the evaluation will be used by PREP, and possibly other organizations and agencies, to recommend resources, regulations and/or programs that will have the overall effect of improving construction site stormwater management to protect water quality. The project will begin by August 1, 2009 and must be completed by June 30, 2010. The 42 New Hampshire towns and the 10 Maine towns in the Piscataqua Region watershed will be the study area for this project.

Proposals are due to PREP by Monday, June 8, 2009.

**Direct any questions about this Request for Proposals to Phil Trowbridge, PREP Coastal Scientist, at (603) 271-8872 or [Philip.Trowbridge@des.nh.gov](mailto:Philip.Trowbridge@des.nh.gov).**

## BACKGROUND INFORMATION

Nonpoint source pollution, including stormwater runoff, is the major source of pollution affecting estuaries in the Piscataqua Region. Increasing development and associated impervious surfaces have the potential to further diminish water quality. How and where development occurs will continue to shape the health of the region's estuaries and other watershed resources. The Piscataqua Region watershed population grew from about 260,000 to 373,000 over the last 25 years and is expected to grow by about 25 percent in the next 25 years. With this growth comes increased development and stormwater runoff which can significantly pollute local waters.

Stormwater management during construction is governed by federal, state, and local regulations depending on the size of the project and the local ordinances specific to each community. The major programs, as well as some additional resources that may be useful for this project, are summarized below. In Maine there is a voluntary contractor training and certification program. There is also a national voluntary certification program by a trade organization. It should be noted that wetlands dredge and fill permits are often required from the U.S. Army Corps of Engineers and state wetlands programs for construction projects. The wetlands permits typically overlap with a federal, state, or municipal construction permits, but not always. However, in order to narrow the scope of this research, construction projects that only require a wetlands permit will not be included in this study.

### U.S. Environmental Protection Agency

- Construction General Permit. This permit applies to construction activities in New Hampshire that disturb one or more acres of land. The permit requires a Notice of Intent filing and implementation of stormwater pollution prevention plans. Additional information: <http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>.
- Municipal Separate Storm Sewer System Permit. This permit applies to 26 New Hampshire communities in the Piscataqua Region watershed. Municipalities are required to adopt ordinances on E&S controls and to have permits, inspections/enforcement, and require BMP maintenance. Additional information: <http://www.epa.gov/region1/npdes/stormwater/>.

### New Hampshire Department of Environmental Services (NHDES)

- Alteration of Terrain Regulations. This permit is required for construction activities that disturb 100,000 sq ft or more of land (50,000 sq ft if any portion of the disturbance is in shoreland areas) or construction activities that are within 50 feet of a surface water and disturb any amount of land on a 25% or steeper land slope. Additional information: <http://des.nh.gov/organization/divisions/water/aot/index.htm>.
- Section 401 Water Quality Certificate Program. Section 401 of the Clean Water Act requires that states issue a Certification that water quality standards will be met before a federal permit can be issued for a project. Additional information: <http://des.nh.gov/organization/divisions/water/wmb/section401/index.htm>

### Maine Department of Environmental Protection (Maine DEP)

- Stormwater Management Law (38 MRSA 420-D). This law requires a stormwater permit from Maine DEP for all construction activities involving one acre or more of disturbed area. Additional information: <http://www.maine.gov/dep/blwq/docstand/stormwater/storm.htm>.

- Erosion and Sediment Control Law (38 MRSA 420-C). This law requires that all activities that disturb the landscape take reasonable measures to prevent erosion and sedimentation in adjacent waterways. No permit is required but this law is referenced in the permit for the Stormwater Management Law. Additional information: <http://www.maine.gov/dep/blwq/docstand/stormwater/erosion.htm>.
- Maine Construction General Permit. This permit is applicable to construction sites that disturb one acre or more of land area in sections of the state for which Maine DEP has received delegated authority under the federal NPDES program. Additional information: <http://www.maine.gov/dep/blwq/docstand/stormwater/construction.htm>.
- Municipal Separate Storm Sewer System Permit. This permit applies to five Maine communities in the Piscataqua Region watershed in sections of the state for which Maine DEP has received delegated authority under the federal NPDES program. Additional information: <http://www.maine.gov/dep/blwq/docstand/stormwater/MS4.htm>.
- Natural Resources Protection Act (38 MRSA 480). Additional information: <http://www.maine.gov/dep/blwq/docstand/nrpapage.htm>.

#### Municipalities

- Municipalities sometimes require additional E&S controls beyond the federal and state requirements through local ordinances and the planning board approval process.
- In 2009, PREP is completing a survey of the 52 watershed towns in Maine and New Hampshire regarding municipal ordinances and conservation planning (the “Piscataqua Region Environmental Planning Assessment”). One section of this survey gathered information about municipal programs for E&S control. Survey information will be available by July 2009.

#### Contractor Training/Certification Programs for E&S Controls

- Maine DEP Nonpoint Source Training and Resource Center’s Voluntary Contractor Certification Program: <http://www.maine.gov/dep/blwq/training/>
- Certified Professional in Erosion and Sediment Control (CPESC) program and Certified Erosion, Sediment, and Storm Water Inspector (CESSWI) program: <http://www.cpesc.net/>

#### Other Programs and Resources

- Maine Sediment and Erosion Control BMPs: <http://www.maine.gov/dep/blwq/docstand/escbmps/>
- New Hampshire Stormwater Manual: Erosion and Sediment Controls During Construction (Volume 3): <http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-08-20c.pdf>
- New Hampshire Innovative Land Use Planning Techniques Handbook, Section 2, Chapter 8, Erosion and Sediment Control During Construction: [http://des.nh.gov/organization/divisions/water/wmb/repp/documents/ilupt\\_chpt\\_2.8.pdf](http://des.nh.gov/organization/divisions/water/wmb/repp/documents/ilupt_chpt_2.8.pdf) and Model Ordinance: [http://des.nh.gov/organization/divisions/water/wmb/repp/documents/ilupt\\_chpt\\_2.8\\_ord\\_only.doc](http://des.nh.gov/organization/divisions/water/wmb/repp/documents/ilupt_chpt_2.8_ord_only.doc)
- University of New Hampshire Technology Transfer Center provides workshops in erosion prevention and sediment control for road agents and other municipal inspection staff (emphasis on road repairs and road construction projects): <http://www.t2.unh.edu/>

The PREP Comprehensive Conservation and Management Plan (Management Plan) identifies over 100 action plans intended to protect and restore the health of Piscataqua Region’s estuaries.

Specifically, action plan WQ-09 is to “Ensure that water quality and quantity impacts from new development or redevelopment are minimized to the maximum extent practical at the planning board stage of development,” and WQ-10 is to “Research the use and effectiveness of the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire.” (Note: This handbook has been replaced by the New Hampshire Stormwater Manual.) Currently, little information is available about temporary or short-term stormwater management at construction sites during construction prior to final site stabilization, particularly for smaller projects that fall below state and federal land disturbance thresholds. The primary pollutant in stormwater from construction sites is sediment, which also delivers nutrients, bacteria, and toxic contaminants to the region’s estuaries. The purpose of this project is to research and make recommendations for improving stormwater management during construction with the goal of protecting surface water quality from sedimentation and associated pollution.

## **PROJECT DETAILS**

Geographic Focus: PREP works in the watershed areas for the Great Bay Estuary, Hampton-Seabrook Estuary, and New Hampshire’s Atlantic Coast. The focus area includes 10 Maine municipalities and 42 New Hampshire municipalities (see attached map).

Funding/Payment: PREP funding for this project is provided by the U.S. Environmental Protection Agency through an agreement with the University of New Hampshire. The selected applicant will enter into a subaward agreement with the University of New Hampshire. Typical payment terms are monthly or quarterly **reimbursements** from PREP for expenses incurred on the project. If the typical terms are not acceptable, the applicant should provide an alternative payment schedule and a justification.

Cost of services will be a factor in the evaluation of proposals. Proposals that can accomplish the tasks for less money will be evaluated favorably. Matching or cost-share funding is not required. However if there are any contributed funds, donated services, or waived costs, they should be described in the budget narrative.

PREP is not responsible for expenses incurred in preparing the proposal and such costs should not be included. Only expenses incurred after the approval date of the contract will be considered for reimbursement.

Scope of Services: PREP anticipates, at a minimum, the tasks listed below being performed as part of the study. Study components envisioned by PREP are included; however **PREP encourages applicants to recommend additional or alternative components, or different approaches, that could more effectively meet the objectives of this study.** The final scope of work and budget will be negotiated between the selected contractor and PREP.

### **TASK 1: Meet with PREP staff and the Project Advisory Team**

Objective: Receive input and guidance from advisory team to make the study more efficient and useful.

The Project Advisory Team will provide input to the contractor on study design, available resources and program/community contacts, and on the draft final report and recommendations. Two 2-hour meetings with the Project Advisory Team are anticipated (one at project initiation and one to review the draft final report). In addition, several conference calls with PREP and members of the Project Advisory Team may be held mid-course for the project as needed.

#### TASK 2: State/Federal Program Implementation Assessment

Objectives: Understand how effectively existing regulatory programs are implemented; understand the extent of construction activity in the watershed area that falls under state and/or federal E&S control programs; understand the frequency of site inspections by state and federal staff; and gain insights from regulators on ways to improve E&S controls.

##### Proposed Approach:

The contractor will meet with state and federal regulators in New Hampshire (NHDES Alteration of Terrain Permit Program and 401 Water Quality Certification Program), Maine (Maine Construction General Permit, Maine Stormwater Permit), and EPA Region I (NPDES Construction General Permit Program) to assess: (1) Staff capacity for inspections and enforcement; (2) Recommendations/opportunities for improved E&S controls; and (3) Barriers to implementation of current regulations and recommended improvements.

The contractor will obtain a list of all state and federal stormwater permits that have been issued for construction sites in the 52 PREP study area towns in 2006-2008. The permit programs to be included in this inventory are: the NHDES Alteration of Terrain Permit, NHDES 401 Water Quality Certification Program, Maine Stormwater Permit, Maine Construction General Permit, and the USEPA NPDES Construction General Permit. For each permit, information on the location of the construction and the area of land impacted should be obtained. The individual results should be compiled to generate summary statistics on the number of federal and state permits issued in each town and in all 52 towns combined as well as the land area disturbed by these construction activities.

The contractor will obtain a list of all site inspections and enforcement actions by state and federal personnel in 2006-2008 related to the stormwater permits issued in the 52 PREP towns. A site inspection is any activity that independently verifies that permit conditions are being followed. The number of site inspections and enforcement actions should be summarized by town and for all 52 towns combined.

#### TASK 3: Municipal Program Implementation Assessment

Objectives: Understand municipal regulatory approaches to E&S controls and potential effectiveness to protect water quality; understand capacity to implement and enforce local regulations; understand the extent of construction activity in the watershed area that falls within local regulatory programs, but outside of state and/or federal E&S control programs;

understand the frequency of site inspections by municipal staff; and gain insights from municipal program implementers/inspectors on ways to improve E&S controls.

**Proposed Approach:**

The contractor will review the results from the Piscataqua Region Environmental Planning Assessment survey of municipalities (complete by June 2009) for information on current ordinances and E&S control programs in each of the 52 municipalities. A copy of the survey questions related to E&S controls is provided at the end of this document. The survey will provide general information on municipal approaches and allow for evaluation of municipal regulations against some baseline performance standards. The contractor will summarize the number of towns in the PREP study area with regulations for E&S controls at construction sites.

Based on information gathered by the contractor, the Project Advisory Team will select a diverse subset of watershed municipalities with E&S control programs (minimum of 15) to interview for additional information. The contractor will meet with the municipal officials responsible for E&S control in each of the selected municipalities to obtain information regarding: (1) Current ordinances and E&S control programs relative to the performance standards in model E&S control ordinance; (2) Municipal staff capacity for inspections and enforcement; (3) Recommendations for improved E&S controls; and (4) Barriers to implementation of current regulations and recommended improvements.

Based on information available from municipal officials, the contractor will estimate the number and total land area impacted by construction activities that did not require state or federal stormwater permits in the 15 selected municipalities in 2006-2008. Due to the variety of municipal procedures, it is likely that the contractor will need to use several different methods to make these estimates. The contractor will consult with the Project Advisory Team regarding the most appropriate methods before completing this step.

The contractor will obtain a list of all site inspections and enforcement actions by municipal personnel and/or their consultants in 2006-2008 related to E&S issues in the 15 selected towns. A site inspection is any activity that independently verifies that E&S control plans are being followed. The number of site inspections and enforcement actions should be summarized by town.

**TASK 4: Assessment of Leading State and/or Regional E&S Control Programs in the U.S.**

**Objective:** Understand effective approaches for improving E&S controls at construction sites from other states and organizations.

**Proposed Approach:**

The contractor will conduct preliminary research on state or regional (e.g., county, watershed) E&S control programs within environmental, transportation, and other agencies/organizations. The contractor will select the five leading states or regions and complete a comprehensive review of the states' programs and/or regional initiatives to improve E&S control during construction activities (e.g., contractor certification programs;

contractor and/or site inspector training programs; required inspections by certified inspectors; training volunteer monitors; etc.), including research and interviews with program implementers to understand effectiveness of programs in improving E&S controls and costs/capacity needed to implement programs. Research conducted under this task should be coordinated with efforts of New Hampshire legislative study committees (i.e., the Stormwater Commission and the Land Use Commission) to prevent duplication of effort.

#### TASK 5: Comprehensive Project Report

**Objective:** Document work performed and findings from study; formulate and present recommendations supported by the study findings and research conducted

**Proposed approach:** The contractor will prepare a comprehensive project report with detailed information on each of the tasks, including methods, data collected and synthesized, and summary findings from interviews/research conducted. Based on findings and research conducted by the contractor, the report will include detailed recommendations for improving stormwater management at construction sites in the Piscataqua Region watershed.

Five hard copies of the report, plus an electronic version of the complete report suitable for posting on a website and for additional reproduction by PREP, shall be delivered by the contractor. The contractor will be required to deliver one presentation to an audience determined by PREP.

**Project Schedule:** Proposals are due to PREP by Monday, June 8. The project is expected to begin by August 1, 2009 and must be completed by June 30, 2010.

**Reporting:** An interim project activity report will be required by December 31, 2009. The final report (Task 5) is due by June 30, 2010.

## **PROPOSAL REQUIREMENTS**

The proposal must include the following elements:

### **1. Detailed Plan and Budget**

The purpose of detailed plans and budgets is to allow PREP to evaluate and compare the approaches and costs of different applicants.

A detailed plan for each task listed in the Scope of Services above, or any alternative or additional tasks proposed by the applicant, should include a thorough description of how each task will be completed. This should include any subtasks that will be conducted, staff involved, approximate time required for the completion of each task, all materials that will be needed or used, and the deliverables for each task or subtask. The plan should also include the proposed schedule for completing each task or major subtasks.

Applicants must submit a project budget using the template below and provide an accompanying budget narrative. The narrative should describe each budget item and how it was calculated. Anything listed as “Other” should be clearly defined in the narrative. The budget should include only costs to be charged to PREP. If the applicant is utilizing any in-kind services or donated services, please describe those in the narrative and identify the value of those services.

Project Budget Template (Add additional columns or rows as needed)

Budget Item	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Total
Salaries (list all staff, hourly rates, and number of hours, adding lines as needed)							
Fringe, if not included in hourly rate (indicate rate if applicable)							
Supplies/Materials							
Travel							
Contractual							
Other							
Indirect (indicate rate if applicable)							
Task Totals & Project Total							

## 2. Staff Roles and Experience

List staff that would be involved with the project and identify the specific responsibilities of each. For the project staff identified, describe key qualifications, including:

- Experience developing and implementing assessments of E&S controls, best management practices, and stormwater management practices
- Familiarity with local, state and federal regulations governing E&S and construction activity in New Hampshire and Maine
- Experience developing comprehensive reports synthesizing field data, interview data, and research findings to draw conclusions and make recommendations

Where appropriate, samples of comparable work completed by the applicant should be included (links to web-accessible documents are preferred). For hard-copy submissions, samples will be returned by PREP upon request.

## 3. References

The applicant should include a list of 3-5 clients that can be contacted as references. These references should have experience working with the applicants on similar projects.

## 4. Supporting Documentation (OPTIONAL)

Include any relevant letters of commitment, letters of support, or any other documentation in support of the proposal, if applicable.

An original proposal and three copies (all double-sided) must be received by Jennifer Hunter, Piscataqua Region Estuaries Partnership, University of New Hampshire, Nesmith Hall – Room 120, Durham, NH 03824, **no later than 4:00 p.m. on Monday, June 8, 2009**. An electronic version of the proposal must also be emailed to [Jennifer.Hunter@unh.edu](mailto:Jennifer.Hunter@unh.edu) or submitted on CD-ROM. The electronic version must be one .PDF file that includes the entire proposal (excluding any stand-alone work product samples). Faxed proposals will not be accepted.

## EVALUATION OF PROPOSALS

A review team assembled by PREP will evaluate all complete proposals received by the submission deadline. The review team may consist of PREP staff, Management Committee members, and other individuals with expertise in E&S control programs. The review team will evaluate proposals according to the following criteria:

1. The soundness and articulation of the overall approach
  - The likelihood that the project activity, as described in the proposed work tasks, will achieve the project objectives
  - The applicant's approach demonstrates knowledge of subject matter
  - The work tasks are thoroughly and clearly defined; deliverables are articulated; the schedule is realistic; and the budget and budget narrative match the proposed tasks
  - The estimated hours per task and hourly rates for personnel are reasonable for the work described and the deliverables anticipated
2. The cost of the proposal relative to other proposals that achieve the same objectives
3. The experience of the applicant/staff with similar projects
4. The prior performance of applicant in fulfilling contracts awarded by PREP, state agencies, or municipalities

PREP reserves the right to reject all proposals, to waive any irregularity in a proposal, and to accept or reject portions of any proposal. PREP also reserves the right to request additional information from any or all applicants to assist in the evaluation process.

## SCHEDULE

04/20/09: Request for Proposals released by PREP  
06/08/09: Proposals due to PREP  
07/10/09: Target date for contractor selection  
08/01/09: Target date for project start  
06/30/10: Project completed

**Direct any questions about this Request for Proposals to Phil Trowbridge, PREP Coastal Scientist, at (603) 271-8872 or [Philip.Trowbridge@des.nh.gov](mailto:Philip.Trowbridge@des.nh.gov).**

# Piscataqua Region Estuaries Partnership Focus Area



## Erosion and Sediment Control Questions from the Piscataqua Region Environmental Planning Assessment conducted by PREP in coordination with the regional planning commissions

Erosion and Sediment Control					
If the municipality has specific erosion and sediment control regulations, where are they currently found? <i>(Check all that apply)</i>	E&S Control Ordinance <input type="checkbox"/>	Site Plan Regulations <input type="checkbox"/>	Subdivision Regulations <input type="checkbox"/>	Zoning Ordinance <input type="checkbox"/>	N/A - no existing stormwater regs <input type="checkbox"/>
What is the minimum area of soil disturbance that "triggers" application of the municipality's erosion and sediment control regulations?	[redacted] sq. feet		[redacted]		
	Check One (yes or no)		Doc.Ref. #	Document URL or Additional Comments:	
Do the municipal regulations reference Best Management Practice (BMP) standards from a technical manual?	yes <input type="checkbox"/>	no <input type="checkbox"/>	[redacted]	[redacted]	
If yes, which manual(s)?	[redacted]				
Does the municipality require a surety or performance bond to ensure the developer implements erosion control measures as proposed?	yes <input type="checkbox"/>	no <input type="checkbox"/>	[redacted]	[redacted]	
Do municipal regulations require that the post-development peak flow rate at least matches pre-development for the 2yr, 10yr and 25yr 24hr storms?	yes <input type="checkbox"/>	no <input type="checkbox"/>	[redacted]	[redacted]	
If not, what standard for runoff peak flow does the municipality require (if any)?	[redacted]				
A municipal professional or consultant is required to inspect the construction site during the following phases <i>(Check all that apply)</i> :	Site walk prior to plan approval <input type="checkbox"/>	Following installation of erosion control measures <input type="checkbox"/>	During and post-storm inspection of temporary measures <input type="checkbox"/>	Following installation of semi-permanent or permanent stormwater management system <input type="checkbox"/>	Final inspection including first-storm performance of full system <input type="checkbox"/>