

**Joint Report Maine Department of Environmental Protection:
Bureau of Land and Water Quality - Division of Watershed Management, State Planning Office:
Maine Coastal Program, Maine Center for Disease Control: Division of Environmental Health-
Drinking Water Program
Progress Report
July 1 – December 31, 2005**

Project Period:

Maine DEP - July 1, 2005 – June 30, 2006
Maine SPO & DHS - January 1, 2005 – December 31, 2005

This report encompasses the reporting requirements for ME DEP contract #2005-21 and SPO/DWP contract #G804577

**PROJECT TITLE: NONPOINT EDUCATION FOR MUNICIPAL OFFICIALS (NEMO)
2005 to 2006 (7th Year)**

Task One: Maintain the Maine NEMO Train-the-Trainer Program and a Statewide NEMO Network of Presenters. Percentage of coordinator's time: 20%

One training was co-sponsored by NEMO during this time period. The coordinator has also been working with Cooperative Extension (Laura Wilson) on evaluation techniques for the Train the Trainer program, and evaluation results are reported with Task nine.

Reading Site Plans for Water Quality, November 19, 2005. This full-day workshop was co-sponsored with the Well's NERR and taught by Rob Sanford. Of the 43 participants, skill levels ranged from part-time volunteers to full time planners employed by municipalities. Feedback from this workshop indicates that in the future, participants should be segregated by skill level to better focus on individual needs. Again, all participants received a copy of the book to help with future review projects. It is too soon to document participant utilization of skills from this workshop.

Task Two: Provide full NEMO presentations and related services to a minimum of 15 municipalities and other land use decision makers, by the coordinator or NEMO Network. Percentage of coordinator's time: 20%

A total of 15 presentations were given from July 1-Dec 31, with a total of 237 attendees. Total towns participating: 38 Phase II towns: 25 Drinking water priority towns: 7

Alphabetical breakdown of towns receiving a NEMO presentation:

Athens, Auburn, Bangor, Berwick, Biddeford, Brewer, Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Harmony, Heartland, Kennebunk, Kittery, Lewiston, Litchfield, Milford, Ogunquit, Old Orchard Beach, Old Town, Orono, Portland, Raymond, Saco, Saint Albans, Sanford, Scarborough, Skowhegan, South Berwick, South Portland, Standish, Veazie, Wells, Westbrook, Windham, Yarmouth, York,

Presentation dates and details:

- GMLA/Athens/Harmony/Heartland/Saint Albans Lakes (7/11)
- Ogunquit CC Open Space Planning (7/21)
- Friends of Royal River, Moose Brook survey team LLWQ (8/4)
- Skowhegan CC, PB, CEO, land trust LLWQ (9/6)
- Cape Elizabeth/Cumberland/Falmouth/Freeport/Portland/Yarmouth Phase II NEMO (9/14)
- Bangor, Bangor Airport, Air Natl Guard Phase II NEMO (10/4)
- Berwick/Cape Elizabeth/Falmouth/Freeport/Kittery/Old Orchard Beach/Portland/Saco/Westbrook Phase II NEMO (10/5)
- Bangor/Brewer/Old Town/Orono/University of Maine Orono Phase II NEMO (10/18)
- Bangor/Brewer/Milford/Old Town/Orono/Veazie/Air Natl Guard/University of Maine Orono Phase II NEMO (10/19)
- Auburn/Lewiston Phase II NEMO (10/25)
- Litchfield reducing Imp Area marketing (11/2)
- **Scarborough Joint Planning Committee LLWQ, SW utilities, LID (11/10)
- Portland Water District/Cape Elizabeth/Cumberland/Falmouth/Gorham/Portland /Raymond/Scarborough/South Portland/Standish/Windham/Westbrook LLWQ, LID, SW utilities (12/12)
- South Portland PB LLWQ, LID, SW utilities (12/13)

**Scarborough will be running the taped presentation repeatedly on community access channel.

PB= planning board CC= conservation commission LLWQ=Linking Land Use to Water Quality
 LID= Low Impact Development SW=Stormwater CEO=code enforcement officer
 COLA=coalition of lakes associations GMLA=great moose lake association

Task Three: Continue to coordinate Maine NEMO with other state programs, nonprofit groups, universities, and colleges; and represent Maine NEMO statewide. Percentage of coordinator's time: 10%

- Continued collaboration with the Well's NERR includes providing resource guides, economic data and model ordinances, participation with "Our Children's Water" workshop series bringing together Wells, Sanford and Kennebunk to tackle action items from the MBLR watershed plan, shared sponsorship of the workshop "Reading Site Plans for Water Quality", tours of the UNH Stormwater Center, and ongoing partnership focused on integrating portions of the NH NROC model in Southern Maine.
- NEMO regularly passes along GrowSmart information to towns during presentations and as follow-up resources.
- Continued coordination with BWH on map design and integration
- Attended Watershed Managers Roundtable meetings
- Coordinated with SPO and KVCOCG on growth cap/subdivision ordinance revision/and general information for Litchfield Strategic Planning Committee.
- Coordinated with CBEP on GIS projects, SOP manual trainings for Phase II communities and participated in CBEP advisory committee meetings and grant evaluations.

- Work with ISWG, Aqiron Engineering, CCSWCD and CBEP on training and evaluations for public works people on the new SOP manual covering good housekeeping and IDDE.
- Presented at Maine COLA conference, panel on working with municipal officials to develop ordinances
- Attended Rivers and Lakes Restoration Conference (7/12-7/14)
- Hilliar and Assoc./ Zach Henderson joint presentations for Royal River, Moose Brook (7/19)
- Attended Chapter 500 training by DEP, currently supplying towns with LID and Chapter 500 update brochures.
- Coordinated with Cooperative Extension (Laura Wilson) on newsletter articles, erosion control and outreach and education work with the Great Moose Lake Association and four town group, on evaluation materials and processes for Maine NEMO, exploring possibilities of establishing a NROC model in Southern Maine, and methods for expanding the Maine NEMO program.
- Attended the Land Use Planning Summit (8/9-10) in Bangor
- Participated in Education & Outreach for MS4s (8/19)
- Contacted Julia Peterson and NROC about current eval updates and converted eval materials into online survey
- Coordinated with Stormwater User Fee Workgroup (9/20) and to date have given presentations to 3 of the 5 towns involved in coordinating stormwater utility work.
- Collaborating with Bangor area MS4's to host AmeriCorp mapping coordinator next summer
- Attended Center for Watershed Protection Stormwater Institute in Virginia (11/14-11/18)
- NROC in Maine meeting with Well's NERR, Maine DWP, Cooperative Extension (12/9)
- Coordination efforts with the Maine Drinking Water Program include NEMO program evaluation work, determining methods for integrating the NROC model in Southern Maine, and sharing a booth at the Smart Growth Summit (10/20)

(MBLR= Merriland Branch Brook and Little River UNH=university of new Hampshire
 NROC=natural resources outreach coalition) KVCOG=Kennebec Valley Council of Governments
 ISWG=Interlocal Stormwater Working Group CCSWCD=Cumberland County Soil and Water
 Conservation District)

Task Four: Publish an electronic Maine NEMO monthly bulletin, maintain the Maine NEMO website including members only site, and update the Maine Resources Guide. Percentage of coordinator's time: 5%

- NEMO updates are sent out monthly via email to the NEMO Network
- The website has been updated with the most recent versions of the IDDE/SOP training manual and the Jeopardy training game
- 2005 version of the Maine Resources Guide was distributed to GML Associates, Yellowwood Associates, Ogunquit Conservation Commission, Friends of the Royal River, Land use planning summit, Skowhegan CC Planning board and Land trust, Our Children's Water, Scarborough, Yarmouth, Site plan training in Wells, Smart Growth Summit, Cumberland CC, Portland Water District Board of Trustees, and South Portland PB
- The Maine Resources Guide is currently being updated and a new version will be available in the spring of 2006

Task Five: Continue to affiliate with the National NEMO Network and participate in professional development opportunities; when appropriate distribute this information to Maine NEMO Network partners. Percentage of coordinator's time: 5%

- Participated in National discussions of LID, Natl NEMO reporting, program evaluation methods, establishing a train-the-trainer program, using GIS and working with phase II communities.
- Attended Center for Watershed Protection Stormwater Institute in Virginia (11/14-11/18) with particular attention to other communities implementing stormwater utilities and integrated info into presentations for Scarborough, Portland Water District Trustees and South Portland Planning Board. Currently scheduling similar presentations for Portland and Saco.

Task Six: Continue developing the integration of GIS presentation maps, impervious % analysis, theoretical buildout, and water resources mapping into the NEMO program to assist towns in natural resource based planning. Percentage of coordinator's time: 10%

- Water resources and land use maps for Old Town, Veazie, Bangor, Brewer, Milford, Hamden, South Portland, Kittery, Skowhegan, York, Westbrook, Ogunquit, Heartland, St. Athens, Albans, Harmony, Auburn, Moose Brook, Royal River, Skowhegan, Readfield, Winthrop, Maranacook Lake Region, Bangor, Scarborough, Litchfield, and Orono,
- Contracted with Spatial Alternatives for historical analysis of imp area in Casco Bay based on 1993 Maine Combo data.
- Litchfield town road mapping / town properties mapping.
- Contracted for impervious analysis for Dill (also known as Hart) Brook, threatened watershed in Lewiston in collaboration with City of Lewiston, Edwards and Kelcey Engineering, and Spatial Alternatives. Analysis includes theoretical buildout, and training for Lewiston employees in Community Viz analysis of various development scenarios.
- Purchase of hand held PDA's and contract with Edwards and Kelcey for development software to pilot a project for data collection on catchbasin and outfall evidence of non-point source discharges, linked to spatially oriented storm drain system and queried to identify areas that are prone to non-point source discharges.

Task Seven: Provide technical resources and follow-up to support the communities Maine NEMO is working with (including maps, model ordinances, list of community resources, the Maine Resources Guide, etc). Priority will be given to DEP MS4 communities, DWP priority towns, SPO service center towns, and coastal communities. Percentage of coordinator's time: 5%

- Grant info to Freeport, Sanford, Kittery, Old Orchard Beach, Ogunquit, Raymond.
- Maine Resources Guide provided to 17 groups.
- 20 copies of the IIDE/ SOP training materials to CCSWCD, to 12 attendees of the SOP trainings and to key figures in the Bangor region for further distribution.
- SOP manual/jeopardy game to Town of Sanford and 7 other individuals.
- Shared NEMO Slides with Lyndsey Monroe, Program Coordinator, Bangor Land Trust
- Phosphorous info to Raymond for inclusion into town newsletter.
- Follow-up with Yellowwood associates for Litchfield and coordination of community resource inventory work (ongoing).
- DEP RFP for phosphorous comp projects forwarded to Town of Raymond CC and open space planning committee for Panther Pond grant opportunities.
- Outreach to OOB and Spruce Creek Group for GIS projects.
- Toured UNE stormwater center and forwarded information to multiple towns and Network Partners.

- Utilized the NEMO Network to pass along NROC training opportunities
- Information on accessory apartment ordinances from GrowSmart Maine website provided to PWD, South Portland PB, Scarborough Joint Planning Committee, Litchfield Strategic Planning Committee.
- Outreach to phase II communities for presentations and GIS projects
- Concept paper for Litchfield Strategic Planning Committee to secure public participation in protecting rural character in revision of town land use ordinance
- Coordinated planning presentations with Dan Bacon (Scarborough assistant planner) for joint presentation to planning committee on open space developments/smart growth ideas. Forwarded methods for funding stormwater programs, Randall Arendt open space subdivision info, and Freeport subdivision ordinance to Scarborough. Scarborough is now writing an open space subdivision ordinance that will be triggered through wetland impacts.
- Greenroof info provided to the engineers at Gorrill Palmer

Task Eight: Work with the Maine Department of Health and Human Services, Drinking Water Program to continue to integrate ground water protection strategies into the NEMO presentation, and adopt successful strategies for ground water and aquifer protection from other programs.

Percentage of coordinator's time: 10%

- Source water protection was included in all presentations including the priority towns of Lewiston, Scarborough, Standish, Orono, Eliot, Litchfield, and York.
- Drinking water resources have been included in GIS maps for the towns of Albans, Auburn, Bangor, Brewer, Harmony, Hamden, Heartland, Kittery, Lewiston, Litchfield, Maranacook Lake Region, Moose Brook, Milford, Ogunquit, Old Town, Orono, Royal River, St. Athens, South Portland, Skowhegan, Readfield, Scarborough, Veazie, Westbrook, Winthrop, and York.
- Reinforcement of protection importance for Auburn, Freeport, Hartland, Kennebunk, Kittery, Old Town, Sanford, South Berwick, and Wells, which all have PWS sources within town boundaries.

Task Nine: Evaluate and include in the Annual Report the Maine NEMO program's effectiveness in delivering NPS information to Towns and individuals. Evaluate the Train the Trainer Program with email surveys at 1, 6 and 12 months after the NEMO training to determine if Trainers are passing along the NEMO NPS message. Evaluate changes in a Town based on telephone interviews prior to, six months, one and two years after NEMO involvement. Evaluate NEMO Resources by tracking numbers of requests for resources and training materials. Survey results can be found in appendix 1-4. Evaluation results will be used to conduct strategic planning efforts and focus the NEMO program. Percentage of coordinator's time: 10%

- **6 month survey results from Basic NEMO May 16, 2005.** (10 attendees) Demographics of attendees shifted from agency employees to municipal employees (including code enforcement officers, town planners, recycling coordinators, etc). This shift in NEMO participants means that training ideas and materials are more likely to be used repeatedly in the participating municipalities as 90% of new participants (Nemoids) work regularly with their planning boards. Survey results (see appendix I) indicate that six months after Basic NEMO training 100% have incorporated NEMO ideas into conversations, 90% have spoken to land use decision makers about NEMO, and 90% have assisted a town or group working on NPS or resource protection. Nemoids also report that within six months 80% have helped a town with outreach and education, 70% with determining protection priorities, zoning, and stormwater management, and 60% with drinking water protection, ordinance development and better site design. This reported success indicates that while straying from the original Network model, this new demographic may be better able to affect change on the town level, and increased municipal employee training should be encouraged.

- **6 month survey results from Changing Behavior with Social Marketing, May 24, 2005.** NEMO sponsored 11 members of the NEMO network to attend this workshop by Doug McKenzie-Mohr put on by the Well's NERR. Survey indicates that 85% of the NEMO sponsored participants are utilizing skills from this workshop designed to teach methods for changing attitudes, beliefs and behaviors.
- **6 month survey results from Reading Site Plans for Water Quality, June 29, 2005.** Of the 17 participants, 63% indicate that they are utilizing skills learned at this half-day workshop. Participants indicated that a half-day was inadequate for this, and a repeat workshop was scheduled for November. This was taught by Rob Sanford, Professor at USM and author of the book Site Plan and Development Review: A Guide for Northern New England. All participants received a copy of the book to help with future review projects.
- **Survey results SOP Training for Phase II Communities, (six workshops total in this time period)** These workshops focused on teaching public works employees about standards operating procedures to reduce NPS pollution. Of the 161 attendees, 129 completed training evaluations. When asked if participants "cared more about water quality as a result of the workshop", there was an 82.5% increase (average score of 3.3 on a 1-4 scale) and a 90% increase (average score 3.6) when asked "Do you believe your actions can affect water quality?" A total 62% listed a concept that they would apply in the future, with 29% listing specific SOPs and 16% noting a greater awareness of stormwater effects on water resources.
- Skowhegan, and Ogunquit have completed the initial town survey prior to NEMO involvement, but there has not been time for the six month follow-up survey. Results will be reported in the next NEMO progress report.
- The IDDE/SOP training materials and Jeopardy game have been distributed world wide. Eleven people responded to the evaluation survey, and reported that they have use it to train 220 public works employees, program managers, and other municipal employees. Comments indicate it will be incorporated into more training events in the future.

Task Ten: Coordinate NEMO Advisory Committee meetings.

Percentage of coordinators time: 3%

- Advisory Committee meeting on workplan (7/22)
- NEMO Advisory Committee Mtg (10/11)

Task Eleven: Program reporting requirements- Progress reports (2) each covering project activities for the previous 6-month period will be submitted by P.E.T.E. by December 31, 2005; June 30, 2006 respectively, to each funding agency. A Final Project Report summarizing all key project activities/results will be submitted at project end (December 31, 2006) to the DEP. All reports submitted to DEP will conform to the applicable procedures contained in the DEP document "Nonpoint Source Grant Administrative Guidelines". Annual Report. Percentage of coordinator's time: 2%

- Last report submitted June 30, 2005.

Task Twelve: As appropriate grant opportunities become available and the pursuit of the grant opportunity is approved by the Executive Committee, the NEMO Coordinator will coordinate and write grant proposal(s). Percentage of coordinator's time: 2%

- Technical assistance was provided to Litchfield in their application of the Green Community Technology Grant, which was awarded in July 2005. Since then the coordinator has helped coordinate the community resources inventory and supplied the town's Strategic Planning Committee with information and presentations.