



Strengthening Network Programs

NEMO Network Initiatives

In addition to day-to-day Network coordination, the Hub has launched several initiatives, involving a number of partner agencies and organizations, to assist NEMO programs in enhancing their educational repertoire. These include:

Forest Resource Education for Municipal Officials

In 2006 the Network Hub, in partnership with the USDA CSREES Forestry Program and the U.S. Forest Service, launched an effort to integrate the forested landscape into NEMO educational programming for local officials. As communities continue to grow and develop, the health of our forestlands (and with it the economic, ecological and public health of our communities) is threatened by their conversion to other uses, fragmentation and subdivision. It is become increasingly apparent that in addition to educating private landowners about forest stewardship, there is also a need to educate community land use decision-makers about accurately valuing the forest resource in the land use planning process.

The Forest Resource Education for Municipal Officials (FREMO) project seeks to take advantage of NEMO programs' expertise in working with local land use officials by adding information on forests to their educational arsenals. The approach is to train NEMO programs on the benefits of, and threats to, the forest



Network members networking at the FREMO workshop in Annapolis, Maryland.

resource, and ways to factor in forests in the land use planning process. FREMO facilitates the development of educational workshops, materials and resources that can be adapted by programs throughout the Network.

Educators from NEMO programs in 14 states participated in a FREMO workshop in Annapolis, Maryland in 2007. The workshop featured discussions on the benefits of forests, the links between forested landscapes and water quality, and strategies for integrating forest-related issues into natural resource-based planning. Following the workshop, four NEMO programs (OR, NC, VT and MN/WI) have launched efforts to take the information and materials from the workshop and, in collaboration





with foresters, tailor new programs for their states. All materials developed from the four pilots will be made available to the entire Network for adaptation.

Geospatial Training

The use of geospatial data and analysis to support education has long been a hallmark of NEMO programs. While about two-thirds of NEMO programs utilize geospatial imagery and data in their presentations, currently only one-third of NEMO programs have the capacity to provide geospatial support to communities in the form of new tools, analysis and/or modeling. The Network Hub is working to increase both of these percentages through trainings and other opportunities for Network members.

In 2006, the Network Hub partnered with the NOAA Coastal Services Center (CSC) to provide basic training in geographic information systems (GIS) and remote sensing technologies to 11 NEMO programs. This has been used as a building block for future, more advanced trainings. So far, technical training opportunities have been offered on a variety of tools, including CommunityViz[®] visualization software, the Impervious Surface Analysis Tool (ISAT), and the Nonpoint Source

Pollution and Erosion Comparison Tool (N-SPECT).

In 2007, the Network Hub collaborated with NOAA CSC and the National Association of Counties to develop and pilot test a new remote sensing workshop focused on using remotely sensed imagery in the land use decision-making context. The training was broken down into three modules, (1) Remote Sensing Basics, (2) Remote Sensing Tools and (3) Putting Maps, Images and Data on the Web. The third module has since been delivered as a stand alone training at NEMO U6 and turned into a web resource for anyone looking to learn more about putting maps and data on the internet. Regional training workshops in collaboration with USDA and NOAA CSC are being discussed.



The NEMO Hub is working with the NOAA Coastal Services Center and other partners to provide geospatial training opportunities to Network members.

On the Web

- National NEMO Network Website - nemonet.uconn.edu
- Network Initiatives - Updates and additional information about the Network's initiatives can be found online at nemonet.uconn.edu/hub/initiatives.htm.

Tools

- CommunityViz[®] - www.communityviz.com
- Impervious Surface Analysis Tool (ISAT) - www.csc.noaa.gov/crs/cwq/isat.html
- Nonpoint Source Pollution and Erosion Comparison Tool (N-SPECT) - www.csc.noaa.gov/crs/cwq/nspect.html
- Putting Maps, Images and Data on the Web - clear.uconn.edu/tools/share

Partners

- USDA CSREES - www.csrees.usda.gov
- U.S. Forest Service - www.fs.fed.us
- NOAA Coastal Services Center - www.csc.noaa.gov



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

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Initiatives continued...



Web-Based Tools

Over the last decade, the volume of geospatial data available at the local level has increased dramatically. This has created a great opportunity to provide much needed context for local land use decision-makers. However, the increase has also created challenges, particularly for smaller, developing communities without the staff or expertise to identify what data to use and how to use it. NEMO programs are increasingly working to help communities overcome these challenges through simple yet flexible tools that utilize the web to provide access to the most pertinent geospatial data.

Online Community Resource Inventory

One such tool is CT NEMO's **Online Community Resource Inventory (CRI)**. The Online CRI is a website that provides users with access to 14 natural, cultural and economic resource maps for every town in Connecticut. As users page through the data, they effectively produce a basic resource inventory that can be used to inform land use planning decisions. The website is a complement to NEMO workshops that focus on the basic premise that good local planning



(Top) From the Print Your CRI page, you can either print single maps, or the whole set complete with a title page.

(Bottom) The Network Hub held a training session in January of 2009 for NEMO programs interested in building their own Online CRI tool.



should begin with an understanding of what and where the community's natural and cultural resources are.

To help facilitate the development of these tools in other states, the Network Hub is "franchising" the Online CRI tool by working with NEMO programs



in Rhode Island, Minnesota, South Carolina, New York and Delaware to adapt the tool for their states. The project is funded by the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), a partnership of the University of New Hampshire and the National Oceanic and Atmospheric Administration (NOAA).

Each of the states involved is taking a slightly different approach to building the tool, but all will maintain the basic idea of keeping it simple enough to be useful for local officials of varying technical backgrounds. At the completion of the project, the Hub will produce an online “Cookbook” demonstrating how to build a site like this with explanations of the different approaches taken.

National Low Impact Development Atlas

Another tool the Hub has developed, in collaboration with the CT and CA NEMO programs, for use and adaptation by the Network is the **National Low Impact Development (LID) Atlas**. The Atlas grew out of CT NEMO’s statewide LID inventory, which sought

to highlight innovative stormwater management projects throughout the state. LID practices include green roofs, vegetated swales, pervious pavement, rain gardens and other site design tools that encourage infiltration and processing of stormwater as close to where it falls as possible.

The National LID Atlas seeks to help communities get over their natural reluctance to be the first to pursue some of these innovative practices, by connecting them with other communities that have done it. Powered by Google™ Maps, the Atlas provides details on LID projects nationwide, complete with contact information and links to more detailed information. NEMO programs coordinate which projects are added to the Atlas from their states and can embed a localized, state-specific version into their own websites.



(Top) An example of a pervious parking lot located in Old Saybrook, Connecticut that can be found on the LID Atlas.

(Bottom) The National Low Impact Development Atlas highlights examples of LID practices nationwide.



On the Web

Tools

- Online Community Resource Inventory - nemo.uconn.edu/tools.htm
- National Low Impact Development Atlas - nemonet.uconn.edu/hub/initiatives.htm

Partners

- CICEET - ciceet.unh.edu
- CT NEMO Program - nemo.uconn.edu
- CA WALUP - cawalup.usc.edu:3455/cawalup

