



# **The NEMO Program**

(Nonpoint Education for Municipal Officials)

## **Overview**

Local land use decisions are a key determinant of the social, economic and environmental health of our communities, yet our local decision makers in Connecticut are volunteers with little or no training in land planning or natural resource protection. The Nonpoint Education for Municipal Officials (NEMO) Program was created in 1991 at the University of Connecticut to provide education and assistance to these critical local land use officials. NEMO is a collaboration of three entities at UConn: the Department of Extension, the Department of Natural Resources and the Environment, and the Connecticut Sea Grant College Program. 20 years after its inception, NEMO has worked with over two-thirds of the 169 municipalities in Connecticut, and continues to provide cutting edge education and technical tools for communities wishing to protect their water and other natural resources, while accommodating growth.

## **How NEMO Works**

NEMO's basic educational method is faceto-face workshops for local officials. NEMO conducts several workshops on various topics, all addressing some aspect of natural resource-based land use planning and design. This approach goes beyond a laundry list of natural resource problems, helping towns identify and implement planning, regulatory, and design strategies that address key land use issues. In recent years, low *impact development*, or LID, is a particularly popular topic with Connecticut communities. LID seeks to eliminate or greatly reduce the water resource impacts of development, using practices that promote infiltration of stormwater and make use of the natural pollutant processing of soil and vegetation.

Research and technology play a large role in NEMO educational programs. Satellitederived land cover maps are used to better understand landscape patterns. GIS technology, or computerized mapping, is used to create maps and analyses that convey complex information in an intuitive, understandable fashion. The NEMO website is used to display and distribute information, increasingly in an interactive way, through tutorials and web-based GIS mapping. Through this combination of sophisticated technology and face-to-face outreach education, the program strives to engage its target audience of local land use officials.

## **Bringing NEMO to Your Town Hall**

NEMO goes to its target audience. Program faculty conduct presentations at community venues, and work with community contacts to ensure that the format and audience of the workshop help to maximize the chances for positive follow up. The ideal audience is a group that has representation from all of the local land use boards, as well as municipal departments (planning, engineering, public works) and interested civic



#### **Contact the NEMO Program**

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The NEMO Website nemo.uconn.edu

#### **Contact CLEAR**

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#### **NEMO Facts**

- NEMO has won national awards from the American Planning Association and the National Environmental Education Training Foundation.
- NEMO is the inspiration for, and coordinating center of, the National NEMO Network, a group of 31 sister projects in 30 states (as of 2011).
- NEMO's integrated research/outreach model is the foundation of UConn's Center for Land Use Education and Research (CLEAR), created in 2002.

As a part of the impervious cover TMDL project at the University of Connecticut, several conventional parking lots on its main campus have been replaced with pervious materials in an effort to reduce stormwater runoff.



organizations (land trusts, chamber of commerce, watershed groups). To discuss the options for a NEMO workshop in your town, please contact NEMO Director Dr. Mike Dietz (see contact information).

### **Impervious Cover TMDL**

In addition to its basic work with towns. the NEMO Program is involved with several research and management projects around the state, including one focused on an innovative, national precedent-setting approach to managing stormwater. In 2007, the Connecticut Department of Environmental Protection issued the first total maximum daily load (TMDL) in the country based on impervious cover. This TMDL, developed as a way to improve streams impaired by poorly understood urbanization-related impacts, is for Eagleville Brook, a small watershed that drains much of the University of Connecticut campus in Storrs. The advantage of treating imper-

> vious cover as a pollutant is that it is more tangible than pollutants that typically have a TMDL, such as phosphorus or metals.

Based on geospatial data analysis followed by extensive field work, the project team has identified 51 retrofit opportunities, including a "Top Ten" list that attempts to maximize both the environmental and social or educational impacts of the response. Considerable progress has been made on campus, including the replacement of conventional parking lots with pervious materials and changes to plans for upcoming construction (see photo below). Check out the Impervious Cover TMDL website for information and progress on this innovative new approach: **clear.uconn.edu/projects/tmdl**.

#### Making a Difference

NEMO has assisted many towns in Connecticut to make changes to their plans, regulations, policies and procedures to better protect natural resources while accommodating growth. Towns have conducted natural resource inventories, developed open space plans and updated their Plan of Conservation and Development to better protect priority resources. Other towns have changed their subdivision and road regulations and adopted development design and stormwater management practices to better protect their waterways. Still others have improved their land use process by forming new committees, conducting new studies, or using new technologies for information sharing.

NEMO is an educational program of the University of Connecticut, Cooperative Extension System, Connecticut Sea Grant College Program and Natural Resources and the Environment Department. In addition to support from UConn, NEMO has been funded by grants from the CT DEP Nonpoint Source Program and the NOAA Connecticut Sea Grant College Program. NEMO is a program of the Center for Land Use Education and Research (CLEAR). Land and Sea Grant collaborating. For more information about CLEAR, visit clear.uconn.edu.



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