

Connecticut NEMO Newsletter

Nonpoint Education for Municipal Officials

Spring 2006

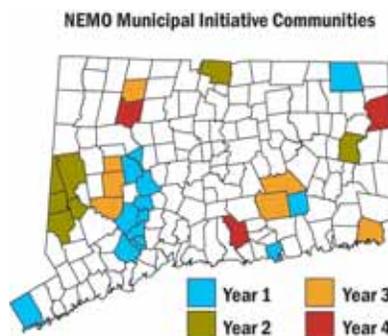


Municipal Initiative Program produces 3 more Stellar Graduates

It won't surprise you that we at the NEMO Program strongly believe in the power of education to effect long-term change. Still, education is really just the catalyst that inspires informed action. Whether it's a new stormwater regulation for a town or responsible lawn care for homeowners, the trick is to take new information from a workshop or publication and apply it to your unique circumstances.

Enter the *Municipal Initiative*. The Municipal Initiative (Muni) is a unique program developed in collaboration with the CT Department of Environmental Protection that allows the NEMO Team to focus more resources on a few municipalities. During an application process, towns identify specific town planning goals they wish to accomplish, and through education and "over-the-shoulder" advice, the NEMO Team assists

the town to achieve those goals. Although the NEMO Team can only focus on a few towns per year, the chosen towns then serve as case studies to inspire other towns in Connecticut.



In order to qualify for the Muni, selected towns must designate a contact person who will be responsible for facilitating a NEMO Task Force. The membership of this task force includes, at a minimum, members of the major land use commissions or

boards and the office of the chief elected official (town council; board of selectmen, mayor's office). Other groups, such as town departments, land trusts and economic development commissions are also encouraged to participate.

The Municipal Initiative, now in its fifth year, remains a gratifying experience in what a group of dedicated town staff and volunteers can accomplish, given a

little backup education and advice. In 2005, NEMO worked with three communities under this initiative: Killingly, Killingworth and Torrington. These communities have either completed the Muni, or are in the final stretch. In the following article, we will focus on the work of Torrington; however, updates on all the Muni towns can be found on our website.

If your town is interested in participating in the Municipal Initiative, contact John Rozum, (john.rozum@uconn.edu) the CT NEMO Program Director. ☀

Muni Initiative Graduates Include:

- Old Saybrook, Year 1
- Woodstock, Year 1
- Salem, Year 1
- Candlewood Lake Authority, Year 2
- Pomperaug River Watershed Coalition/Central Naugatuck Valley, Year 3
- East Haddam, Year 3
- Stonington, Year 3

Year 4 Participating Municipalities

- Killingworth
- Killingly
- Torrington

In This Issue

Spotlight On . . .

Torrington

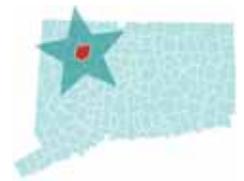
New and Noteworthy

- New Rain Garden Design Manual
- Build a Community Resource Inventory
- New Workshop for Contractors (pg.4)

From the NEMO Science Desk

Land Use on Large Scale
Climate Patterns

Spotlight On . . .



Torrington: Balancing Smart Growth and Resource Protection

The City of Torrington is the regional center for Litchfield County, and serious about planning and smart growth issues. The approval of a new county courthouse, along with a push for the continued revitalization of the downtown, provided the impetus for an update to the city's plans and regulations. Joining the Municipal Initiative in 2004, a task force with representation from the major land use departments in the city set goals for the initiative that included updates to the city's Plan of Conservation and Development, revisions to zoning and subdivision regulations, the inclusion of smart growth provisions, and an update to stormwater management standards.

"We used a team approach in reviewing and revising our Regulations and City Engineering Standards and Specifications," observed City Planner Martin Connor. "Even our Mayor became involved in the effort."

In order to facilitate the application and review of both public and private development projects, the engineering department has developed the City of Torrington's Standards, Specifications, Rules and Regulations. These standards were structured to follow many of the principles presented both in the NEMO workshops and the *CT Stormwater Quality Manual*, requiring the preparation of a stormwater management plan for both water quantity and quality for all projects that will disturb more than 1-acre of land. The engineering standards also include new stormwater-related details on roads: flexibility in road standards permit a curbless design that allows for sheet-flow to roadside drainage swales, and the permitted use of permeable materials in both roadways and driveways provides a departure from past practice in the city.

The planning department worked with the planning and zoning commission to make major

changes to both the subdivision and zoning regulations. In zoning, the major change came with the recognition of different development demands between the sewerred and non-sewerred areas of the city. In the more rural sections, the commission appended the zoning regulations so that new development would need to meet the "net buildable area" requirements. These requirements assure that the carrying capacity of the land to accept on-site sewage disposal is met, ultimately determining the suitability of a lot for development. In the more urbanized sections of the city, the regulations now allow for higher density mixed-use development, encouraging retail on the street-level with residential uses on the 2nd and 3rd floors.

Both the zoning and subdivision regulations have embraced the use of low impact development and the standards of the *Stormwater Quality Manual*. Greater effort has been made to bring agreement between the standards of the engineer-

ing department and the requirements of the zoning and subdivision regulations, both for consistency and to make the application process easier. The regulations also stress the preservation of the pre-development vegetation, setting forth landscaping requirements for native vegetation and eschewing the use of invasive plants.

"The NEMO Program helped educate Commission members and staff, helping us to focus on smart growth and stormwater treatment related issues," concludes Connor. "Working together we made important changes that will be very beneficial in the future in protecting valuable natural resources. We are grateful for the guidance, insight and valuable information the Municipal Initiative brought to us and our City." ☀

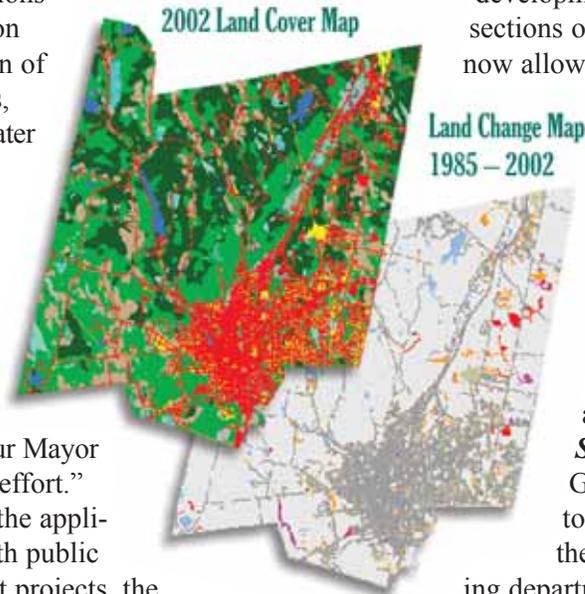
Map Legends

Cover Classes

- Developed
- Turf & Grass
- Other Grasses & Ag
- Deciduous Forest
- Coniferous Forest
- Water
- Forest Wetland
- Non-forested Wetland
- Tidal Wetland
- Barren
- Utility Right-of-way

Change Classes

- Developed prior to 1985
- Turf & grass prior to 1985
- Developed between 1985 - 1990
- Turf & grass between 1985 - 1990
- Developed between 1990 - 1995
- Turf & grass between 1990 - 1995
- Developed between 1995 - 2002
- Turf & grass between 1995 - 2002
- Undeveloped
- Water



"Working together we made important changes that will be very beneficial in the future in protecting valuable natural resources.

We are grateful for the guidance, insight and valuable information the Municipal Initiative brought to us and our City."

- Martin Connor, City Planner

New & Noteworthy

Coming Soon from the NEMO Program

Build a Community Resource Inventory...Online!

Before you can plan the future of your community, you need to know what you have. A resource inventory of your town is a vital planning and review tool for your commissions, but how do you get started? The NEMO Team has been delivering the Community Resource Inventory (CRI) workshop for five years and many com-



The upcoming CRI website includes sections on building your CRI, how to use your CRI and tips for going beyond the basics.

munities have gotten started with their inventories. However, finding and using the plethora of published maps has been a stumbling block for many.

No more! Beginning this summer, the NEMO Program will launch the CRI-Online website. The website, funded by a grant from CT DEP, is designed to be a tool that helps commissions get started in developing a customized resource inventory for their town. This “one stop shop” of map making will provide town-level maps for printing or to be inserted into your favorite GIS program. Look for an announcement on the NEMO website, nemo.uconn.edu. ☀

All About Rain Gardens

Although the focus of NEMO education efforts has typically been town personnel and commission members, it doesn't mean the information isn't applicable to a wider



The cover of the new Rain Gardens Design Manual.

audience. An upcoming publication, created by **Mike Dietz** of CT NEMO and **Karen Filchak** (UConn Cooperative Extension), brings rain garden design to homeowners. The *Rain Garden Design Manual* is another step in the direction of moving from “why” to “how” in LID practices.

The manual, based on a similar publication from the Wisconsin Department of Natural Resources, will provide homeowners with simple, yet detailed guidance on all aspects of home rain garden installation. Topics such as where to put the garden, how large to make it, what plants to use, and how to maintain it will be covered. The manual is scheduled to be available in the summer of 2006. Copies will be available upon request from Mike Dietz (michael.dietz@uconn.edu), and the electronic version (pdf) will be available on the NEMO website. ☀

From the NEMO Science Desk

Many folks familiar with NEMO teachings are well aware of the local and regional impacts that land use has on natural resources and the water cycle. However, the impact of global land use patterns on large scale climate patterns has been highlighted in a recent article (“Land Use and Climate Change”, by Roger A. Pielke Sr., *Science*, Vol. 310, December 9, 2005). Pielke cites NASA reports estimate that human development has transformed between one-third and one-half of the earth's land surfaces.

There is growing evidence that land use patterns, in addition to greenhouse gas production, is playing a role in climate disturbances.

Although greenhouse gas production may have a larger global influence on average temperatures, land use changes seem to produce varying regional effects. Pielke cites the alteration of thunderstorm patterns due to land use changes as one mechanism that can influence regional temperature and precipitation regimes. Interestingly, while some areas may experience temperature increases, other areas may experience temperature decreases. These changes can cancel each other out when averaged out globally. However, Pielke reminds us that “people and ecosystems will experience the effects of environmental changes regionally, and not as global averaged values.”

This cutting edge research shows how important land use decisions can be, from the local, regional and global perspectives. The human influence on global systems is undeniable. With all of its success stories in the land use arena, NEMO is helping to tip the balance in the other direction, in favor of ecological and social balance. ☀



Check This Out!

- The **CT NEMO Impact Report *Putting Communities in Charge*** is available online on the NEMO publications page or by contacting the NEMO program. nemo@uconn.edu

- **Statewide aerial photos** are now available to download on the CLEAR website. Visit clear.uconn.edu/data.html for:

- BLK/WT Orthophotos
- True-color Coastal Imagery
- False-color Infrared Coastal Imagery.

- The **CT NEMO website redesign** will be launched this summer. The improved site will include an **LID stormwater treatment practice (STP) section** with an interactive map showing locations of various STPs around the state as well as a searchable database for engineering and construction companies familiar with LID practices. nemo.uconn.edu

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New Workshop for Those Who Get Their Hands Dirty

OK, so we have all of the town officials, commissions, and planners educated on LID practices (well, maybe not all, but quite a few...), the engineers know how to design them, so now we just need to get them in the ground! What do you mean none of the contractors want to do

it? Well of course not! These techniques still are fairly new in this part of the country, and many contractors have not been shown the proper way to install them so they will perform properly.

As part of the Niantic River Watershed Project, NEMO held its first workshop dedicated to contractors. Experts from CT NEMO, and Aqua Solutions, LLC conducted the workshop on February 23, 2006 at the University of Connecticut Avery Point campus. Stormwater basics, low impact development concepts and specific installation and maintenance guidance were highlighted at the workshop to 40 participants. Additional workshops for contractors are being planned over the next year. If you are interested in participating, or helping to organize, a workshop in your area contact Mike Dietz (a.k.a. "Dr. Stormwater") at michael.dietz@uconn.edu. ☀



Karl Frey, a principal of the development firm Vespera, addresses participants of the first workshop dedicated to educating contractors about LID practices. The workshop is a collaborative effort between the Niantic River Watershed Project and CT NEMO Program.

Connecticut NEMO Newsletter

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