Connecticut NEMO Newsletter

Nonpoint Education for Municipal Officials
Winter/Spring 2008

From Buffers to Buildouts

This spring, NEMO and its parent organization, the UConn Center for Land Use Education and Research (CLEAR), completed two projects that are worth noting (we hope!).

The first looked at riparian, or streamside, areas in the southern half of the state. Intact riparian areas are known to help protect water quality and reduce erosion and sedimentation, as well as provide wildlife corridors. The research, funded by the Long Island Sound Study National Estuary Program, used CLEAR remote sensing data to look at land cover (as of 2002) and land cover change (1985 – 2002) in the 100 foot, 200 foot, and 300 foot corridors bordering streams in the southern half of the state. Overall, the study found that riparian areas had a greater percentage of natural vegetation, and had lost less natural vegetation over the 17-year study period, than the overall landscape. This result provides indirect but strong evidence that the state's wetlands and watercourse "buffer" regulations are having an effect in slowing development along streams. The study also identified "hot spot" watersheds experiencing the greatest rate of riparian vegetation loss. ***The Status of Connecticut's Coastal Riparian Corridors*** can be found by going to the CLEAR website and rolling over the Research button.

An example of a riparian area land cover change map (a section of the CT River seen in blue).

The second project explored the "buildout" analysis, a planning tool that has garnered a lot of attention at the state Legislature and other places over the past several years. What types of buildouts are there, and what data and software do you need? Is a buildout analysis (a) the answer to all your thorniest planning issues; (b) a smoke-and-mirrors trick to stop all further development in your town, or; (c) none of the above? These and other questions were explored in the project, funded by the state Office of Policy and Management and conducted by NEMO in partnership with the Council of Governments of the Central Naugatuck Valley. A report based on the project, ***About Buildouts: a Brief Guide to Buildout Analyses, and Why and How to Do Them***, will be available from the Publications section of the NEMO website in May.

Exploring Low Impact Development in the Comfort of Your Own Home

Most people (including us, sometimes) no longer remember that NEMO is an acronym that stands for "Nonpoint Education for Municipal Officials." Yet dredging up that historic mouthful reminds us that while NEMO conducts education on a wide range of topics having to do with natural resource-based land use planning, we have always had a particular focus on stormwater and its impact on water resources.

Today, many towns are becoming interested in "low impact development" (LID), a suite of techniques with the goal of reducing or eliminating the water quantity and quality impacts of stormwater generated by development. At NEMO's statewide LID conference last summer, interest in LID ran high, but so too did the list of barriers that participants felt were impeding wider and faster adoption of these techniques.

In this issue, we highlight NEMO's Stormwater Management Trifecta, a small but potent nuclear family of websites designed to help your community surmount these barriers and get going on LID. These websites put you in direct contact with the relevant sections in the Connecticut Stormwater Quality Manual, and can also take you to LID sites and regulations pioneered by your neighboring towns. We hope that the article will inspire you to fire up your browser and visit.

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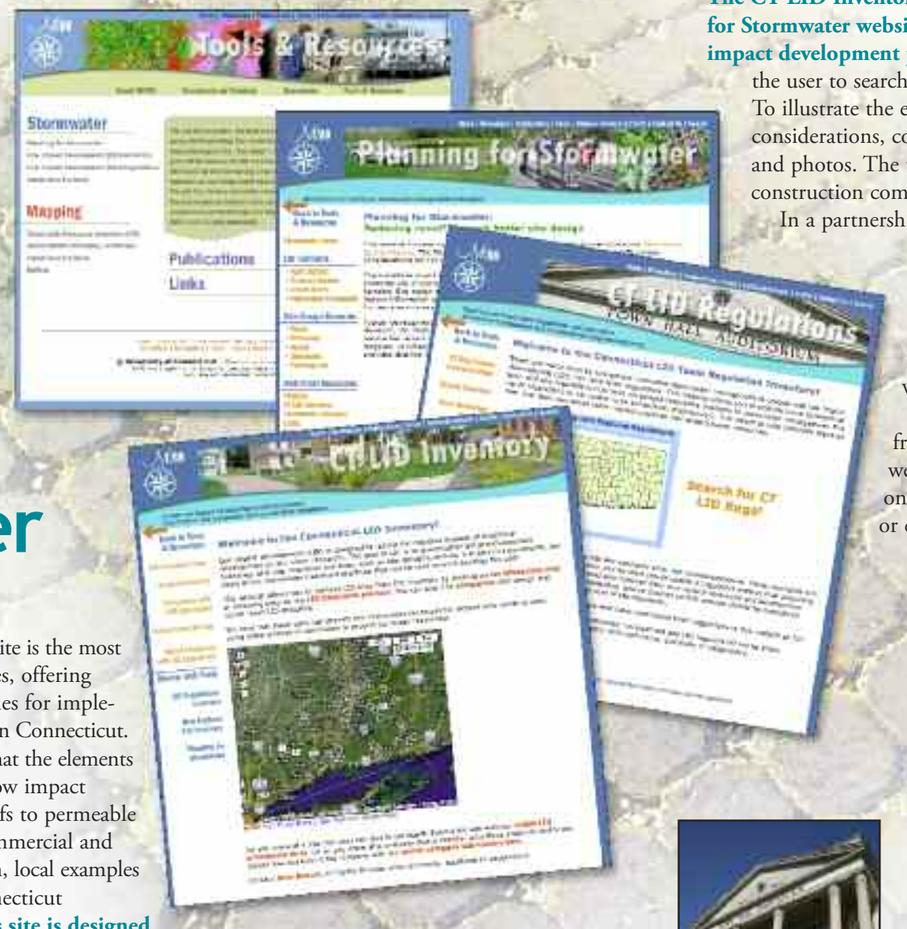
Spotlight On... Introducing the Stormwater Management Trifecta

New Low Impact Development (LID) Tools & Resources

Now online at NEMO's Tools and Resources section, three websites offer your town a comprehensive approach to addressing land use and water quality.

The TRIFECTA offers complimentary ways of accessing the latest in low impact development and innovative stormwater management research and implementation methods.

nemo.uconn.edu/tools.htm



(Clockwise from top left) NEMO's Tools and Resources home page, Planning for Stormwater home page, CT LID Regulations home page and the CT LID Inventory home page.

Planning for Stormwater

Reducing runoff through better site design

The Jordan Cove Urban Watershed National Monitoring Project in Waterford, Connecticut focused on a unique public/private partnership to incorporate and monitor the effectiveness of a variety of stormwater low impact developent (LID) designs.

The Planning for Stormwater website is the most general of the TRIFECTA websites, offering information, details and case studies for implementing low impact development in Connecticut. From this site the user can learn what the elements of stormwater management and low impact development are—from green roofs to permeable pavement. The details include commercial and residential site design consideration, local examples and direct links to the 2004 Connecticut Stormwater Quality Manual. **This site is designed to be accessible to land use officials who evaluate and implement these stormwater management practices in their local communities.**

The site also includes vendor information, searchable LID or site design elements, such as grassed swales or roads, an LID glossary, and answers to frequently asked questions about the effectiveness of low impact development. ❋

CT LID Inventory

Low impact development examples with a local impact

The CT LID Inventory website supplements and builds on the Planning for Stormwater website by providing searchable local examples of low impact development projects throughout Connecticut. The site allows the user to search projects by town, LID practice type or project name. To illustrate the examples fully, project profiles include maintenance considerations, contact information for the installers, engineers, owners and photos. The user can also search specifically for engineering and construction companies familiar with low impact development.

In a partnership with the University of New Hampshire Stormwater Center, NEMO's CT LID Inventory website was expanded to be a part of the Northeast LID Inventory, a similar website that includes low impact development examples throughout the Northeast. This site is also accessible through NEMO's CT LID Inventory website.

The LID examples featured on the website come from community input. If you know of any LID sites we'd love to hear about it. Contact NEMO through our online submission form, by email (nemo@uconn.edu) or call John Rozum at (860-345-5225). ❋

Public access parking stalls at Cornfield Point, Old Saybrook feature pervious pavement. Shown here are both modular concrete pavers and Gravel Pave2™.

LID Regulations

Regulations for innovative stormwater management

The LID Regulations website is the newest effort and completes the TRIFECTA. **This site is designed to help commissioners and town staff make changes that promote low impact development implementation in town regulations and ordinances.** From the Search page, users can search regulations that explicitly address stormwater management in Connecticut. The site is intended as a way to get past the paralysis of the "blank page" and start to address the regulatory aspect of encouraging low impact development.

Like the CT LID Inventory website, regulation examples are searchable by town and by regulation type, as well as by a variety of regulatory approaches. The details of the regulations include contact information, the full text excerpts of the regulations and any implementation experiences with the amendments. Connecticut towns are encouraged to submit additional examples of innovative stormwater management regulations as they are amended. ❋

New & Noteworthy

Jordan Cove Website The *Jordan Cove Urban Watershed Project* was a ten year project in Waterford, Connecticut that monitored the effectiveness of various low impact development practices in a newly developed subdivision. The results of this nationally recognized study, along with pictures, videos and interviews of project participants are available on the website **jordancove.uconn.edu** (home page shown below).

New Workshop: Habitat-based Mangement of Open Space Lands Many land trusts and municipalities have acquired large portfolios of properties that are now permanently protected, but have no clear plans on how to conserve and enhance the ecological and habitat values of the property. This workshop leads participants through a habitat-based planning process to show how to develop workable management plans for their properties. A supporting website is currently in development. Contact **Juliana Barrett at 860-405-9106** for more information.

Connecticut's Changing Landscape, v2.0 NEMO's mother ship, The Center for Land Use Education and Research (CLEAR), will be releasing a new version of the celebrated study of Connecticut land cover change from 1985 to 2006. Not only will this study extend the time period to 21 years, but it will be an entirely updated analysis, providing both new and refined land cover classes, including a "stand-alone" agriculture class. Look for an upcoming announcement from CLEAR.

NEMO Wins National Water Resources Award! The NEMO program, comprised of the CT NEMO and the National NEMO Network, was awarded the *2008 Water Resources Team Award* from the U.S. Department of Agriculture for "Outstanding Integrated Program" at the USDA Water Quality Conference in Reno, Nevada in February. The NEMO Team was recognized for establishing an "*outstanding program that has had a significant impact on the protection of water resources in urbanizing areas across the country.*"

NEMO Welcomes Kate Woodruff

Kate Woodruff joined the NEMO Team last fall as a geospatial technology specialist. Kate's primary focus is on GIS and remote sensing technology, but she has taken charge of various NEMO projects. Kate has hit the ground running, developing and enhancing two novel low impact development websites that are featured in this newsletter (see the Stormwater Trifecta article, page 2).

NEMO's newest team member, Kate Woodruff.

Kate is a graduate of the University of California, Los Angeles with a B.A. in Political Science, International Relations, focused on water management, with minors in Environmental Studies and Anthropology. She also has a Masters of Environmental Management in Water Management, Law and Policy from Yale's School of Forestry and Environmental Studies. Given her impressive pedigree, we consider ourselves lucky to have Kate onboard.

Back to Basics with the Land Use Academy

NEMO's sister program, the Connecticut Land Use Academy, is an educational program for land use commissioners. The Academy provides accessible land use education that helps commissioners succeed in their roles of public service. *The Land Use Academy is the state's official certification program for fundamental land use education for commissioners.* The academy focuses on commissioners with fewer than five years experience, though all are welcome.

The Academy includes three core courses and is taught in a day-long conference-style event. The training is offered four times annually in locations across the state. Learn more at clear.uconn.edu/lua.

Academy 2008 Schedule

(Saturdays 8:30 A.M. - 3:00 P.M.)

- Stamford, CT, March 15
- Groton, CT, May 17
- Torrington, CT, September 27
- Berlin, CT, November 15

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