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Research continued...

CLEAR and the Connecticut Department of Environmental Protection (CT DEP) have jointly produced a new website, Connecticut Environmental Conditions Online (CT ECO), that includes a variety of online maps and tools for viewing Connecticut’s environmental and natural resource information. The new CT ECO website includes an extensive catalog of environmental and natural resource information for Connecticut, and several sets of high resolution imagery, the most recent from 2008. CT ECO uses advanced software that combines internet and geographic information system (GIS) technology. A previous website collaboration between the University of Connecticut (CLEAR) and CT DEP, the Community Resource Inventory Online, provides basic natural resource maps for every town in the state, with an emphasis on basic land use planning. CT ECO builds upon this approach, providing many additional data layers suitable for a variety of uses, including new soils data layers from USDA NRCS, and new open space and habitat data layers from CT DEP.

CT ECO is the latest and most sophisticated of CLEAR’s efforts to provide web-based tools for local land use decision makers that allow access to the information at many different levels of technical sophistication. UConn and CT DEP will be conducting webinars throughout 2010 to demonstrate the workings of the site and some of its many uses. In addition, brief video tutorials will be posted on the site this spring. A visual tour of the CT ECO website appears on page 2 of this newsletter.

Research

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The first impervious cover TMDL (total maximum daily load) water regulation in the country is being implemented in the Eagleville Brook watershed in Mansfield, which includes much of the University of Connecticut (UConn) main campus. The response of the University and the town will focus on reducing the amount and impacts of stormwater runoff from impervious surfaces, which magnify, concentrate and channel pollutants into the brook. Project partners include CLEAR, CT DEP, the Town of Mansfield, the UConn Office of Environmental Policy, the Center for Watershed Protection and Horlsey-Witten Group. The field assessment portion of the project is almost complete. However, there has already been considerable
The NEMO’s new publication, Developing a Sustainable Community.

The “Your Town” section of CCL provides step-by-step guidelines for community leaders interested in implementing practices that help to reduce the impact of development on water resources. The booklet goes over 14 separate recommended site planning and design practices, each with real-life examples, illustrations, and most important, specific information on which plans, regulations and procedures need to be changed to implement them. The booklet is featured on the CT NEMO website (Publications section) right next to another recent NEMO tour de force, the About Buildouts booklet featured in CLEARScapes Issue #1. View both booklets at nemouconnedu/boots/publications.html.

The Simple Map Viewer is an easy-to-use interactive map viewer that allows users to view a single map theme, such as soils, protected open space or critical habitats areas overlaid on various dates of aerial imagery. The viewer allows users to interact with the map themes on a level above what is available in the Map Catalog. In addition, users can create ready-to-print map layouts within the viewer (image inset). The PDF file allows users to turn on and off a variety of layers as well as zoom and pan to different geographic extents.

**Map Services**

Map Services allow users of desktop geographic information system (GIS) software to connect directly to the environmental and natural resource data on OT ECO. This allows a user to overlay CT ECO data with their own geospatial data within their desktop GIS.

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The website offers online reference guides that contain comprehensive explanations of all of the natural resource and environmental datasets available on CT ECO. The Data Guides and Resource Guides help users determine appropriate uses of the data and provide access to complete GIS metadata records.

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The Advanced Map Viewer takes the interactive mapping experience a step further by including additional data layers and tools. Unlike the simple viewer, the advanced viewer allows a user to display and interact with multiple layers at once. Users can also print customized map layouts within the viewer (image inset). The PDF file allows users to turn on and off a variety of layers as well as zoom and pan to different geographic extents.

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**New Online CLEAR Calendar**

Workshops, Webinars and More at clear.uconn.edu

The CLEAR homepage has a useful new feature—a CLEAR-wide training Calendar. The calendar includes dates and details on all upcoming CLEAR trainings, workshops and webinars from CT NEMO, National NEMO, Geospatial Training, Forestry, Land Use Academy and GV! So whether you are interested in GIS trainings or basic training for land use commissioners, the CLEAR Calendar is a great place to discover learning opportunities.
Connecticut Environmental Conditions Online
c.teco.uconn.edu

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New & Noteworthy @ CLEAR

- CLEAR’s research team has just received a grant to use remotely-sensed data to track the health of Connecticut’s lakes. Satellite-derived data will be used to track lake water clarity, which has long been used by the scientific community as a key indicator of lake quality. The results will provide a cost-effective way to assess the state’s historical record of water clarity, identify change in water clarity in Connecticut lakes, and provide a methodology for continued assessment into the future. The grant is from the Connecticut Institute of Water Resources, part of a national network of 54 state water institutes that promote federal/state partnerships in water resources research and information transfer.

- CLEAR’s CT NEMO Program has produced a new publication on low impact development, Developing a Sustainable Community. This booklet is featured on the CT NEMO website (Publications section) right next to another recent NEMO tour de force, the About Buildouts booklet featured in CLEARScapes Issue #1. View both booklets at nemo.uconn.edu/tools/publications.htm.

- The National NEMO Network is holding its seventh national meeting, NEMO U7, in Portland, Maine this coming September. The Network is comprised of 32 programs in 30 states, all focused on educating local land use officials about the connections between land use and natural resource protection. Network programs are patterned after, and coordinated by, CLEAR’s CT NEMO program.

- The CLEAR website has averaged over 4800 unique visitors per month for the past three years. Some of the most popular sites are the CT NEMO Program, the Community Resource Inventory (CRI) Online tool, and the Connecticut’s Changing Landscape (CCL) research project. The “Your Town” section of CCL, where one can get maps and charts for any town in the state, attracts over 1200 unique visitors per month.

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Porous concrete parking lot on the UConn campus, during construction (top) and completed (bottom). Inset shows closeup of lot surface.

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Tools - CT ECO Website

Research - TMDL, Riparian Corridors, Agricultural Soils

CLEARSCAPES

A Newsletter of the Center for Land Use Education and Research at the University of Connecticut

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