

### Upcoming Projects & Initiatives

### **Projects Now Underway**

- **Build-out Analyses:** Working with Connecticut Office of Policy and Management (OPM) and the Central Naugatuck Valley Regional Council of Governments, the NEMO Team is creating a "build-out" analysis for the region, and developing statewide educational materials on build-out analyses and how to use them.
- 21 Years of Change: CLEAR researchers are completing an update and enhancement of the *Connecticut's Changing Landscape* study with data from 2006, making the total project time period 1985 – 2006.
- New GIS Tools: CLEAR geospatial experts are developing stand-alone GIS tools from the Center's forest fragmentation, impervious surfaces and urban growth analyses.

#### **Ideas We're Working on**

- Measuring urban "compactness" in Connecticut cities.
- Looking at nitrogen processing in urban riparian corridors.
- Helping partners in the National NEMO Network to adapt CLEAR web tools.
- Creating a "state of your watershed" website of key indicators.
- Expanding the Land Use Academy course offerings.
- Working with the Extension Master Gardener program to promote "rain garden" bioretention areas across Connecticut.
- Enhancing the Center's ability to provide a wide variety of remote sensing data and derived products over the web.

- Farmland Loss: The *Connecticut's Changing Landscape* study update will, for the first time, isolate farmland as a single land cover class, thus facilitating studies of farmland loss. In addition, the Geospatial Technologies Program (GTP) is completing a study looking at farmland loss in the Middlesex County region from 1970 to the present.
- Low Impact Development: NEMO is organizing a statewide conference on Low Impact Development (LID) during the summer of 2007. In addition, NEMO is working with other New England NEMO programs and the Stormwater Center at the University of New Hampshire to create a regional LID database and website.
- Forest Fragmentation and Local Land Use: USDA is partnering with the National NEMO Network on a new project to help NEMO programs around the country fold forest resource protection into their ongoing educational programs for local land use officials.
- **Improved Topography**: LERIS and GTP are creating, and making available over the web, statewide high resolution topographic data.
- National Dissemination of CLEAR Web Tool: The National NEMO Network is working with NOAA to adapt the *Community Resource Inventory Online* web mapping tool to other states.
- **Projecting Regional Trends**: CLEAR Forestry is continuing its work with the Highlands Project, using the *Connecticut's Changing Landscape* data to provide a baseline for a projection model (GEOMOD) and to be used with other data to evaluate and project future land use trends, threats to sensitive natural resources and other potential changes on the landscape.

# **Future Goals**

The overall goal of CLEAR faculty and staff is to expand our programs and partners, in order to provide enhanced services to the communities and citizens of Connecticut. Our vision is for a Center that can provide these services in a reliable and sustainable manner.

Realizing our goal will require a more sustainable funding structure that relies less on externallyfunded specific projects, which currently provide roughly 80% of the Center's support (page 17). Much of the regular, ongoing research, training and outreach activities of CLEAR are not, in the long run, amenable to federal or state grant programs, which tend to focus on specific projects instead of ongoing services. Given the proven quality of CLEAR's work, and its utility and value to the citizens and communities of Connecticut, we hope to attract a larger state investment in the Center.

There are many areas that CLEAR is hoping to enhance including:

• On the UConn "home front," CLEAR hopes to involve more faculty from additional academic departments, as well as to increase the capacity of LERIS and to obtain institutional support for its maintenance and upgrade.

- At the state level, the Center hopes to expand its support of the state agencies charged with implementation of the Responsible Growth Initiative.
- The research and technology side of CLEAR intends to do more work with high resolution imagery, advanced landscape visualization techniques and modeling of future land use impacts.
- On the outreach side, we plan to expand our services to coastal communities, and to develop new programs in support of the state's land trusts.
- On the national level, we hope to expand our work helping other states to adapt tools and methods developed by CLEAR.
- Finally, our hope is that our collaborative **international work** on measuring global urbanization will continue.

## **CLEAR Activities & Projects**

The remainder of this Progress Report is comprised of lists: staff, funding sources, partners, awards, grants and publications. These lists are as comprehensive as we could make them, and cover the period from April 2002 through April 2007. They are intended to give an overall feel for the breadth and depth of the Center's work. Those wishing specific information on a project, publication or other CLEAR effort should visit the website (clear.uconn.edu) or call the appropriate Center program contact, listed on pages 26 and 27.

Partners & Cooperators16
Staff & Funding
Grant Funded Projects
Research
Applications & Training Projects
Outreach Education Projects19
Selected Awards21
Publications
Journal Articles
Magazine, Newsletter & Other Articles23
Books
Abstracts & Proceedings24
Recent Websites & Web Tools Developed25
Major Outreach Publications

