

Changes to Regulations



With a Spotlight on Rhode Island NEMO

Regulations represent the implementation of the vision set forth in plans, and lay out the rules by which new or expanded developments must abide. From road design to impervious surface limits to special overlay zones to parking requirements to stormwater management systems, these types of changes can have the most direct impact on how communities will grow and protect their natural resources. Some examples of changes to regulations in response to NEMO efforts are provided below.

► **Houston, Texas:** TX NEMO worked with the City of Houston to correct landscaping ordinances that make it difficult to use native plants in commercial landscapes. A variance was obtained for a “watersmart” demonstration landscape on a high-profile city-county project. The fact that a variance was necessary drew attention to problems with the ordinance. TX NEMO is continuing to work with the city on the lengthy process to change the ordinance.



AL NEMO is helping communities along Mobile Bay work together to protect the bay.

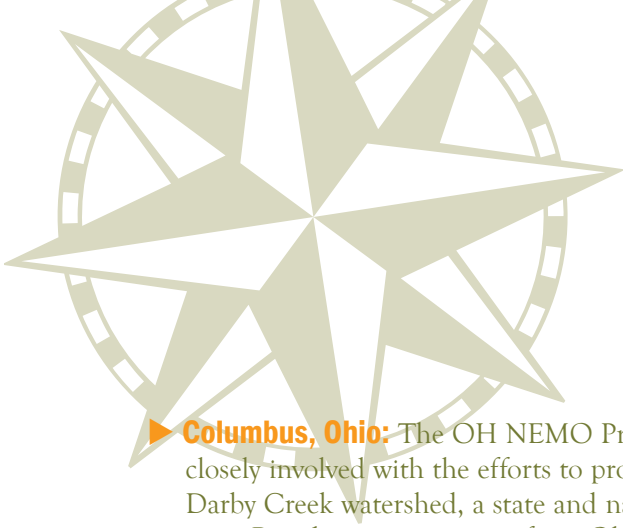
► **Mobile Bay, Alabama:** Mobile Bay is the second fastest growing region of Alabama. AL NEMO has helped the City of Fairhope lead a regional initiative to protect the Bay as the region grows. Fairhope has developed a comprehensive erosion and sediment control ordinance that has also been adopted by two other cities along the Eastern shore of the bay.

► **Duluth Township, Minnesota:** Northland NEMO worked with Duluth Township to establish a sensitive areas overlay ordinance. The ordinance includes greater setback restrictions, limits on impervious

surfaces and runoff reduction requirements within particular sensitive areas. Northland NEMO is also helping both Wright and Winona Counties rewrite their stormwater and erosion and sediment control ordinances.

► **Hancock County, Mississippi:** Working with the MS NEMO Program, which is coordinated by the state Department of Environmental Quality, Hancock County passed a stream buffer ordinance that prohibits any construction or clearing 25 feet from the top of the bank of any stream. Prior to the ordinance’s adoption, new developments cleared the land all the way to the stream.

► **New Jersey:** The Association of New Jersey Environmental Commissions (ANJEC), has been providing education to the communities it works with based on the NEMO model. As a result of their efforts several towns, including Moorestown, West Hampton, Plumsted Township, Readington, West Amwell, Mt. Olive and Harrison, have passed stream corridor ordinances that use buffers and conservation easements of various widths along stream banks to protect water quality, habitat and the wildlife food chain.



► **Columbus, Ohio:** The OH NEMO Program is closely involved with the efforts to protect the Big Darby Creek watershed, a state and national scenic river. Based in part on input from Ohio State University and the OH NEMO Program, the City

of Columbus adopted **special zoning overlay ordinances** for lands along a major tributary of the Big Darby Creek, the Hellbranch. The ordinances create buffer zones, reduction in impervious surface and increased infiltration requirements. Much of the information from the Darby overlay has been used in the development of a draft citywide ordinance, with further input from OH NEMO.



OH NEMO is working with communities in the Big Darby Creek watershed. (Photo courtesy of Jodi Miller, Ohio State University.)

► **Kandiyohi County, Minnesota:** Following several Northland NEMO workshops, the County adopted a **stormwater and erosion and sediment control ordinance** into their subdivision ordinances. They previously had no provisions for stormwater and erosion and sediment control. The County also made significant revisions to their **shoreland ordinance**, establishing resource management districts in tiers around recreational lakes and within 1000 feet of natural environment lakes. Two cities in the county are following suit, looking to make changes to zoning ordinances in shoreland areas.

► **Porter County, Indiana:** The Indiana NEMO effort, *Planning with POWER*, has helped Porter and Lake Counties, which lie outside of Chicago along Lake Michigan, launch a joint Smart Growth initiative. The initiative was spurred by the region’s tremendous growth, rapid loss of farmland and POWER’s participation in the Open Space Planning Boot Camp (page 30). As part of this effort, Porter County recently adopted **conservation design**



Porter County, Indiana adopted a conservation design subdivision ordinance to preserve open space.

subdivision regulations requiring 10% open space minimum on all subdivision development, and up to 40% open space requirement on subdivisions in designated sensitive areas.

► **Trussville, Alabama:** The AL NEMO Program has been working with the City of Trussville to protect the picturesque Cahaba River, the last remaining free-running river contained within Alabama. As a result, the city has passed a **Cahaba River Overlay District**, which creates a 125 foot buffer along the river. The district is divided into three sections, with land use restrictions progressively increasing with proximity to the river.



Communities like East Haddam, Connecticut are adopting new subdivision regulations that allow for narrower roads.

► **East Haddam, Connecticut:** East Haddam worked with CT NEMO to address a comprehensive overhaul of its subdivision and zoning regulations. The Planning and Zoning Commission adopted **new subdivision regulations** using the “net buildable

area” concept that relates the intensity of allowed development to the capacity of the land to sustain it. The commission also revised **road ordinances** to reduce width requirements for local roads from 32 to 18 feet, and discourage the use of curb and gutter for stormwater drainage.

► **California:** One of the partners in the CA NEMO Partnership is the State Water Resources Control Board. The Board, which is responsible for the regulation of both water allocation and water quality protection, has begun recommending in **regulatory guidance and consultations** with applicants for new developments that communities use NEMO and low impact design (LID) principles to reduce the impacts of the new development on water quality.

Spotlight on Rhode Island

Regulations for Protecting Critical Drinking Water Resources

The Rhode Island NEMO Program, led by the University of Rhode Island (URI) Cooperative Extension, employs several land use decision support tools to help local officials understand land use impacts on water quality and develop strategies for addressing those impacts. These efforts have resulted in numerous changes to local planning and zoning regulations.

RI NEMO is working with the state's Department of Health to build the capacity of local land use officials to protect drinking water. Through this collaboration, RI NEMO has completed community-based drinking water assessments of all major community water supplies in the state under the U.S. EPA's Source Water Assessment Program. The results of these assessments were made available to residents via a website, CD and localized fact sheets complete with large format maps.

RI NEMO has also developed a series of interactive workshops to distribute and explain the assessment results and recommendations to local board, council and commission members, focusing on protec-

tion measures. The workshop series includes a presentation *How Changing Land Uses Affects Water Quality* (customized using local maps and assessment results), *How Local Actions Can Protect Water Quality* and *Using Computer Generated Maps in Project Review*.



RI NEMO's watershed assessment approach is clearly having an impact on local practices. For example, the **Town of Jamestown adopted a zoning overlay ordinance that integrates stormwater and wastewater management for high water table areas.** The groundwater protection/high water table zoning overlay applies to designated areas within the town

that have substandard lots served by private wells. Provisions of the ordinance include an impervious surface limit of 15% (calculated for individual lots and excluding wetlands), a requirement to control runoff volume using low-impact techniques to maintain pre-development infiltration for a 25-year storm and mandated use of advanced wastewater treatment technologies capable of 50% nitrogen removal.



RI NEMO is helping the island community of Jamestown protect their water resources.

The program is also working with the URI Onsite Wastewater Training Center on an EPA-funded wastewater initiative, Safewater, that seeks to help Rhode Island towns develop comprehensive wastewater management plans to protect, recycle and sustain local water resources. As a result of this effort, the **Town of Charlestown updated its wastewater management ordinance** to strengthen provisions for mandatory septic system inspection, maintenance and repair. All cesspools will be phased out and replaced with either conventional or advanced treatment systems within five years of next inspection. Charlestown joins the two other towns in the project, South Kingstown and New Shoreham, in establishing septic system inspection and maintenance programs that include cesspool removal.

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