

# Bay Lake Regional Planning Commission: Regional Center of Excellence in Green Infrastructure

January 2010

Green Bay, WI

Population: 589,894

Size: 5,433 square miles

[www.baylakerpc.org](http://www.baylakerpc.org)

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## Background

The **National Association of Regional Councils** (NARC), in partnership with the US Forest Service, recognized two regional planning organizations as *Regional Centers of Excellence* (RCEs) to receive \$5,000 grants and serve as national models for their regional green infrastructure programs in May 2009. The Bay-Lake Regional Planning Commission (BLRPC), and the Delaware Valley Regional Planning Commission (DVRPC) were selected through a national call for applications. As RCEs, BLRPC and DVRPC engaged in a variety of activities promoting regional green infrastructure planning and were featured at NARC's 43rd Annual Conference and Exhibition and through Green Regions, a public awareness campaign focused on the environment. This profile summarizes BLRPC's green infrastructure program and its achievements during the seven-month RCE project.

## Bay-Lake and Green Infrastructure

In 1997, BLRPC began defining and mapping environmental corridors, providing information to cities and counties in the Northeast Wisconsin region to facilitate green infrastructure protection in local planning and zoning efforts. These maps feature the region's wetlands, wetland buffers, waterways, waterway setbacks, recreation areas and areas of steep slope. In 2005, BLRPC completed its data collection and produced comprehensive maps and documents detailing the nature and extent of each county's environmental corridor, or green infrastructure. All mapping and planning was completed by BLRPC staff, one planner and one

Geographical Information Systems (GIS) specialist, using ArcGIS 9 and ArcInfo 9. Valuable local input was also provided through technical advisory groups in each county.

Through this major mapping effort, BLRPC identified over 600,000 acres of wetlands, 1,314 lakes with an area of nearly 38,000 acres and over 300 major waterway systems. As BLRPC's role in green infrastructure planning is strictly advisory, the commission provides data and information to its member jurisdictions to complement local comprehensive planning and zoning, in order to preserve this important resource.

## Bay-Lake's RCE Project

BLRPC is constantly challenged to identify ways to promote green infrastructure protection throughout its region. With no regulatory authority residing with BLRPC, awareness about their environmental corridor mapping project within and around the Bay-Lake Region was limited. BLRPC applied

to be an RCE to enhance their ability to educate local jurisdictions and neighboring regions about green infrastructure, as well as to increase a awareness, motivation and ability to protect such resources.

With their grant, BLRPC prepared, published and distributed posters about the benefits of and tools for protecting regional

green infrastructure. The nine unique posters include one regional map and eight additional versions featuring each of the eight individual counties within the region. In addition to identifying the location of green infrastructure, the posters included essential information on green infrastructure

**Bay-Lake Regional Planning Commission**  
ENVIRONMENTAL CORRIDORS  
[www.baylakerpc.org/env\\_corridors.html](http://www.baylakerpc.org/env_corridors.html)

Environmental corridors encompass a wide variety of natural and restored native ecosystems and landscape features, including wetlands, floodplains, waterways, woodlands, wildlife habitats, public lands (such as federal, state, county, and local parks, and natural and scientific areas), and other open spaces (such as viewsheds and greenways).

With the many benefits that environmental corridors afford people and communities, implementing environmental corridor protection is recommended to facilitate their preservation. Environmental corridors can be protected through community planning, ordinances, and zoning, conservation easements, and public acquisition.

**AREAS OF STEEP SLOPE:**  
Areas of steep slope are defined as highly erodible areas of land with a slope of 12 percent or greater. Landslides represent a threat to safety of steep slopes and can be reduced by reducing sediment runoff into waterways. Areas of steep slope are mapped by the USDA Natural Resources Conservation Service.

**WATERWAYS:**  
Waterways are defined as navigable bodies of water, including lakes, ponds, rivers, streams, and creeks. Waterways provide many diverse benefits including habitat for fish and wildlife, drinking water supply, water transportation, and groundwater recharge. Waterways are mapped by U.S. Geological Survey.

**WATERWAY SETBACK:**  
A 75-foot setback from navigable waterways, floodways, streams, ponds, riparian vegetation and riparian wetland quality for providing aquatic access points to fish populations and reduce sediment runoff. Setbacks also increase the energy of flowing runoff water, thereby reducing erosion potential.

**WETLANDS:**  
Wetlands include areas of land two acres or greater in size whose water is at least or above the land surface long enough to be capable of supporting aquatic or hydrophytic (water-loving) vegetation and soils. In the absence of wetland conditions, wetlands include wetlands, swamps, bays, and bays. Wetlands are parks, forests, wetlands and prairie/wetlands, and are considered the most biologically diverse of ecosystems. Wetland inventories have been developed by the Wisconsin Department of Natural Resources.

**WETLAND BUFFER:**  
A 100-foot buffer around riparian wetlands, floodplains, waterways, and other wetlands provides a "buffer" between the wetland and the surrounding upland, which is especially vital for wetlands with direct groundwater connection. Wetland buffers also increase the flood control benefits of wetlands by providing additional storage capacity after the wetland has filled with water. All of these benefits are provided to the surrounding upland by the buffer zone, which becomes saturated and runoff volume increases.

**FLOODPLAINS:**  
Floodplains include flat or nearly flat land adjacent to a waterway that experiences occasional or periodic flooding. It includes the floodway (consisted of the open bank and adjacent areas that carry flood flow) and the floodplain (consisted of the open bank and bed covered by the "100-year flood"). Floodplains provide space for flood storage and conveyance of water during flood events, prevent downstream erosion, filter sediment and reduce agricultural, law, industrial, and urban runoff. Floodplains are inventoried by Flood Insurance Rate Maps by the Federal Emergency Management Agency.

**SECONDARY ENVIRONMENTAL CORRIDORS:**  
Secondary environmental corridors include county-identified features for which inventory data is not consistently available across the whole region. Some secondary environmental corridor features include:  
- State-identified scientific and natural areas  
- Riparian habitat areas or corridors  
- Wetlands smaller than two acres in size  
- State and Federal wildlife strips  
- Groundwater recharge areas  
- Wetland riparian sites  
- Woodlands  
- Public lands  
- Unique geologic features, such as the Michigan Escarpment (Escarpment)

preservation benefits and tools, including zoning changes, transfer of development rights, conservation easements, tourism strategies and transportation planning. The posters were reviewed by natural resources professionals, local officials and planners in the region to ensure content accuracy. The posters and other information on regional green infrastructure were then published on BLRPC's website and distributed to each local jurisdiction within the region, as well as other key stakeholders in and around the region.

Beyond producing the posters, BLRPC presented at NARC's 43rd Annual Conference and Exhibition in Denver, CO and at the 6th biennial State of the Lake Michigan Conference in Milwaukee, WI. BLRPC also engaged an advisory group made up of representatives from University of Wisconsin's Extension, Wisconsin Department of Natural Resources, Wisconsin Sea Grant, the Nature Conservancy, local watershed groups, U.S. Fish and Wildlife Service, the University of Wisconsin at Green Bay and others.

### Project Impacts

With the \$5,000 grant and additional leveraged funding, BLRPC developed nine distinct posters for the region and printed a total of 2,000 copies – 400 copies of the regional poster and 200 copies of each of the eight individual county posters. The 11x17, two-sided posters are high quality and ready for display, printed in glossy full-color. The posters include a map of the environmental corridor, a description of the benefits of the green infrastructure, a landscape picture

of each element of the green infrastructure and a detailed description of each feature.

At the completion of the project period, over 629 copies of the posters had been distributed to all 185 units of local government and other environmental stakeholders within the Bay-Lake region. The posters have also been made available on BLRPC's new webpage devoted to green infrastructure planning, which received over 100 hits with 65 posters downloaded in the first two months that the webpage was available. The webpage and posters will also be featured in BLRPC's newsletter, further driving hits to the website and poster downloads. Finally, BLRPC presented information about developing and promoting green infrastructure to about 45 people at NARC's 43rd Annual Conference in Denver in June 2009 and to about 25 people at the 6th biennial State of the Lake Michigan Conference in Milwaukee in September 2009.

Overall, BLRPC directly reached nearly 800 stakeholders, including local elected officials, fellow regional planners and many others. Building on the publicity produced through this effort, BLRPC will continue to work with its counties and local jurisdictions to develop comprehensive plans and zoning that preserve and protect regional green infrastructure. To date, BLRPC has already seen an increase in local jurisdictions' requests for green infrastructure maps and data; however due to the nature of green infrastructure and the audiences served, the full impact of BLRPC's project goes beyond those directly reached during the project period and will extend to the populations served by them, both now and in the future.

### About the National Association of Regional Councils

The National Association of Regional Councils (NARC) serves as the national voice for regionalism by advocating for regional cooperation as the most effective way to address a variety of community planning and development opportunities and issues. NARC's member organizations are composed of multiple local governments that work together to serve American communities – large and small, urban and rural. In 2008, NARC launched the first of four public awareness campaigns – Green Regions, Mobile Regions, Build Regions and Secure Regions. For additional information, please visit [www.NARC.org](http://www.NARC.org) or [www.GreenRegions.org](http://www.GreenRegions.org).

### About the Bay-Lake Regional Planning Commission

The Bay-Lake Regional Planning Commission was created to address regional land use, economic, and intergovernmental issues in northeast Wisconsin. The Commission evolved from a long tradition of state and local interest in land and water conservation and balanced economic development in the State of Wisconsin. The Bay-Lake Regional Planning Commission was established by Governor Patrick Lucey in April 1972 to provide advisory planning service on area-wide issues, to represent local interests on state and federal planning program activities, and to provide

local planning assistance to communities in the counties of Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Oconto, and Sheboygan. For additional information, please visit [www.baylakerpc.org](http://www.baylakerpc.org) or [http://baylakerpc.org/env\\_corridors.html](http://baylakerpc.org/env_corridors.html).



### About the U.S. Forest Service

The U.S. Forest Service manages over 193 million acres of National Forests, has the world's largest forestry research organization, and facilitates the conservation of state and privately owned forest land across the country. The Forest Service promotes the use of Green Infrastructure and Landcare to help conserve and manage public and private forest land that spans the urban to rural continuum. For more information on the U.S. Forest Service, please visit [www.fs.fed.us](http://www.fs.fed.us).



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*Building Regional Communities*

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### About Green Infrastructure and Landcare

Green infrastructure is the network of natural lands, working landscapes and other open spaces that are strategically planned and managed to conserve their ecological functions while also providing associated benefits to human populations. Green infrastructure includes woods, meadows, forests, wetlands, farmland, animal habitat, etc., and plays an important role in reducing air pollution, filtering stormwater, maintaining ecological balance, and increasing the effectiveness of traditional infrastructure. Landcare, the community-based practice of holistic, cooperative and sustainable land management techniques is an integral aspect of maintaining green infrastructure.