



Photo Credit: Little Traverse Conservancy

# MICHIGAN COASTAL NEWS

A Publication of the Michigan Coastal Management Program Volume 5, Issue 2: Summer 2011

## OFFICE OF THE GREAT LAKES

Patricia Birkholz,  
Director

Frank Ruswick,  
Deputy Director

## COASTAL PROGRAM STAFF

Virginia Berry  
[berryv@michigan.gov](mailto:berryv@michigan.gov)

Alisa Gonzales-Pennington  
[gonzalesa@michigan.gov](mailto:gonzalesa@michigan.gov)

Lynda Krupansky  
[krupansky@michigan.gov](mailto:krupansky@michigan.gov)

Matt Smar  
[smarm@michigan.gov](mailto:smarm@michigan.gov)

Matt Warner  
[warnerm1@michigan.gov](mailto:warnerm1@michigan.gov)

Ronda Wuycheck, Chief  
[wuycheckr@michigan.gov](mailto:wuycheckr@michigan.gov)

*Michigan Coastal News* is issued quarterly by the Michigan Coastal Management Program, Office of the Great Lakes, Department of Environmental Quality. To suggest an article idea or submit a volunteer opportunity, contact Matt Smar at (517) 335-3459 or [smarm@michigan.gov](mailto:smarm@michigan.gov).

### Construction of Ohio Offshore Wind Farm Projected for 2013

Ohio has taken a major step in its bid to develop the Great Lakes' first offshore wind energy project, which could also be the world's second freshwater offshore wind farm. Lake Erie Energy Development Company (LEEDCo) and Freshwater Wind, LLC entered into a two-year option-to-lease contract with the State of Ohio in January, giving them the exclusive right to pursue a long-term lease for a future wind farm on nine square nautical miles – about 5,700 acres - of Lake Erie submerged lands northwest of Cleveland. During the contract period LEEDCo and Freshwater Wind will complete environmental studies on fisheries, ice conditions, bird and bat use of offshore waters, and take other steps required to obtain the long-term submerged lands lease as well as approval from the Ohio Power Siting Board. The developers are optimistic that construction will begin in 2013 on the first 20 megawatts (MW) of a 1,000 MW facility.

The project grew out of a public process that began in 2006 with the Great Lakes Energy Development Task Force, formed to study economic development options in the advanced energy technology sector for Cuyahoga and Lorain Counties. The Task Force identified a future Great Lakes offshore wind industry as a prime vehicle for generating energy-related jobs in the area and began holding monthly meetings with local residents, government officials, and businesses to explore the idea of making Cleveland a regional wind turbine manufacturing center. The Lake Erie wind farm is the linchpin of the economic development initiative and is intended to encourage offshore wind energy development throughout the Great Lakes, creating business for wind turbine manufacturing, related industries, and Ohio ports. Observers credit the local support for the project to the Task Force's regular and frequent public engagement, potential for skilled job creation, and the level of visual impact from the shore; reportedly, when installed more than seven miles out in the lake the turbines will appear to be about the size of a dime on the horizon.

It could take years to overcome substantial logistical, technical, and other hurdles throughout the region before Cleveland reaps the initiative's full economic benefits. For example, chokepoints in the St. Lawrence Seaway limit the dimensions of ships that can enter the Great Lakes, effectively excluding many of the specialized support vessels available for offshore wind farm construction. This has led some in the industry to call for support vessels to be built in the Great Lakes. Another challenge is to design turbine foundations that withstand the impacts of the thick winter ice cover that forms on freshwater lakes. Industry watchers expect that the world's first freshwater wind farm, a 30 MW project on Sweden's Lake Vänern that began operation last year, will yield valuable technical data relevant to the Great Lakes. Additional information on the Lake Erie project is available through the LEEDCo website at [www.leadco.org](http://www.leadco.org).



Photo Credit: Matt Smar, DEQ



### **Project Spotlight:** **Best Practices for Living in Michigan's Dunes**

Michigan's majestic coastal dunes are the type of "world class" natural and scenic features that make the *Pure Michigan* marketing campaign so visually compelling to prospective tourists. They are also fragile ecosystems, and management of the dunes is a key objective of the Michigan Coastal Management Program. This involves protecting and conserving dune habitat, encouraging appropriate use of the dunes for recreation, and promoting thoughtfully planned development that avoids or minimizes impacts to the dune environment.

The Department of Environmental Quality administers the Critical Dune statute and rules, and these State regulatory measures establish a base level of protection over approximately 70,000 acres of dunes. Yet, a conservation approach worthy of these world class resources requires the informed participation of a wide spectrum of stakeholders, including developers that build in the dunes and landowners who call them home. A county conservation district recently used a Coastal Zone Management grant to build such public support.

The Muskegon Conservation District (MCD) is a long-time partner in dune protection efforts, and was one of the first conservation districts to coordinate with the State on the oversight of permit-related vegetation management under the Critical Dune regulatory program. Through their on-the-ground work in dune conservation, the MCD saw room for improvement in the public's understanding of how landowner actions affect the dune environment, and how landowners could develop and enjoy their dune properties in keeping with the protections established under State law. Since dune ecosystem dynamics and State Critical Dune regulations are complex, improving public understanding of these topics presents a challenge.

MCD staff worked with a consultant to develop and package public outreach and education materials in a way that helps property owners, developers, and local government officials to understand the rationale for the Critical Dune regulations, ecological values provided by individual Critical Dune properties, and environmentally protective building practices specific to dunes. The resulting information toolkit, written in plain language, includes a digital slide presentation and three concise documents: *An Overview of Michigan's Critical Dune Areas*, outlining the State regulations; *Living in Michigan's Critical Dunes*, targeted toward landowners; and the more technical *How to Protect Critical Dunes: Practical Guidelines for Site Development and Management in Michigan's Critical Dunes Areas*, for those designing a landscaping or other project to be consistent with regulatory requirements. According to MCD staff, the information has been well-received. The information toolkit is available on the Michigan Association of Conservation Districts website at [http://macd.org/critical\\_dunes.html](http://macd.org/critical_dunes.html). Contact Jeff Auch, MCD Executive Director, for additional information at (231) 773-0008 or [jeff.auch@macd.org](mailto:jeff.auch@macd.org).

### **Adopt-a-Beach™ Teams Sought to Raise the Bar on Volunteer Monitoring Program**

*Contributed by Jamie Cross, Alliance for the Great Lakes*

The Alliance for the Great Lakes' award winning Adopt-a-Beach™ program is being brought to new heights. This year the Alliance is offering advanced training for those adopters that want to go the extra mile for their beach, and the satisfaction of knowing their efforts will have a bigger impact.

Volunteers who enroll in the new Tier 2 Adopt-a-Beach™ Program sign a memorandum of understanding committing to make one or more beach visits a month for three months, and to participate in quality control training that will help ensure the accuracy of data collected during Adopt-a-Beach™ monitoring visits. Although all volunteers participating in Adopt-a-Beach™ collect and record data that is used by local and state beach authorities and the United States Environmental Protection Agency, the extra training provided for our Tier 2 adopters means their data is considered more reliable.

"This is a great summer program for young people, or for a family or individuals who just want to get involved in improving their local beach," says Jamie Cross, Adopt-a-Beach™ Program Manager. The Alliance is especially interested in Tier 2 volunteer monitors for the Saginaw Bay area, one of Michigan's designated Areas of Concern.

About 10,700 people in six of the eight Great Lakes states now volunteer with Adopt-a-Beach™. Teams conduct litter removal and monitoring, and also complete a beach health assessment form that requires science-based observation and testing. For more information on the Adopt-a-Beach™ program contact Jamie Cross, Adopt-a-Beach™ Manager at (616) 850-0745 extension 12 or [jcross@greatlakes.org](mailto:jcross@greatlakes.org).

## Biodiversity Conservation Strategies for Lakes Erie and Michigan

Contributed by Matt Preisser, Office of the Great Lakes, DEQ



Photo Credit: Ron Leonetti for TNC

**American lotus beds at twilight,  
North Maumee Bay, Lake Erie**

Over the past several decades, agencies and organizations in the United States and Canada have generated a vast amount of information on Great Lakes biodiversity. Yet until recently, there lacked a coordinated, lake basin-wide effort focusing centrally on biodiversity. Building off the successful models used for the recently completed biodiversity strategies for Lakes Huron and Ontario, a team of scientists is beginning to develop strategies for the restoration and conservation of the native biodiversity and ecosystem function of Lakes Erie and Michigan.

The Nature Conservancy and Michigan Natural Features Inventory have begun working with a broad network of scientists, natural resource professionals, agency staff, and non-profit colleagues to employ a tested process for conservation action planning that enables analysis, documentation, and common understanding of the linkages among biodiversity conservation targets (selected ecological systems and species), threats to the targets, conservation strategies, and measures of success. The product of these efforts will be a set of biodiversity conservation strategies for both Lake Erie and Lake Michigan that will guide public and private actions in a strategic manner, and which will be incorporated into existing basin-wide planning

tools and adaptive management programs such as the Lakewide Management Plans. The strategies and supporting technical information will be publicly available on-line. We anticipate that these strategies will facilitate collaborative action among diverse and widespread partners, providing a common vision for conservation of these two Great Lakes.

During the summer of 2011, a project team for each lake will conduct and refine its threat and viability assessments, develop the suite of lake-specific conservation strategies, and begin to draft the project reports for each lake. An important goal of this project is to actively engage stakeholders throughout the entire process, culminating with stakeholder workshops in December, 2011 in Detroit (for Lake Erie) and Chicago (for Lake Michigan). This two-year project will be completed by September, 2012. Contact Doug Pearsall, Senior Conservation Scientist at The Nature Conservancy, for additional information at **(517) 316-2259** or [dpearsall@tnc.org](mailto:dpearsall@tnc.org).

## Michigan Wetlands Conference Highlights Climate Change Adaptation

Management of Michigan's wetlands encompasses multiple objectives and issues, including habitat protection, flood control, water quality protection, recreation, and increasingly, climate change. On August 30 through September 2 the Michigan Wetlands Association will bring together diverse groups with a common interest in wetland management at the professional conference titled *Transitions in Wetland Science, Management, and Policy* at the Grand Traverse Resort in Acme, Michigan. The conference features three tracks: A *Special Symposium* on wetland management in response to climate change; *Current Issues in Wetland Regulation and Policy* with updates on Michigan Wetland Advisory Council activities and proposed changes in federal wetland regulations; and *Wetlands and Watersheds* focused on wetland monitoring, assessment, planning, stewardship, and restoration at the watershed scale.

The Special Symposium is the first public discussion in Michigan to focus on climate change adaptation in the context of wetland management. It aims to increase understanding of climate change impacts anticipated in the Great Lakes Region, and offer practical ideas for integrating climate change adaptation into ongoing wetland programs. Because they are highly water-dependent ecosystems, hydrologic modifications associated with increased temperature and altered precipitation patterns are likely to impact coastal wetlands and other wetland types. Proactive wetland managers can implement climate change adaptation measures by strategically pursuing common management goals such as wetland restoration and management for flood storage and water quality improvement, bridging gaps in wildlife corridors to facilitate species migration, and encouraging biodiversity to increase ecological resilience.

The keynote speaker for the conference, Heather Stirratt, Great Lakes Coordinator for the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center, is actively engaged with NOAA's work on climate change adaptation and "Climate Ready" Great Lakes communities. Among the other confirmed speakers and panelists are Dr. William Mitsch of Ohio State University, co-author of the fundamental wetland reference textbook *Wetlands*; Dr. Donald Uzarski of Central Michigan University, Principal Investigator for the ongoing five-year, basin-wide Great Lakes Coastal Wetland Monitoring project; and Mr. David Evans, Chief of the Wetlands Division in the United States Environmental Protection Agency Office of Wetlands, Oceans, and Watersheds.

Visit the Michigan Wetlands Association website at [www.miwetlands.org](http://www.miwetlands.org) for information on the agenda, registration, and related activities. Contact Peg Bostwick, Association of State Wetland Managers, for additional information at **(517) 626-6981** or [peg.bostwick@aswm.com](mailto:peg.bostwick@aswm.com).

## Maritime Administration Sends Marine Highways Report to Congress

On April 6, the United States Department of Transportation's (USDOT) Maritime Administration (MARAD) released *America's Marine Highway Report to Congress*, summarizing the first year of progress toward developing the nation's marine highway system. Marine highways are corridors for the waterborne movement of passengers and container and trailer freight between coastal hubs that are otherwise served only by roads and railways. Designated marine highway corridors are alternatives to specific landside transportation routes and borrow their names from these routes. For example, in Michigan the Upper and Lower Peninsulas are flanked by the western branches of the "M-90" marine highway corridor through the Great Lakes and St. Lawrence Seaway, intended as an alternative route for freight transported by heavy trucks on Interstate-90, as well as Interstates-94 and 80.

A number of issues add momentum to the federal effort to develop a marine highway system. Fuel efficiency is one such issue; while two-thirds of all domestic freight tonnage was moved by truck in 2008, it requires significantly less fuel to move a ton of freight a given distance by water or rail than by road. Also, the land-based system of highways and bridges that sustain heavy truck traffic is aging and overused in many parts of the country and in need of repair and upgrades. However, opportunities for expanding road infrastructure are often limited, particularly in urban areas where right-of-way acquisition costs are very high. With the volume of freight moved in and through the U.S. expected to grow substantially in coming years, a national marine highway system offers the potential to absorb some of this growth while alleviating overall levels of transportation-related petroleum consumption and air pollution, as well as congestion and wear on landside roadways. Additionally, the redundancy provided by marine highway corridors could mitigate the impact of disruptions to road and bridge traffic caused by natural or man-made disasters, boosting the resiliency of the country's transportation network.

The M-90 marine highway is one of 18 corridors designated nationwide, and USDOT officials intend the designations to focus public and private investment. One way USDOT is accomplishing this is to designate specific projects nominated by public agencies as "marine highway projects," which will receive preferential treatment for federal assistance from USDOT and MARAD. Michigan's project, sponsored by the Detroit/Wayne County Port Authority, is to develop a cross-border passenger ferry service between Detroit and Windsor, Ontario, as an alternative to local bridge and tunnel crossings. *America's Marine Highway Report to Congress* is available to view and download at [www.marad.dot.gov/documents/MARAD\\_AMH\\_Report\\_to\\_Congress.pdf](http://www.marad.dot.gov/documents/MARAD_AMH_Report_to_Congress.pdf).



Photo Credit: David Howell, Friends of the Detroit River

## Volunteer for Michigan's Coast!

**Adopt-a-Beach™ Clean-ups.** The Alliance for the Great Lakes is looking for volunteers to participate in the annual beach clean-ups at multiple locations on Michigan's coast on Saturday, September 17. This coast-wide event coincides with The Ocean Conservancy's International Coastal Clean-up. The clean-ups can be enjoyable outings for individuals, families, or groups. Participants pick up litter and collect data on the types and quantities of debris found. The Alliance uses this information in educational programs addressing Great Lakes debris. Contact Jamie Cross, Adopt-a-Beach™ Manager at **(616) 850-0745 extension 12** or [jcross@greatlakes.org](mailto:jcross@greatlakes.org).

**Detroit River – Kayak Tour and Dinner Cruise Help.** The Friends of the Detroit River (FDR) welcomes volunteer assistance with registration, program activities, set-up and take-down, and other tasks involved in the successful execution of two upcoming special events. FDR is hosting the first annual *Kayak the River* tour on Saturday, August 20, at Elizabeth Park in Trenton, and the ninth annual *FDR Fall Dinner Cruise* on Thursday, September 8, at Bishop Park in Wyandotte. Volunteers are also needed on a regular basis to help with filing, mailings, and other administrative work at the FDR office in Trenton. Contact Tricia Blicharski, FDR Office Manager, for information on volunteering at **(734) 675-0141** or [blicharskifdr@gmail.com](mailto:blicharskifdr@gmail.com).

**St. Clair and Monroe Counties - State Park Stewardship Workdays.** The Department of Natural Resources (DNR) Parks and Recreation Division needs weekend volunteers to help remove invasive shrubs at Algonac State Park, St. Clair County, and plant native grasses and wildflowers at Sterling State Park, Monroe County. The aim of the workdays is to restore remnants of lakeplain prairie, a globally rare natural community. Workdays at Algonac are Saturday, August 6 and Sunday, September 11. The workday at Sterling is Saturday, September 24. The September 11 and 24 workdays will be followed by an afternoon Volunteer Potluck. Contact Laurel Malvitz-Draper for information at **(248) 359-9057** or [malvitzl@michigan.gov](mailto:malvitzl@michigan.gov). Additional DNR volunteer opportunities are posted at [www.michigan.gov/dnrvolunteers](http://www.michigan.gov/dnrvolunteers) - click on "Calendar of Volunteer Stewardship Workdays."