



Photo credit: Mike Molnar

## Shorelines

### *A Publication of the Indiana Lake Michigan Coastal Program*

#### **Program Update:**

The past few months have been busy for the LMCP and partners. In March the *Partners in Preservation, Restoration, and Recreation* event at Bass Pro Shops saw the unveiling of the newest *Ecosystem* poster. Brian Breidert and Doug Keller from the DNR opened with a presentation on the ecology of Lake Michigan and the threat posed by invasive species. Thirteen partner organizations staffed tables and answered questions from the public while the artist, Barb Labus, signed copies of the new poster for all who wanted one. The funding for the Federal Coastal Program was announced in late February. The Indiana share is similar to that from last year - \$966,000 for base-line funding, \$86,000 for program enhancements, and \$42,000 for the Coastal Nonpoint Program. NOAA announced in mid March that the Coastal and Estuarine Land Conservation Program (CELCP) is to have a National competitive funding round for Federal FY2009. CELCP projects have a \$3 million maximum. The LMCP will publish the request for proposals for this land acquisition program in the next week and plans to hold a grant workshop to answer questions regarding CELCP. Lastly, the LMCP and Coastal Advisory Board members have been working closely as the four CAB Committees are fully developed: Grants, Outreach and Education, CELCP/Coastal Areas of Significance, and Nonpoint and Low Impact Development. We look forward to continuing to work with the CAB members and other partners on these committees in the future.

#### **Project Design and Evaluation Workshop:**

The LMCP is partnering with the NOAA Coastal Service Center again to offer the Project Design and Evaluation workshop June 17-18th. This is the third year that the LMCP has offered this opportunity. Participants in the workshop will gain an understanding of how to design a good outcome oriented project from the start. Participants from previous years have stated that this is the best hands on training they have ever attended. Seating is limited to 30

Shorelines is issued quarterly by the Lake Michigan Coastal Program.

To suggest an idea for an article, send an email to:

[coastal@dnr.in.gov](mailto:coastal@dnr.in.gov)

**Please visit our website at:**  
[www.IN.gov/dnr/lakemich](http://www.IN.gov/dnr/lakemich)

Mike Molnar, Program Manager

[mmolnar@dnr.IN.gov](mailto:mmolnar@dnr.IN.gov)

Ph: 317-233-0132

Jenny Orsburn, Program Specialist,

[jorsburn@dnr.IN.gov](mailto:jorsburn@dnr.IN.gov)

Ph: 219-983-9912

Joe Exl, Coastal Nonpoint Coordinator,

[jexl@dnr.IN.gov](mailto:jexl@dnr.IN.gov)

Ph: 219-921-0863

Jenni Newman, Program Assistant,

[jnewman@dnr.IN.gov](mailto:jnewman@dnr.IN.gov)

Ph: 317-234-3985

#### **Lake Michigan Ecosystem Posters Available:**

The Lake Michigan Ecosystem Poster was unveiled March 8<sup>th</sup>. This beautiful poster is the second in the series designed by local artist Barb Labus. This poster depicts the interaction of exotic and native species in Lake Michigan and includes relevant educational information as well. The LMCP is partnering with Illinois Indiana Sea Grant to distribute these posters and related educational curricula on invasive species this spring to schools within the coastal area.



*Anyone interested in obtaining a copy of the poster for personal use can pick-up a copy at the DNR office in Michigan City at:*

**100 W. Water Street  
Michigan City, IN**

### **Public Access Project Update:**

The Indiana Department of Natural Resources (IDNR) contracted with the Eppley Institute for Parks and Public Lands to update the inventory of existing sites that provide access to natural, cultural, and historic resources within the Indiana Lake Michigan Coastal Area. Representatives from the Eppley Institute will be at the NIRPC Environmental Management Policy Committee meeting on May 1, 2008 at 9:00 AM CDT to explain the process they intend to use to complete this project. The process will involve consolidating existing inventory information from cities, towns, and townships in the region. This inventory is the first step in a three-year process that the Lake Michigan Coastal Program is undertaking, which will ultimately lead to need-based planning for enhancing recreation access in the Lake Michigan Coastal Area. The resulting Public Access Management plan will be used to guide grant funding in the future.

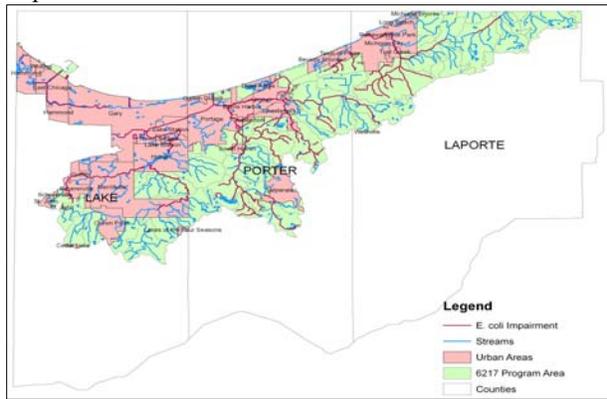
### **Septic Systems - What You Need to Know:**

#### **Issues**

Based on 1990 census data approximately 50,720 households in Lake, Porter and LaPorte Counties utilize onsite septic systems to treat household wastewater. The Indiana State Department of Health estimates that 25% of septic systems are inadequate and have failed. This is on par with the national average. That adds up to about 12,680 households in Northwest Indiana. Surveys show that of the permits issued for septic system repair or replacement by the county health departments in Indiana, approximately 93% are greater than ten years old.

One of the issues that stand out from these figures, other than the 25% failure rate, is the fact that these are estimates. We cannot say with certainty what the actual numbers are. Additionally, the number of households utilizing onsite septic systems was not collected as part of the 2000 census. Given the amount of development that has gone on in Northwest Indiana, the numbers are likely considerably higher.

Untreated sewage from failed septic systems can contain a number of diseases that are a concern to people including hepatitis, giardiasis, and salmonellosis. Due to the relative ease of sampling, *E. coli* is commonly monitored by state agencies and watershed management groups as an indicator of fecal contamination. Within the coastal program area there are a number of streams that are listed for *E. coli* impairment by the Indiana Department of Environmental Management (IDEM). Every year along Indiana's Lake Michigan waterfront, there are beaches that are either periodically closed or warnings posted due to elevated *E. coli* levels. It is important to note that combined sewer overflows (CSO) are not the only source of *E. coli* loading to our waters. Failing septic systems are also one of significant contributing factors. The figure below shows that a number of streams listed for *E. coli* impairment do indeed fall well outside of urbanized areas where CSO's commonly exist.



#### **Challenges**

There are a number of challenges that septic systems present to homeowners, local governments and state agencies. The following highlights just a few of those challenges.

1. Currently there is no state rule or county ordinance that requires operating septic systems be inspected or maintained. Both NOAA and EPA noted this fact in the Indiana Coastal Nonpoint Program Finding document. Indiana has been given five years to demonstrate that it has enforceable policies and mechanisms for the inspection and maintenance of existing systems. A copy of the finding document can be found at [www.in.gov/dnr/lakemich/issues/cprprogram.htm](http://www.in.gov/dnr/lakemich/issues/cprprogram.htm).
2. Currently there is no statewide data tracking system for septic systems. While some counties do have electronic databases, they only go back several years. Beyond that they rely on paper copies with varying degrees of information recorded. A statewide tracking system would allow the county health departments and ISDH to record pertinent information which would assist in septic system management and decision making processes.
3. Homeowner education and outreach is generally lacking or could be greatly expanded. A majority of septic system failures reported to the county health departments are greater than 10 years old. Just like your home or vehicle, septic systems do require occasional inspection and maintenance. In the worse case scenario, homeowners may not even be aware they have a septic system. (cont. page 3)

(cont. from page 2: Septic)

4. The soils in Northwest Indiana are far from ideal for septic systems. According to the Natural Resource Conservation Service (NRCS) approximately 96% of Lake County, 83% of Porter County, and 74% of LaPorte County have soils that are described as having severe limitations for septic systems. This rating is based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health.

**Potential Solutions**

On April 1, 2008 the Coastal Nonpoint Program partnered with Purdue Extension and Planning with POWER to host a septic system informational workshop for local leaders and decision makers in Northwest Indiana. A diverse group of speakers and panelists were on hand to provide local and statewide perspectives on the septic issue. Participants included staff from local health departments, the ISDH, town officials and county plan commissions to name a few. A few key items discussed during this first workshop were exploring the potential of establishing a wastewater (septic system) management district and also a tracking database.

Joe Exl, Coastal Nonpoint Coordinator with the LMCP, is currently working with program partners to identify a process for septic system inspection and maintenance and also the development of a tracking database. The LMCP will be receiving federal funding under Section 309 over the next three years to assist in meeting these goals. For questions, please contact Joe Exl at 219-921-0863 or jexl@dnr.in.gov.

**City of Portage Parks committed to habitat restoration, public access and environmental education:**

The City of Portage's Parks and Recreation Department recognizes the importance of protecting unique natural habitats, providing a variety of recreational opportunities and outreaching to its residents on the importance of environmental stewardship. The Portage Parks Department has applied and received numerous grant awards from the Lake Michigan Coastal Grants Program over the last 5 years.

- \* Protected 130 acres of Salt Creek corridor
- \* Restored 6 acres Little Calumet River floodplain forest habitat
- \* 2,000 feet of trail established in new Deer Trail Park
- \* 3.3 miles of streambank will be stabilized in Salt Creek

**Brennan Woods Acquisition**

In 2006 Portage acquired a 130-acre piece of beautiful Salt Creek, named Brennan Woods, after the family that owned the property. The property is bordered to the north by the CSX railroad and is bordered to the south by the Indiana toll road. The site includes Salt Creek, and its floodplain which comprises a vast water retention and passage area that hosts an abundance of plant, animal, and insect species. The west side of the parcel is wetland. The east side also contains vast wetland and marsh areas, as well as large sections of upland and bottomland forest with steep banks dropping to the creek. The property contains and enables access to the western shore of what is locally known as Kitchell Lake (approximately 15 acre lake).



The acquisition of this property has secured and preserved an incredibly ecologically-diverse piece of property that is a vital component of Portage's plan to obtain the entire Salt Creek corridor within its municipal boundary. This corridor will eventually become a natural greenway crossing the city from south to north and will connect to pedestrian trails that travel east to west.

**Deer Trail Park**

Deer Trail Park is Portage's newest addition. This 16-acre park is located in the Ameriplex Complex, along the Little Calumet River. It also borders Indiana Dunes National Lakeshore property. Although the property represented (cont on page 4)

(cont. from page 3: Deer Trail) forest and floodplain habitat, the site needed some TLC. The Park Department sought funding to remove a variety of invasive plant species such as Garlic Mustard, Phragmites and Box Elder. Native floodplain species were then planted to enhance the quality of the understory. Wetlands were enhanced by breaking drainage tiles and removing sediment.

Partnerships were key to the success of this project. Jeff Jones, Portage Park's Assistant Superintendent said, "The successful development of Deer Trail Park was made possible by two Lake Michigan Coastal Program grants and additional partnerships with Holiday Properties, the Porter County Community Foundation, Bass Pro Shops, NiSource Environmental Challenge Fund, the National Park Service and Portage Parks and Recreation Foundation."



Deer Trail Park  
Photos courtesy of Portage Department of Parks and Recreation

Public access improvements were also made to this park.

Over 2,000 feet of wood chip trails wind through the site, improving access to the Little Calumet River. Portage sought and received support from the National Lakeshore to construct the portion of the trail that would transverse federal property to the River. This site is now popular to anglers and those seeking a quiet, shady stroll in the woods. Educational signage installed at the site will help interpret the resident flora and fauna.

### ***Salt Creek Streambank Restoration***

Portage has identified Salt Creek as one of its jewels and has committed to enhancing its natural functions as well as developing it as a recreational amenity. Anglers have been fishing Salt Creek for its steelhead, chinook salmon, coho salmon and brown trout for eons. Part of being good stewards of such a waterway, includes tending to the very places fish call home. Portage Parks is working with the Northwest Indiana Steelheaders on streambank stabilization projects. These volunteers will concentrate on stream and habitat restoration on 3.3 miles of Salt Creek. The technique, commonly known as the Palmiter Method, eliminates stream bank erosion, increases creek flow, creates and improves fish habitat and provides appropriate access to streams and creeks, all by using natural materials, most of which is on-site.



Photo courtesy of NW IN Steelheaders

### ***Portage Outdoor Science Education Program***

Starting in the fall of 2008, Portage Parks and Recreation Department will partner with the Portage Township Schools to develop a K-12 outdoor science education curriculum. The curriculum will include field trip-based lesson plans specifically developed for each of the thirteen different grade levels. "The proposed Outdoor Science Education Program is a great new partnership with Portage Township Schools and the Lake Michigan Coastal Program that highlights five distinctly different natural areas within the City of Portage and makes those valuable natural resources available in a learning environment for the school age children of Portage," says Jones.

The educational sessions will focus on five separate and diverse natural areas within Portage including a fen, a natural dune area on the Lake Michigan shoreline (Portage Lakefront Park), an upland wooded 16 acre parcel (Deer Trail Park), a black oak savanna (Woodland Park) and over three miles of Salt Creek (Imagination Glen Park), one of northwest Indiana's best steelhead fishing tributaries. Each series of lesson plans will include classroom-based pre-fieldtrip instruction on a particular subject. Subject matter for the outdoor science curriculum will include environmental and conservation issues, preservation practices, habitat identification, wildlife biology, geology, botany, meteorology/water cycle and ecosystems. All materials will meet the Indiana Academic Standards as established by the Indiana Department of Education.

## Calendar of Events

4/22/08 - Linking Watersheds Conference - [www.foxriverecosystem.org/conference.htm](http://www.foxriverecosystem.org/conference.htm)

4/28/08 – *Biofuels Moving it Forward* - [www.southshorecleancities.org](http://www.southshorecleancities.org)

5/1/08 – *NIRPC EMPC Meeting* – 9:00 AM - <http://www.nirpc.org/NEWhome/calendar.htm>

5/20-22 – *EPA Watershed Academy* - [www.cmap.illinois.gov/lmacademy.aspx](http://www.cmap.illinois.gov/lmacademy.aspx)

6/5/08 – *NIRPC EMPC Meeting* – 9:00 AM - <http://www.nirpc.org/NEWhome/calendar.htm>

6/5/08 - *Indiana Finance Authority - Sustainability Workshop* - Indianapolis  
[http://www.in.gov/ifa/files/Save\\_the\\_Date\\_June\\_5\\_2008\\_3-3-08.pdf](http://www.in.gov/ifa/files/Save_the_Date_June_5_2008_3-3-08.pdf)

6/17-18 – *Project Design and Evaluation Workshop* – [jnewman@dnr.in.gov](mailto:jnewman@dnr.in.gov)

6/18/08 – *National Get Outdoors Day*

6/16/08 – *Application deadline for Coastal and Estuarine Land Conservation Program Projects* – <http://www.in.gov/dnr/lakemich/grants/celcp.html> Contact—[mmolnar@dnr.in.gov](mailto:mmolnar@dnr.in.gov)

6/25/08 – *Coastal Advisory Board Meeting* – 6:15 PM - Forest Park Golf Course, Valparaiso  
<http://www.in.gov/dnr/lakemich/board/index.html>

7/3/08 - *NIRPC EMPC Meeting* – 9:00 AM - <http://www.nirpc.org/NEWhome/calendar.htm>

7/15/08 – *Natural Resources Commission meeting* – 6:00 PM - NIRPC –  
<http://www.in.gov/nrc/2268.htm>

Photo Credit: Mike Molnar

*The purpose of the Indiana Lake Michigan Coastal Program is to enhance the State's role in planning for and managing natural and cultural resources in the coastal region and to support partnerships between federal, state and local agencies and organizations.*

*Additional Information Regarding the Lake Michigan Coastal Program and Upcoming Events can be found at: [www.in.gov/dnr/lakemich](http://www.in.gov/dnr/lakemich)*