



**Indiana Department  
Of  
Natural Resources  
Lake Michigan Coastal  
Program**

**Annual Report 2007**



**DNR**  
Indiana Department of Natural Resources



## Table of Contents

Introduction	2
Program Updates	2
Staff Report	2
Coastal Strategic Workplan	3
2006 Federal CZM Grant	3
CZMA Section 312 Evaluation	5
Coastal Advisory Board Update	7
Program Initiatives	8
The Coastal Estuarine Land Conservation Program	8
Lake Rim GIS Website Update	9
Project Design and Evaluation Training	9
Section 309 Public Access	10
Program Outreach Activities	10
Coast Week 2006	10
Ecosystems of the Indiana Coastal Region Poster Series	10
Welcome to the Great Lakes Basin Highway Sign	11
Shorelines	11
Coastal Grants Program	11
2006 Grants	11
Projects Awarded in 2006	12
2007 Grants	15
2007 Funded Projects	17
Status of Projects Awarded to Date	18
Project Highlights	19
2003 Grant Cycle Close Out	20
2004 Grant Cycle Close Out	20
Great Lakes Restoration Grants Program Close Out	20
Section 6217 Coastal Nonpoint Pollution Control Program	21
Watershed Management	21
Hoosier Riverwatch Workshops	22
Dunes Creek Daylighting – Watershed and Water Quality Education and Outreach	22
Indiana Clean Marina Program	23
Coastal Conservationist	23
Rain Gardens	24
Staff Contact Information	25

## Introduction

This Annual Report includes accomplishments and highlights of the Lake Michigan Coastal Program's work during the past year. It covers the time period of April 2006 through June 2007. It is our goal to use this report as an effort to communicate the accomplishments of the Program and improve stakeholder participation in the LMCP.

When the U.S. Congress in 1972 recognized the importance of meeting the challenge of continued growth in the coastal zone and they responded by passing the Coastal Zone Management Act (CZMA). The CZMA authorizes NOAA to administer the Coastal Zone Management Program (CZMP), a federal-state partnership program, which provides the basis for protecting, restoring, and responsibly developing the nation's important and diverse coastal communities and resources. NOAA provides the needed funding assistance and oversight of the program while state programs are tailored to state-specific circumstances and needs, and are based on state--not federal--laws. Thirty-four states and territories, which include over 95,000 miles of coastline, participate in the CZMP.<sup>1</sup>

Indiana participates in the CZMP through the Lake Michigan Coastal Program (LMCP). The LMCP is based on a "networked approach" that links existing state programs, agencies, and laws into an effective state coastal program. The lead agency for implementing the program is the Indiana Department of Natural Resources (DNR). Within the DNR, the Division of Nature Preserves has the lead for coordinating among the LMCP's networked partners.

Participation in the CZMP makes it possible for the LMCP to support activities that achieve the following goals in Indiana's coastal zone:

- Protect and restore significant natural resources;
- Prevent the loss of life and property in coastal hazard areas;
- Improve public access for recreational purposes;
- Protect and restore important historic and cultural resources;
- Improve government coordination and policy and decision making;
- Prevent, reduce, or remediate nonpoint source pollution that affects coastal waters;
- Revitalize urban waterfronts and ports; and
- Provide for priority water dependent uses.

## Program Updates

The LMCP continues to work with local, regional, and state partners to increase the benefits of our program and provide an educational resource to the community. Staff members in Indianapolis and Chesterton administer the NOAA grant, which provides planning and technical assistance grants to local governments and organizations, as well as 306A small-scale construction and acquisitions grants for cities, counties, and other local government partners. Program staff coordinates with local, state, and federal agencies on projects and programs to restore and manage habitat, biodiversity, and other natural and coastal resources. They also assist and advise local governments on planning and management measures to reduce non-point source pollution from stormwater runoff and work with IDEM and EPA on coastal water quality issues.

---

<sup>1</sup> To learn more about the CZMA, see <http://coastalmanagement.noaa.gov/about/czma.html>.

## Staff Report

Our program grew with the addition of two new staff members. We welcome our Special Projects Coordinator, Susan Melnyk. Susan comes to the LMCP from the National Policy and Evaluation Division (NPED) within NOAA's Office of Ocean and Coastal Resource Management (OCRM). She has re-created our newsletter *Shorelines*, drafted the Coastal and Estuarine Land Conservation Program (CELCP) Plan, and is involved in special projects. Susan is located at the Dunes office. Patti Schmid, Program Assistant, moved on to a position with DNR's Division of Fish and Wildlife. We are happy to announce that Jennifer Newman will fill this role. She comes from a strong background in logistics management. Jennifer will be located out of our central office in Indianapolis and provide programmatic administrative assistance.

## Coastal Strategic Workplan

The LMCP's Coastal Strategic Work Plan sets the program priorities for our next two years of operations. The development of our four strategic goals is intended to strengthen and redefine program delivery.

### LMCP Vision Statement

*The Lake Michigan coastal community is healthy and thriving for this and future generations.*

### Mission:

*The Program strengthens partnerships by providing the tools and assistance to manage coastal resources in Indiana.*

### Goals:

- 1) Improve the integration of the program components to more effectively address the diverse needs of the coastal community.
- 2) Enhance community understanding of coastal resource issues in order to increase participation in planning and decision making processes
- 3) Improve communication among state partners to more effectively provide state services in response to local community issues.
- 4) Enhance the ability of communities to protect and restore coastal resources
  - a) Increase awareness of funding and match opportunities to meet growing stakeholder needs.

Program staff continues to develop and implement objectives and associated actions for these new goals.

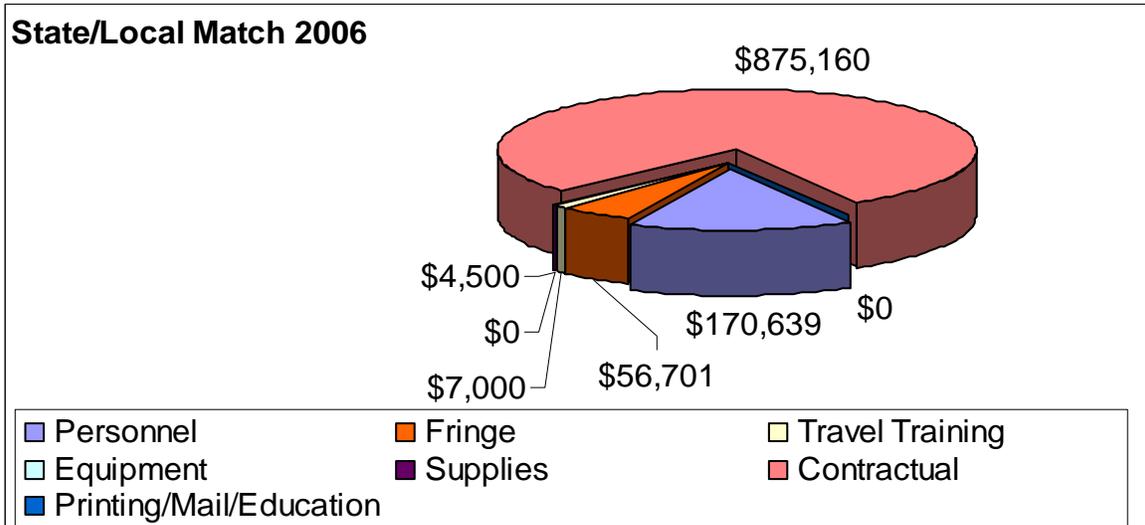
## 2006 Federal CZM Grant

The LMCP received federal funds for Section 306, Section 306A, Section 6217 (also known as Nonpoint Pollution Control Program), and Section 309 (Program Enhancement). Section 306A activities include property acquisition and low cost construction projects. Section 306 funds are authorized for planning, education and outreach, technical assistance, research, and other non-construction related projects. Section 6217 funding is directed to activities that achieve the goals of the LMCP's Nonpoint Pollution Control Plan.

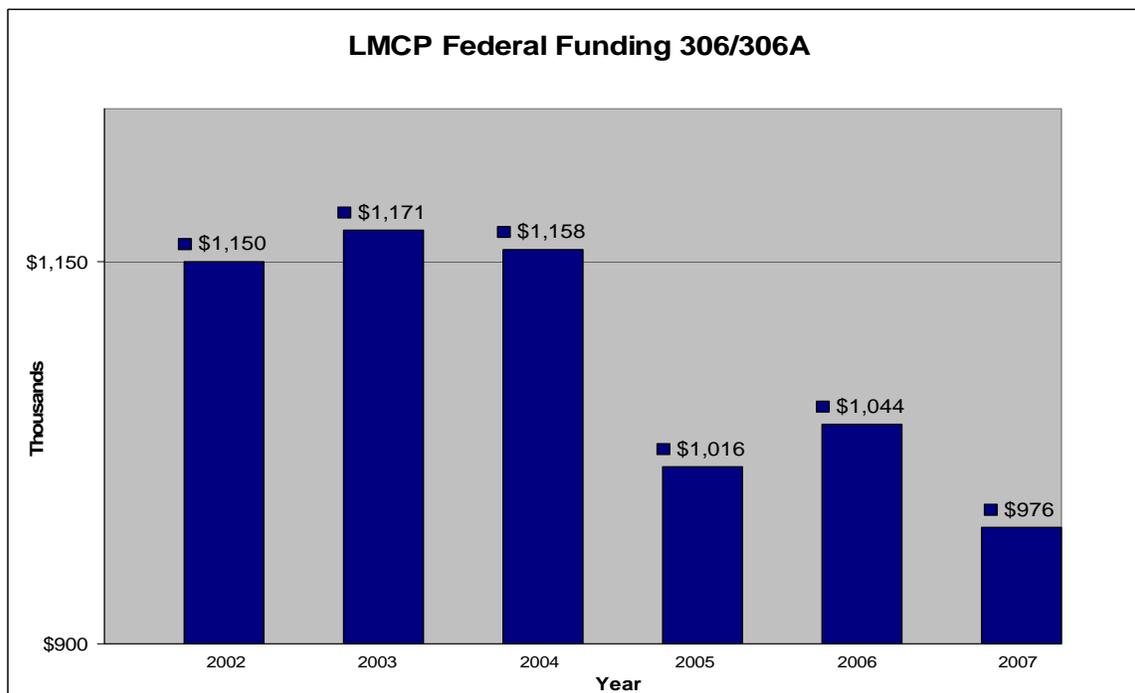
The authorization provided through passage of the Coastal Zone Protection Act of 1996 allows NOAA to fund voluntary Section 309 Coastal Zone Enhancement Grants in order to encourage states to develop program changes dealing with one or more of nine issue areas. These include coastal wetlands,

coastal hazards, public access, marine debris, cumulative and secondary impacts, special area management planning, ocean resource, energy and government facility siting, and aquaculture. The LMCP completed its Enhancement Strategy in 2005.

Total match provided by state, local, and nonprofit organizations for programmatic operating funds and project specific funding in the 2006 budget was \$1.114 M. The breakout of this match is presented in the figure below.



Since receiving final approval from NOAA in 2002, the State of Indiana has received federal funds for LMCP operation. The LMCP’s budget is developed each year according to CZMA guidance. It is based on a formula derived by NOAA for the distribution of allocated and de-obligated previous years funding with a maximum of \$2M. The bar chart below depicts the amount of Section 306 and 306A federal funding received by LMCP. The largest amount awarded was in 2003 (\$1.171 M), and the smallest was \$976,000 (2007).



## CZMA Section 312 Evaluation

As required by Section 312 of the CZMA, NOAA staff conducted a site visit in Northwest Indiana the week of May 30-June 2, 2006 as part of the evaluation of our federally approved coastal management program. The CZMA Section 312 evaluation examines the programmatic operations of Indiana's approved coastal program during the period from August 2002 through April 2006. Rosemarie McKeeby from OCRM's National Policy and Evaluation Division led an evaluation team consisting of Diana Olinger, our federal Program Specialist in OCRM's Coastal Program's Division, and Steven Resler, Federal Consistency chief from the New York State Coastal Management Program.

This was our first CZMA Section 312 evaluation as the LMCP received final approval from NOAA in 2002. LMCP staff prepared background information for the evaluation team's review, and conducted meetings with stakeholders to assist the team in the evaluation. The week included a full schedule of project site visits, stakeholder meetings, and focused discussions with partners, staff, and citizens.

The result of the evaluation was a set of review findings and recommendations developed by the evaluation team leader with input from evaluation team members. The CZMA allows an opportunity for the State to respond with comments on the draft evaluation findings report. The tables below list Program accomplishments and suggestions from NOAA's evaluation.

Issue Area	Accomplishment
Staff	LMCP has exceptional staff who have built the program from its inception in 2002. The staff are critical to LMCP's success.
Coastal Advisory Board	LMCP emphasizes public involvement in the program and engages the public in all of its major projects. In particular, LMCP established the CAB when the program was approved in 2002 and developed the Board into a forum for the public to assist with LMCP implementation. LMCP also ensures that the CAB has broad stakeholder representation.
Partnerships	LMCP regularly engages in many diverse partnerships. The program successfully coordinates with other programs both within DNR as well as with external state, local, academic, industrial and private agencies and organizations.
Strategic Planning Initiative	In 2006, LMCP developed a strategic plan that clearly defines its vision, goals and objectives. The plan will provide overarching guidance for the coastal program as it continues to grow.
Coastal Habitat	Working with its partners, LMCP began development of Indiana's CELCP Plan. The plan will serve as a comprehensive and coordinated planning document that assesses Indiana's priority coastal and estuarine land conservation needs and provides clear guidance to applicants for nominating and selecting coastal and estuarine land conservation projects within Indiana.
Water Quality	LMCP collaborated with its partners to develop Indiana's coastal nonpoint program document and submitted it to NOAA and USEPA for review in January 2005. LMCP also initiated and worked extensively on the development of the Indiana Clean Marina Program.
Coastal Dependent Uses and Community Development	LMCP runs a successful Coastal Grants Program that provides money at the local level for projects in areas such as public access, land-use planning, acquisition and restoration. The program provides excellent grant workshops and other technical assistance to prospective applicants.
Education and Outreach	LMCP initiated development of a strong education and outreach component. LMCP collaborated with its partners on Coast Week activities, the "Ecosystems of the Indiana Coastal Region" poster, and the Lake Michigan Basin sign design contest. The program uses a variety of methods to improve public awareness of Indiana's coastal issues.

<b>Issue Area</b>	<b>Program Suggestion</b>
Staff	1. OCRM encourages LMCP and DNR to conduct an assessment of current staff capacity and potential future staffing needs. LMCP and DNR should also assess whether the amount of funding that LMCP retains for program operations will be sufficient as the program's workload increases. LMCP and DNR should use the results of the assessment to develop a staffing plan for the program as it matures and undertakes new initiatives.
Coastal Advisory Board	2. OCRM strongly recommends that the CAB maintain its role as a stakeholder advisory group and critical public input mechanism for LMCP as the program matures.
Coastal Dependent Uses and Community Development	3. OCRM encourages LMCP to continue improving its Coastal Grants Program. In particular, LMCP should: (1) expand, as practicable, its efforts to increase the visibility of the Coastal Grants Program; (2) collaborate with its partners to explore the feasibility of sponsoring occasional grant writing workshops for local communities; and (3) continue working closely with prospective applicants to raise awareness of options for meeting the one-to-one match requirement.
Federal Consistency	4. OCRM encourages LMCP to continue improving federal consistency implementation. In particular, LMCP should: (1) complete the alignment of the federal consistency process with DNR's environmental review process; and (2) increase outreach and education about the process to its federal partners.
Education and Outreach	5. OCRM encourages LMCP to continue improving its education and outreach efforts. In particular, LMCP should: (1) complete its marketing plan; (2) re-establish its newsletter; and (3) work with DNR to explore possible methods of reducing processing times for press releases and website updates.

## Coastal Advisory Board Update

As a key component of the LMCP, program activities, major projects, and initiatives are developed in response to input and involvement of stakeholders. Guided by the Indiana Coastal Program Document, the Coastal Advisory Board (CAB) performs vital roles including: Stakeholder Representation, priority setting: public involvement, and planning and coordination.

The CAB is comprised of 27 members, 19 voting and 8 ex-officio non-voting members. Voting members of the CAB are selected by the Director of the Department of Natural Resources (DNR). Nominations are solicited every two (2) years for Board positions. Officers are elected annually. The CAB nominated and elected officers for 2007-08: Chair - Dorreen Carey; Vice-Chair – David Pilz; Secretary – Paul Labus. 2007 brought eleven new voting members and two new non-voting members to the CAB.

<b>Voting Members</b>	
<b>Stakeholder Group</b>	<b>Representative</b>
Lake County Citizen	Awaiting Director Appointment
Porter County Citizen	Henry (Hank) Bliss
LaPorte County Citizen	Betty Lou Nault
Lake County City or Town	Dorreen Carey
Porter County City or Town	David Pilz
LaPorte County City or Town	Frank Seilheimer
Agriculture	Gene Matzat
Historical Resources	Bruce Woods
Environment	Charlotte Read
Lake Michigan Aquatic Resources	Gerald Hodges
Local Land Trusts or Land-holding Nature	Paul Labus
Local Parks and Recreation	Jeff Jones
Port of Indiana at Burns Harbor	Awaiting new Port Director
NIRPC	Kevin Breitzke
Universities	Laurie Eberhardt
Tourism	Becky Fox
Indiana Dunes National Lakeshore	Bob Daum
Industry and Business	Kay Nelson
Lake Dependent Users	Tim Frame

<b>Ex-Officio Members</b>	
<b>Stakeholder Group</b>	<b>Representative</b>
IDEM	Hala Kuss
INDOT	Charles Peller
USDA – NRCS	Bill Moran
USFWS	Liz McCloskey
Illinois-Indiana Sea Grant	Leslie Dorworth
US EPA Region 5	Judy Beck
US Army Corps of Engineers	Andrew Benziger
INDOC	Vacant

**Program Initiatives**

In 2007, LMCP participated in several initiatives to provide financial and technical assistance to coastal communities. The Program was host to workshops and educational events and developed new products to involve citizens in coastal communities.

**The Coastal Estuarine Land Conservation Program**

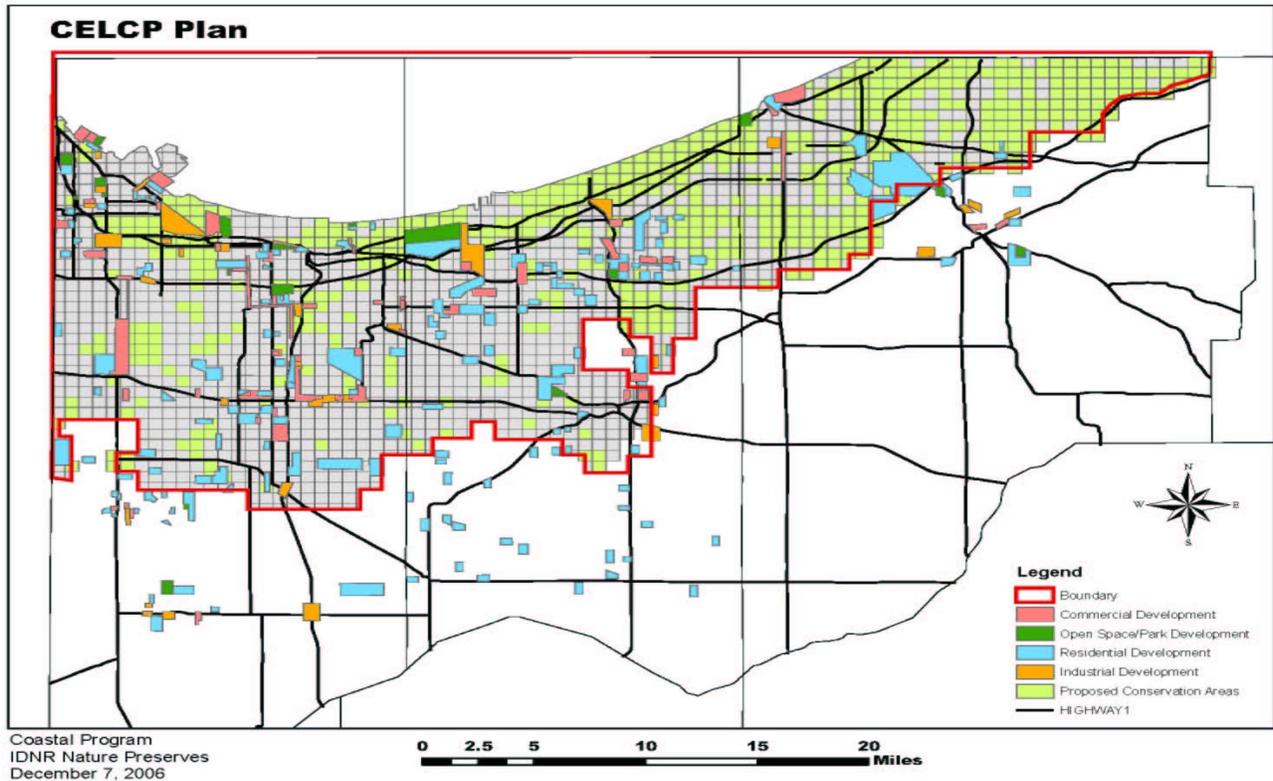
In 2002, the Commerce, Justice, State and Related Agencies Appropriations Act of 2002 directed the Secretary to establish the Coastal Estuarine Land Conservation Program (CELCP) for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses. The CELCP was also to give priority to lands which can be effectively managed and protected and that have significant ecological value.

This national grant funding program is administered by NOAA. In 2003, NOAA published guidelines for the program delineating the criteria for grant awards and a process to distribute funds through a competitive process. The guidelines established a three-stage process for implementation of a competitive program, including: 1) a state planning process that identifies conservation needs and priorities within the state; 2) a process to identify and prioritize projects at the state level; and 3) a national competitive process to rank state-nominated projects and select final projects for funding.

NOAA requests each state's coastal program to submit three project proposals at no more than \$3 million apiece to compete on the national level for funding consideration. CELCP funds are awarded through both a nationally competitive process and Congressional appropriations, or “earmarks.”

Each state that chooses to participate in the CELCP must first develop a coastal and estuarine land conservation plan that identifies the state’s priorities for conservation through the program. These plans are intended to identify the ecological, conservation, recreational, historical or aesthetic values that are a priority for protection using CELCP funds, as well as the threats to those values. In developing its CELCP plan, each state may draw on existing land or watershed conservation plans or ecological assessments, if applicable to the state’s coastal and estuarine priorities. The LMCP is responsible for developing Indiana’s CELCP Plan, in cooperation with Federal, State and local government agencies, nongovernmental organizations, and interested citizens. The draft CELCP Plan was completed in April and submitted to NOAA for final approval. The Indiana CELCP Plan follows a two step process: 1) establishes priority areas in the Coastal Zone for acquisition; 2) establishes several state criteria that

CELCP projects should meet and thus guides land acquisition and protection within the designated priority areas. This two step approach is based upon sound science and public input received during the plan development.



### Lake Rim GIS Website Update

The LMCP is funding an update of the Lake Rim GIS Website to provide state, local, and nonprofit entities access to the most current spatial data and mapping tools and a geographic information system (GIS) Internet mapping service (IMS). It was originally developed by the Indiana Geological Survey (IGS) in cooperation with IDEM and IDNR. IDNR and IDEM are working with the IGS to update the website design, functionality, and data layers. This website provides regionally important data-sets through an on-line data viewer. Users that do not possess standard GIS software can view, sort, and manipulate the online data-sets. The site will also include the addition of modeling capability. In addition, users will be able to export finished map products.

### Project Design and Evaluation Training

Continually adapting project strategy in response to new understanding and changing contexts is key in maximizing impact on coastal zone management. The LMCP hosted NOAA's Coastal Services Center's (CSC) Project Design and Evaluation Workshop in June 2006. This course was offered to our partners to help in their efforts to manage Indiana's coastal resources. The CSC provided hands on training and an interactive curriculum designed to increase the effectiveness of projects by applying valid instructional design theory to projects. Participants were given instruction on the underlying principles of project design and evaluation to understand both why a procedure is being used and to clarify how it fits into the other steps in the overall process. LMCP plans to hold this workshop annually.

## Section 309 Public Access and Wetlands Inventory

Section 309 of the Coastal Zone Management Act (CZMA), as amended in 1990 and 1996, establishes a voluntary grants program to encourage states and territories with approved programs to develop program enhancements in one or more of nine issue areas. The LMCP developed an assessment and strategy in cooperation with regional and state partners. The Section 309 Program Enhancement strategy developed in 2005 listed Public Access and Wetland mapping as the two highest priorities. Since the writing of the strategy several new initiatives have begun. As such, the wetlands mapping project is no longer needed, and the public access project was delayed to better align the project with ongoing initiatives. The National Wetlands Inventory for Lake, Porter, and LaPorte County was recently updated by Ducks Unlimited. The information is available at: <http://glaro.ducks.org/nwi>. A revised request for proposals will be distributed in the late summer for the Public Access Facility Inventory.

## Program Outreach Activities

The LMCP supports outreach activities. We have a continued critical need for efficient and effective dissemination of program and coastal management information among its state and local partners, and information outreach to the general public. Ongoing products/activities include: Website design, development and maintenance, production, and maintenance of program display materials (including a new exhibit for the LMCP), and participation in state and local exhibit events; development of public information materials, i.e. issue brochures, fact sheets, press releases, and articles for coastal publications; and, finally, development or participation in workshops, training, or events related to coastal zone management issues or outreach.

## Coast Week 2006

The LMCP and its partners coordinated a successful Coast Week 2006 which included seventeen coastal related events taking place. The activities are designed to reach a wide audience and cover a broad array of topics ranging from hikes to volunteer water quality monitoring. The Gary Clean Water Celebration kicked off the week and included hands on events, press conference, and informational booths. We look forward to all the fun and festivity that our Five Year Anniversary brings to Coast Week 2007.

## Ecosystems of the Indiana Coastal Region Poster Series



The LMCP commissioned an educational poster in 2005. The poster entitled *Ecosystems of the Indiana Coastal Region* presented information on the top ten ecosystem types of the Coastal Area. Since the formal release of this poster in January of 2006, the LMCP and partners have distributed more than 8,500 posters. The LMCP commissioned the design of the *Lake Michigan Ecosystem Poster* as a continuation of an eleven poster series and plans to release the new poster as part of Coast Week 2007.

## Welcome to the Great Lakes Basin Highway Sign

The LMCP launched a public design contest in 2006 for a *Welcome to the Lake Michigan Basin* highway sign. The sign will be posted at 20 locations throughout the Coastal Program area locations where major roadways intersect the Lake Michigan drainage basin. Unforeseen printing issues delayed the originally planned roll-out date. A new vendor was selected, the signs were printed and are now awaiting placement. The LMCP is coordinating with Indiana Department of Transportation (INDOT) to place the signs, which will be unveiled to the public during the summer of 2007.



## Shorelines



*Shorelines* is the quarterly newsletter of the Lake Michigan Coastal Program. It is dedicated to bring you feature stories, news items, and upcoming events from our staff and Program partners in coastal Indiana. Learn about the many LMCP efforts underway to protect coastal resources, including land use planning, acquisition, water quality enhancement and protection, and education and outreach programs. We welcome your input to the newsletter. If you'd like to share your stories about what is happening on Indiana's coast, please send them to: Susan Melnyk at [smelnyk@dnr.IN.gov](mailto:smelnyk@dnr.IN.gov).

## Coastal Grants Program

The U.S. Congress has made available to states and territories with approved coastal zone management programs, funds for competitive grants for community-based coastal activities. Funding and oversight are provided by the National Oceanic and Atmospheric Administration (NOAA), Office of Ocean and Coastal Resource Management (OCRM). Projects must be consistent with the goals and objectives of the Coastal Zone Management (CZM) Act of 1972 (CZMA, 16 U.S.C. §1451 *et seq.*) and meet the requirements of the CZM Program administered by OCRM.

Indiana's Lake Michigan Coastal Program instituted an annual competitive Grants Program in 2002. The purpose of the Grants Program is to support projects that preserve, protect, restore and where possible develop the resources of the coast for this and succeeding generations and to achieve wise use of the land and water resources of the coastal region, giving full consideration to ecological, cultural, historic and esthetic values as well as to needs for economic development.

Each year a substantial portion of our total Federal award is set aside for the Grants Program.

## 2006 Grants

### Allocation of 2006 Large Scale Coastal Grants – maximum award \$100,000 per project

#### §306(a) Low Cost Construction

- Natural Area Restoration
- Recreational Improvement
- Cultural / Historic Restoration

**§306(a) Acquisition (maximum award \$150,000)**

- Natural Area Preservation
- Recreational Improvements
- Cultural / Historical Area Preservation

**§306 Planning / Coordination/ Management**

- Natural Area Management
- Recreational Planning
- Cultural / Historical Resource Management
- Comprehensive Resource Planning

**§306 Education / Outreach**

- Natural Area Management Training
- Recreational Opportunity Awareness
- Cultural / Historical Education / Awareness
- Comprehensive Education / Outreach

**Allocation of 2006 Small Scale Coastal Grants – maximum award \$5,000 per project**

- Outreach and Education
- Resource Management

**Coastal Advisory Board Funding Priorities**

The Coastal Advisory Board voted for the 2006 Funding Cycle priorities:

- Natural Area Restoration
- Natural Area Preservation
- Natural Area Management Plans
- Natural Area Management Training

**Projects Awarded in 2006**

Fifteen projects were awarded for the 2006 Funding Cycle of Lake Michigan Coastal Grants Program for a total Federal request of \$678,032.50 while providing \$915,877.50 in local match. All projects received final approval from NOAA in August 2006 and are in the project implementation phase.

**Lake County Parks and Recreation Department - \$150,000 / \$150,000**

**CSX Land Acquisition**

The CSX Land Acquisition Project involves the fee simple purchase of approximately 91 acres to be added to the 700 acre Oak Ridge Prairie County Park. This acquisition has been a high priority for our department during the last 20 years. This acquisition would add remnant oak savanna, wetland and prairie to buffer the southwest corner of the park. In addition to the habitat potential, this property will provide a linkage for three bike trails which will improve the non-motorized transportation network in our county. The Natural Land Institute performed a botanical survey in 1996, and six species of state listed species were observed on this 91 acre property. This acquisition is critical for the future potential of the Oak Ridge Prairie-Hoosier Prairie Corridor.

**DNR – Division of Nature Preserves - \$65,000 / \$65,000**

**Hobart Heritage Prairie**

Hobart Heritage Prairie is considered the ecological heart of a 115 acre corridor of wildlands south of Ridge Road and is the key connection to 100 acres on the north side, which includes the 20 acre Liverpool State Nature Preserve. In addition, the parcel is close to areas protected by the Indiana Dunes National Lakeshore (the 280 acre Hobart Prairie Grove) and the Indiana Department of Natural Resources (McCloskey Savanna State Nature Preserve.)

## Projects Awarded in 2006 (cont.)

### **City of Michigan City, IN - \$14,802.50 / \$16,696.50**

#### **Pullman Forest**

The location of this project is a 2-acre field at the base of the large NIPSCO water-cooling tower along U.S. 12 in Michigan City across the street from Pullman Park at the corner of Willard Avenue and 4th Street. This area was once a junkyard and was a joint venture remediation project between Michigan City and LaPorte County. This project received the IACT cooperation award from the state for displaying extraordinary cooperation between municipalities and government agencies.

Concerns with this 2-acre field is the exposure of the NIPSCO cooling tower along a major route into downtown Michigan City and the general lack of forested areas within the immediate downtown area. The objective of this project is to return this 2-acre field back into a white pine, red oak, and red maple forest.

### **City of East Chicago, IN - \$50,000 / \$50,000**

#### **East Chicago Beach Restoration Project**

The project site is a 1,000 foot stretch of city owned property along the East Chicago beach front. The Natural Area Restoration encompasses clearing away invasive species, installing native plantings, and constructing a boardwalk and ramp in accordance with ADA regulations. Remaining funds will be used to subsidize the construction of an observation deck that will also be handicapped accessible. The boardwalk will be approximately 100' long and 8' feet wide. The observation deck at the end of the boardwalk will contain educational kiosks and displays.

### **City of Michigan City - \$38,480 / \$38,480**

#### **Restoration on Trail Creek at Springland Ave.**

Michigan City will partner with Rivertenders, Northwest Indiana Steelheaders and the St. Joseph River Valley Flyfishermen to restore streambank on an area of Trail Creek (a salmonid tributary to Lake Michigan) by relocating fallen trees along a river bank eroded area and cover with glacier stone. They will install 80' of lunger structures to simulate undercut banks. George Palmeter river restoration techniques will be used along entire project. This project will increase creek flow, eliminate erosion, create fish habitat, and teach and instruct students about river restoration. Ultimately 3,960 ft. of bank in Trail Creek will be restored. The area is located along Michigan City's Karwick Nature Park. The Nature Park is being developed for fishing access and passive recreation.

### **DNR – Division of Nature Preserves - \$33,750 / \$33,750**

#### **Hoosier Prairie Block 11 and Gaylord Butterfly Tract Buckthorn Removal**

The Hoosier Prairie Block 11 and Gaylord Tract Buckthorn Removal project is a restoration of a portion of the Hoosier Prairie Nature Preserve. Hoosier Prairie is the largest remaining prairie/savanna complex in Indiana, and is a National Natural Landmark. This project will be to control Glossy Buckthorn, *Frangula alnus*, in two large tracts of the preserve.

### **DNR – Division of Nature Preserves - \$20,000 / \$20,000**

#### **Hoosier Prairie Nature Preserve, Savanna & Wetland Restoration**

The purpose of this proposed project is to restore native savanna and a small amount of wetland prairie at a portion of Hoosier Prairie Nature Preserve in Lake County, Indiana. The preserve contains diverse natural communities, including savanna and priority wetlands, especially wet prairie. It also contains many endangered and threatened species.

The overall goal of the project is to reduce the percentage cover of woody resprouts in the more diverse portions of Hoosier Prairie Nature Preserve. Specifically, the area of focus is management blocks 3 & 4.



## Projects Awarded in 2006 (cont.)

**DNR – Division of Nature Preserves - \$12,500 / \$12,500**

### **Clark and Pine East Phragmites Control**



This property is approximately 258 acres and it contains a mixture of globally rare dune and swale topography, sand-mined areas, two ponds and several hundred feet of frontage on the Grand Calumet River. Clark and Pine East provides habitat for numerous state listed plant and animal species and consists of sand savanna, sand prairie, wet prairie, sedge meadow, emergent marsh, and shrub swamp plant communities. The goal of this project is to significantly reduce the presence of *Phragmites australis* at Clark and Pine East. Numerous invasive plant species occur on the property.

### **Portage Parks Department - \$100,000 / \$332,649 Little Calumet Prairie River Public Access and Restoration Area**

Grant funds will be used to restore six acres of the Little Calumet River Public Access and Restoration Area property. The Portage Parks Foundation is donating the land to the Portage Parks Department to provide the required match and to allow for restoration and future management.



### **Town of Porter, IN Redevelopment Commission - \$100,000 / \$100,000 Orchard Pedestrian Bridge**

The Orchard Pedestrian Bridge and elevated pathway is the result of several years of planning the Orchard Pedestrian Way. The proposed project will connect the north and south walkway by installing a bridge across the Little Calumet River. Having been a goal of the Town of Porter since 2003, this is the perfect opportunity to finally move the project from the planning phase to design and construction phase.

The Town of Porter Parks and Recreation Department owns the parcel south of the Little Calumet River, and Indiana Department of Transportation owns the parcel north of the Little Calumet River. The project will have the following objectives: 1) bicycle/pedestrian Path 2) bird watching Area 3) Nature Walking Trail 4) access to the Lake Michigan tributary – Little Calumet River 5) connect a major project across the Little Calumet River.

### **Jerry Ross Elementary School, Crown Point, IN - \$9,700 / \$9,800 Jerry Ross Elementary Natural Habitat Restoration Project**

Jerry Ross Elementary School is proposing to develop a Natural Habitat Restoration Area within the school's Outdoor Learning Center in the school's courtyard. The proposed project includes various learning stations to support the school's inquiry-based science curriculum. (1)A constructed wetland featuring native emergent, pre-emergent, and sedge meadow plants;(2)An excavated pond that will support aquatic life and recirculate water through the wetland; and, (3)A prairie meadow habitat with native wildflowers and plants.

## Projects Awarded in 2006 (cont.)

### **Purdue University North Central - \$7,710 / \$7,710**

#### **Workshop on enhancing wetland education through GIS applications**

The funding request is to support a multi-agency Geographical Information (GIS) Workshop for the development of wetland education at Purdue University, North Central campus. Landscape-level GIS mapping for natural resource planning is becoming a common tool in most local, state, and federal agencies and the private sector. Much GIS information is being transferred among government organizations. Teachers and interpreters can learn how to use these tools to create and interpret maps for classroom and in-field studies. Students can learn from teachers the basic methods of GIS mapping, which can increase their technical skills required for future employment and higher education. Scientists from USGS National Wetlands Research Center will provide the technical support and implement the workshop. The intended audience for the 3-day workshop includes teachers, non-formal educators, and resource managers in Northwest Indiana.

### **Save the Dunes Conservation Fund - \$64,500 / \$64,500**

#### **Indiana Coastal Restoration Action Team – Training, Working, Outreach (ICRAT-TWO)**

Save the Dunes Conservation Fund, a 501(c)(3) organization, will address the need for natural area management training by coordinating training for the purpose of controlling invasive plants. Innovative training concepts as well as traditional training will be offered.



*ICRAT Workshop*

### **Valparaiso University - \$8,590 / \$11,792**

#### **Learning to keep the Coastline Rivers healthy in theory and practice**

The Valparaiso University Biology Department (VUBD) has a history (9 years) of providing a Biology Department Colloquium through its Biology Club and performing twice-yearly Stream Restorations (6 years) with volunteer labor and with direction and supplies from Rivertenders, an organization dedicated to wise river management. Valparaiso University seeks funds to focus both the colloquium and the restorations upon our coastal watershed. Local residents and students could thereby be given theoretical and practical training in coastal management.

Furthermore, the contact data for the local speakers, attendees and their organizations will be collected into a community address base for advance publicity. Second, VUBD will purchase supplies and a trailer with a small wet lab to their river monitoring and restoration efforts sustainable. We will work with Rivertenders and NWI Steelheaders by participating in their restoration efforts in Trail Creek and Salt Creek. Each restoration will include discussion and demonstration of chemical and biological monitoring as well as an explanation of the fundamental methodology and goals of river restoration.

## 2007 Grants

### **Allocation of 2007 Large Scale Coastal Grants – maximum award \$100,000 per project**

#### **§306(a) Low Cost Construction**

- Natural Area Restoration
- Recreational / Public Access Improvement
- Cultural / Historical Restoration

#### **§306(a) Acquisition (maximum award \$150,000)**

- Natural Area Preservation
- Recreational / Public Access
- Cultural / Historic Preservation

**§306 Planning / Coordination / Management**

- Natural Area Management Planning
- Recreational / Public Access Planning
- Cultural / Historical Resource Management
- Comprehensive Resource Planning

**§306 Education / Outreach**

- Natural Area Management Training
- Recreational Opportunity / Public Access Awareness
- Cultural / Historic Resource Management
- Comprehensive Resource Planning

**Allocation of 2007 Small Scale Coastal Grants – maximum award \$5,000 per project**

- Outreach and Education
- Resource Management

**Coastal Advisory Board Funding Priorities**

The Coastal Advisory Board voted for the 2007 Funding Cycle priorities:

- Natural Area Restoration
- Natural Area Preservation
- Natural Area Management Planning
- Natural Resource Awareness / Outreach

**New for 2007 – The Pre-Proposal Process**

The Lake Michigan Coastal Program implemented a new application format for the 2007 Funding Cycle. During the course of the last five years, LMCP sought public, applicant, and partner input on the usability of our grant materials. The program then created a three-page pre-proposal application in which applicants provide basic project information, such as a summary and a budget. The Coastal Advisory Board (CAB) then provides input to assist each applicant to move into the full-application phase. Each applicant receives one-on-one assistance from the Grants Program, incorporates the CAB input into their application, and the application is then scored by the Technical Advisory Committee. The Director of the Department of Natural Resources makes the final selections from the project applications that are to be submitted to NOAA for funding consideration.

**2007 Funded Projects**

<b>2007 Funded Projects Category</b>	<b>Project Title</b>	<b>Federal Award</b>	<b>Local Match</b>
Acquisition	Acquisition of Trail Creek Frontage at Liberty Trail – (Michigan City)	\$7,500	\$7,500
Restoration	Salt Creek Habitat Restoration – (Portage Parks Department)	\$100,000	\$100,420
	Long Lake Marsh Restoration Area – (Ogden Dunes)	\$15,700	\$15,700
	Natural Resource Management Plan Implementation – (DNR)	\$7,200	\$7,200
	Little Calumet River Restoration Area – (Portage Parks Department)	\$100,000	\$308,669
	Restoration on Trail Creek and fishing habitat at Karwick – (Michigan City)	\$33,000	\$33,000
	Suman Fen Reed Canary Grass Removal – (DNR)	\$22,500	\$22,500
	Hoosier Prairie Cattail Removal Demonstration – (DNR)	\$10,000	\$10,000
	Hoosier Prairie Inholdings – Buckthorn removal – (DNR)	\$7,425	\$7,425
	Calumet Prairie Woody Plant Control – (DNR)	\$50,000	\$50,000
Public Access	Fancher Lake Natural Area Restoration and Public Access – (Lake County Board of Commissioners)	\$80,000	\$80,000
	Karwick Nature Park Bridge over Trail Creek – (Michigan City)	\$100,000	\$184,000
Education/ Outreach	Indiana Adopt-a-Beach – (Alliance for the Great Lakes)	\$14,000	\$14,000
Planning	Little Calumet River Island Bridge and Boardwalk Plan (Town of Highland)	\$55,000	\$55,000
	Ecological Management of Indiana’s Coastal Industrial Habitats – (Wildlife Habitat Council)	\$14,957	\$14,957
Small Grant	Coastal Education Public Seminars – (Purdue University Calumet)	\$2,500	\$3,020
<b>TOTAL</b>		<b>\$619,782</b>	<b>\$1,013,391</b>

Status of Projects Awarded to Date 2005				
Project Sponsor and Title		Project Goal	Federal Award/Match	Status
Lake County Parks	Oak Ridge Prairie County Park – Site Enhancement and native plant project	Restore 66 acres by aggressively removing woody exotics	\$49,850/\$50,000	In-Progress
City of Hobart	Fred Rose Shoreline Natural Area Restoration and Stabilization	Stabilize 700 feet of shoreline using bioengineered methods	\$100,000/\$100,000	Complete
Town of Munster	Heritage Park Oak Woodland Restoration	Restore 11 acres of woodland to a native black oak savanna community	\$37,950/\$37,950	In-Progress
DNR Division of Nature Preserves	Clark and Pine East Dune and Swale Restoration	Restore 30 acres of a globally rare dune and swale community, by invasive removal	\$25,000/\$25,000	In-Progress
Town of Merrillville	Pruzin Park Habitat Restoration and Education	22 acre park will get trails and native wetland/prairie plantings	\$100,000/\$100,000	In-Progress
Save the Dunes Conservation Fund	Improving Capacity for Land Management Planning	Investigate land planning needs and practices, develop template, hold workshops	\$17,413/\$17,442	Complete
Save the Dunes Conservation Fund	<b>SMALL GRANT:</b> Eliminating Off-Road Vehicle Damage to Natural Areas	One day workshop discuss measures to address ORV damage	\$5,000/\$5,000	Complete
<b>FINAL TOTAL</b>			<b>\$335,213/\$335,392</b>	

## Project Highlights

### **Marquette Plan Phase II: The Lakeshore Reinvestment Strategy**

#### **Northwestern Indiana Regional Planning Commission**

##### *Currently in implementation phase*

The Marquette Phase I project set a goal of increasing public access and developing the urbanized area. The Marquette Plan Phase II imposes a new set of challenges with a different set of stakeholders and interest groups. The Marquette Plan Phase II will identify the needs of the smaller communities and create a vision that will identify and protect greenways, identify possible watertrails in the region and address the needs of smaller communities.

The Marquette Plan is a regional plan that creates a comprehensive land use vision for the Lake Michigan drainage basin and a strategy for implementation of that vision. Other current planning projects that will tie into this effort include the 12/20 Porter County Transportation Corridor Study, the LaPorte County Countywide Comprehensive Development Plan and the NIRPC Blueways and Greenways Trails Project.

### **Hansen Park Reconstruction Study and 8<sup>th</sup> and Dickson Public Access**

#### **City of Michigan City**

##### *Completed: September 2006*

A comprehensive study, design and implementation of many new public access amenities in two adjacent, underutilized parks located on Trail Creek in Michigan City. Amenities include fishing pads, trails, canoe launch ramps and observation deck.

The 8<sup>th</sup> and Dickson site has been renamed, through a city-wide naming contest. It is now referred to as Winding Creek Cove.



### **Demonstration of Oak Savanna Restoration in a Disturbed Lake Michigan Sand Dune**

#### **Purdue University**

##### *Completed: June 2007*

The purpose of this project was to conduct an experimental study and to demonstrate the experiment to the public. Oak seedlings were planted, while using various survival treatments, in abandoned sand mine as well as a disturbed site in the Tolleston Dune. The survival and growth was monitored. An interpretive sign was implemented, brochures were distributed, and six guided tours were held as well as two educator workshops. This project met its goals of enhancing the scientific understanding and feasibility for oak restoration and the promotion of public appreciation and awareness for the ecological importance of native habitats.



## 2003 Grant Cycle Close Out

The 2003 Grant Cycle ended June 30, 2006. Thirteen projects closed out the 2003 Funding Cycle. Successes include:

- 🌳 **Protected 264 acres** of valuable coastal habitat through fee-simple acquisition
- 🌳 **Restored 100 acres** of globally rare dune and swale habitat and wetlands
- 🌳 **Improved over 2200 lineal feet** of lake and stream bank
- 🌳 **Assessed** botanical structure and genetic diversity within rare intradunal ponds
- 🌳 **Educated over 100 students** on coastal issues and community initiatives
- 🌳 **Established** the Indiana Coastal Restoration Action Team
- 🌳 **Explored** the rich history of shipping and trading in the Michigan City area

## 2004 Grant Cycle Close Out

The 2004 Grant Cycle ended June 30, 2007. Fourteen projects closed out the 2004 Funding Cycle. Notable accomplishments include:

- 🌳 **Increased and improved public access** at three underutilized urban parks on Trail Creek: Karwick Park, Hansen Park and Winding Creek Cove Park.
- 🌳 **Developed new water quality improvement initiatives** for two important coastal water bodies: Coffee Creek and the Marquette Lagoons
- 🌳 **Created a natural resource management plan** for two adjacent protected properties: Wintergreen Woods and Sebert Park
- 🌳 **Demonstrated techniques** for the restoration of an oak savanna in disturbed sand dunes
- 🌳 **Identified fish spawning and nursery areas** in river mouths of tributaries to Lake Michigan
- 🌳 **Created high quality prairie and wetland complex** along the Little Calumet River in Gary, Indiana

## Great Lakes Restoration Grants Program Close Out

In partnership with the National Oceanic Atmospheric Administration (NOAA), the Indiana Lake Michigan Coastal Program (LMCP) works with local communities and State agencies to preserve, protect, develop, restore, and enhance coastal zone resources. The LMCP received \$1,750,000 in 2001 through NOAA's Great Lakes Coastal Restoration Grants (GLCRG) Program and selected 13 projects utilizing \$1,280,901.09 of federal funds. These projects contributed an additional \$539,405.38 through matching funds to the protection of threatened resources in Indiana's Lake Michigan coastal region. During the funding time period the State of Indiana experienced many changes. In August 2002 the Indiana Lake Michigan Coastal Program (LMCP) was Federally approved. Prior to that time the Great Lakes Coastal Restoration Grant was administered through the Indiana Department of Natural Resources through resolution from the Indiana Natural Resources Commission. As the LMCP was not Federally approved at the time the GLCRG funds were made available the State of Indiana needed to create a new granting mechanism to administer the GLCRG funding. Due to this lack of existing structure the expenditure of this GLCRG funding was delayed. The State of Indiana requested and received no cost extensions for the GLCRG funding to extend the grant period beyond the original 18 month duration. The last extension expired September 30, 2006.

From this grant and the two succeeding CZM awards we have learned some lessons regarding project management. The GLCRG presented unique issues to contend with being that projects were put on hold during NOAA review process, state grant process introduced delays, and local grantees encountered match issues. On future grant projects we will more strictly enforce work completed and

expenditure requirements at the outset of the project. Projects not demonstrating success and progress will be cancelled and funding transferred to more successful endeavors. Several of the GLCRG grantees stated that delays would be resolved and work complete in the specified time period, but never was. If these grantees apply for future CZM funding their grants will be heavily conditioned to required proof of project readiness and success.

## Section 6217 - Coastal Nonpoint Pollution Control Program

To address more specifically the impacts of nonpoint source pollution on coastal water quality, Congress enacted Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990. Section 6217 requires that each state with an approved coastal zone management program develop and submit for approval a Coastal Nonpoint Pollution Control Program (CNP) to the U.S. Environmental Protection Agency (USEPA) and to NOAA. The purpose of the program “shall be to develop and implement management measures for nonpoint source pollution to restore and protect coastal waters, working in close conjunction with other state and local authorities.”

An Environmental Assessment was completed for Indiana’s CNP in May of 2007 based on the program document and supplemental data supplied to NOAA and USEPA. Indiana’s CNP includes management measures for agriculture, forestry, urban and rural development, marina and hydro modification nonpoint source categories, wetlands, riparian areas, and vegetated treatment areas. The CNP boundary is based on the Little Calumet-Galien River watershed.

The LMCP is working on the approval process for the CNP. To receive conditional approval, CNP program documents will be announced on the Federal Register, and public comments incorporated. Finally, the LMCP will need to meet certain conditions, including the development of a monitoring plan to assess over time the efficacy of a CNP, and final development of certain program areas such as management of riparian restoration efforts, and other nonpoint source categories.

## Watershed Management

The CNP provides technical assistance in the development and implementation of management plans within the Little Calumet-Galien River watershed to assure consistency with the program guidance, including Dunes Creek, Trail Creek, Coffee Creek, Salt Creek, West Branch of the Little Calumet River, and Willow Creek, Deep River/Turkey Creek. Joe Exl is currently working with three watershed committees: Trail Creek, Salt Creek, and the West Branch of the Little Calumet River and Willow Creek.



The CNP was honored to receive a plaque this year from Michigan City for “Outstanding Project Management” for assisting in the development of the Trail Creek Watershed Management Plan.

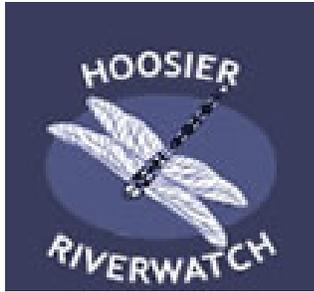
As part of the Save the Dunes Conservation Fund watershed planning efforts for Dunes Creek and Salt Creek, the CNP provided technical assistance for a workshop on Low Impact Development (LID).



LMCP Section 306 funding has been used to implement several projects identified through watershed management plans, including:

- Shoreline habitat enhancement along Lake George in the Deep River/Turkey Creek watershed.
- Acquisition of wetlands and riparian habitat in Portage/Salt Creek watershed.
- Stream restoration to improve fish habitat as well as streambank stabilization along portions of Salt and Trail Creek.

### Hoosier Riverwatch Workshops



Hoosier Riverwatch is a volunteer-based water quality monitoring program coordinated through the DNR's Division of Fish & Wildlife. The goals of Hoosier Riverwatch are to increase public involvement in water quality issues, promote water resources stewardship, and provide water quality information to citizens and government officials working to protect Indiana's rivers and streams.

Joe Exl received certification in March, 2006 and provides outreach and training as well as a loaner water quality monitoring trunk to registered volunteers. Four workshops were attended by teachers, nonprofit organizations, college students, concerned citizens, and staff from the Indiana Dunes Environmental Learning Center.



### Dunes Creek Daylighting - Watershed and Water Quality Education and Outreach

The Dunes Creek Daylighting project site located in Indiana Dunes State Park is used in outreach and education programs to illustrate the project and its broader implications in the watershed. These include:

- The Save the Dunes Conservation Fund's natural stream design workshop "Stream in a Ditch".
- Hoosier Riverwatch workshops hosted at Indiana Dunes State Park.
- IDEM and Indiana Association of Soil & Water Conservation Districts watershed networking session at the Park.
- The Indiana Master Naturalist Program, produced by the Save the Dunes Conservation Fund and the LMCP



## Indiana Clean Marina Program



The Indiana Clean Marina Program is a voluntary, incentive-based program that encourages marinas and recreational boaters to incorporate “clean boating” practices. Beginning in 2006, development of an Indiana Clean Marina Program included presentations to stakeholders, an August 2006 meeting with the Harbormasters from three of the largest marinas along Indiana’s Lake Michigan shoreline, and a dockside meeting held at the Washington Park Marina in Michigan City. The LMCP is developing a clean marina program guidebook highlighting some of the potential pollutants generated by marinas and recreational boating; best management practices (BMPs) that can be implemented by boaters and the marina; a list of some of

the relevant state and federal regulations that apply to marinas; and most importantly guidance for marinas to work toward achieving “Indiana Clean Marina” designation.

## Coastal Conservationist

The Lake Michigan Coastal Program and the Lake County, Porter County, and La Porte County Soil and Water Conservation Districts (SWCD’s) are funding a Coastal Conservationist position at the Northwest Territory Resource Conservation and Development Council (RC&D). The position serves as a liaison between watershed coordinators, land users, and USDA personnel providing targeted USDA financial and technical assistance services to clients. The use of Better Management Practices (BMPs) including filterstrips, conservation tillage, tree plantings, wetland restoration and others will be promoted in the development of watershed management plans.

## Rain Gardens

The CNP uses rain gardens as an educational tool to provide homeowners, businesses, and communities a tool for stormwater reduction.

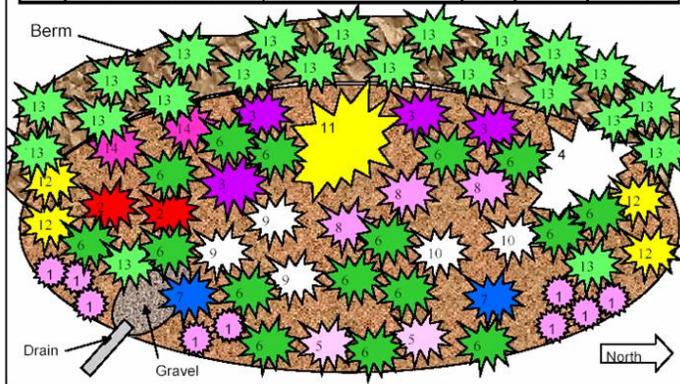
### Outreach:

Partnered with Save the Dunes Conservation Fund, Northwest Indiana Regional Planning Commission, and Porter County Master Naturalist Program held workshop on design and installation of rain gardens.

### Implementation:

- Installed a demonstration rain garden at the LMCP's Dunes State Park office
- Partnered with Save the Dunes Conservation Fund to install a rain garden and signage at the new Porter County Visitor Center
- Partnering with the LaPorte County SWCD to install a rain garden at the Washington Park Marina in Michigan City.

ID #	Latin Name	Common Name	Qty	Height	Spacing
1	Allium cernuum	Nodding Pink Onion	9	1-2 ft	6 in
2	Asclepias incarnata	Red Milkweed	2	3-5 ft	1 ft
3	Aster novae-angliae	New England Aster	4	3-6 ft	1 ft
4	Baptisia lactea	White False Indigo	1	3-5 ft	2 ft
5	Boltonia asteroides	False Aster	2	2-4 ft	1 ft
6	Carex vulpinoidea	Fox Sedge	16	1-3 ft	1 ft
7	Iris versicolor	Blue Flag Iris	2	2-3 ft	1 ft
8	Liatris spicata	Marsh Blazing Star	3	3-5 ft	1 ft
9	Parthenium integrifolium	Wild Quinine	3	3-5 ft	1 ft
10	Penstemon digitalis	Smooth Penstemon	2	2-3 ft	1 ft
11	Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1	4-6 ft	2 ft
12	Solidago rigida	Stiff Goldenrod	4	1-5 ft	1 ft
13	Sporobolus heterolepis	Prairie Dropseed	22	2-3 ft	1 ft
14	Vernonia fasciculata	Ironweed	2	4-6 ft	1 ft



Dunes Creek Watershed  
Rain Garden Demonstration Project  
Indiana Dunes State Park  
Porter County, Indiana

Figure 10. Plant List and Planting Plan



*Installing a new rain garden at the  
LMCP Office, Indiana Dunes State Park*

## Staff Contact Information

### **Indianapolis Office:**

402 West Washington Street, Room W267  
Indianapolis, IN 46204  
317/233-0133 FAX

### **Mike Molnar**

Program Manager  
Lake Michigan Coastal Program  
317/233-0132  
[mmolnar@dnr.in.gov](mailto:mmolnar@dnr.in.gov)

### **Jenni Newman**

Program Assistant  
Lake Michigan Coastal Program  
317/234-3985  
[jnewman@dnr.in.gov](mailto:jnewman@dnr.in.gov)

### **Dunes State Park Annex Office:**

Indiana Dunes State Park  
1600 North 25 East  
Chesterton, IN 46304  
219/926-9775 FAX

### **Jenny Orsburn**

Program Specialist  
Lake Michigan Coastal Program  
[jorsburn@dnr.in.gov](mailto:jorsburn@dnr.in.gov)  
219/983-9912

### **Joe Exl**

Coastal Nonpoint Coordinator  
Lake Michigan Coastal Program  
[jexl@dnr.in.gov](mailto:jexl@dnr.in.gov)  
219/921-0863

### **Susan Melnyk**

Special Projects Coordinator  
Lake Michigan Coastal Program  
[smelnyk@dnr.in.gov](mailto:smelnyk@dnr.in.gov)  
219/926-9757



**DNR**  
Indiana Department of Natural Resources



This publication made possible under Cooperative Agreement number NA06NOS4190161 from the National Oceanic and Atmospheric Administration Office of Ocean and Coastal Resource Management.