



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

**Annual Report 2006
And
Background Document**

April 19, 2006



DNR
Indiana Department of Natural Resources



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FUNDING

Funding for these projects is made available through a mix of Federal, State, Local, and Nonprofit funding. The Lake Michigan Coastal Program is part of the Federal Coastal Zone Management Program. Each year the LMCP receives funding from the National Oceanic and Atmospheric Administration via a cooperative agreement. Federal funding from the following cooperative awards is reflected in this report:

- NA17OZ1381 – Great Lakes Coastal Restoration Grant – FY 2001
- NA17OZ2334 – Coastal Grant – FY 2002
- NA03NOS4190083 – Coastal Grant – FY 2003
- NA04NOS4190039 – Coastal Grant – FY 2004
- NA05NOS4191061 – Coastal Grant – FY 2005

PARTNERSHIPS

The LMCP would like to thank our Federal, State, local and nonprofit partners. It is through our continued working relationship and partnering that we can make a difference in the future of the Lake Michigan watershed. Thank you for a good 2004-2005. We look forward to a great 2005-2006!

Part I. INTRODUCTION

The Indiana Lake Michigan Coastal Program (LMCP) received Federal Approval in August 2002. This document is the first Annual Report compiled since the LMCP received Federal approval and actually covers a period of longer than one year. This document spans back to 2002 and all the intervening years until present. This document provides a wealth of background information on the components of the LMCP as well as notable achievements during the past several years. It is our intent that you the reader will walk away with a better understanding of the purpose of the LMCP and how all the interrelated components make up the whole.

The Vision of the LMCP is to facilitate the coordination of Coastal Resource Protection, and Preservation through accountable and efficient planning, practice and stewardship.

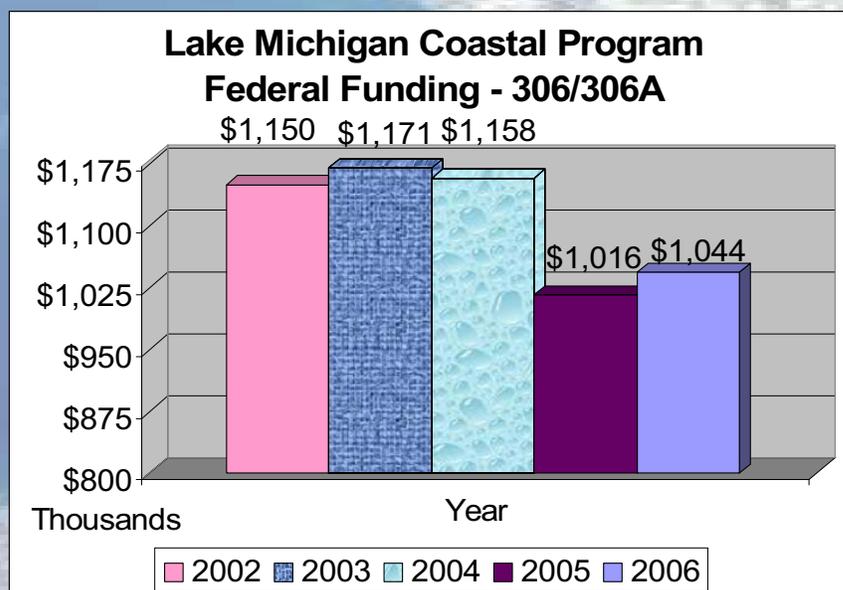
The Purpose of the Indiana Lake Michigan Coastal Program is to enhance the State's role in planning for and managing natural and cultural resources in the coastal region and to support partnerships between federal, state and local agencies and organizations. The Indiana Lake Michigan Coastal Program relies upon existing laws and programs as the basis for achieving its purpose.

Background

Participation in Federal Coastal Program -

The Coastal Zone Management Program is a national initiative that focuses on balancing the economic prosperity and environmental health of the nation's coasts. Thirty-four of the 35 coastal states and territories participate in the federal program. Illinois is the only state that has not yet participated of the eligible states. The National Oceanic and Atmospheric Administration (NOAA) administers federal funding for the Coastal Zone Management Program.

The amount of funding to the Indiana program is variable based upon a formula derived by NOAA for the distribution of allocated and deobligated previous years funding. Since inception the LMCP has had a high of \$1.171 M (2003) and a low of \$1.016 M (2005) in funding for the general programmatic component represented by Section 306 and Section 306A of the Coastal Zone Management Act.



Participation in the Coastal Zone Management Program makes it possible for the Lake Michigan Coastal Program to support activities that achieve the following goals in the coastal region:

- 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.

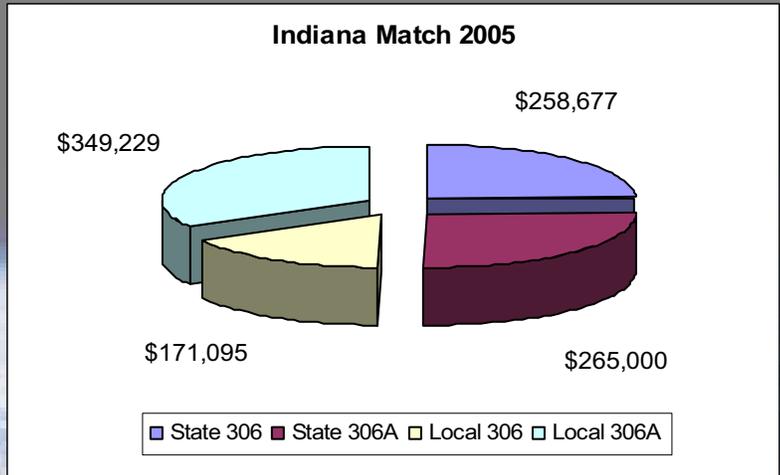
The Indiana Lake Michigan Coastal Program (LMCP) is a “networked” program made up of several Indiana natural resource protection programs. The lead agency for implementing the program is the Indiana Department of Natural Resources (DNR). Since the program was approved in 2002, the Division of Soil Conservation had responsibility for providing administrative support to the coastal program staff and coordinating the networked state agency partners.

Program Operations -

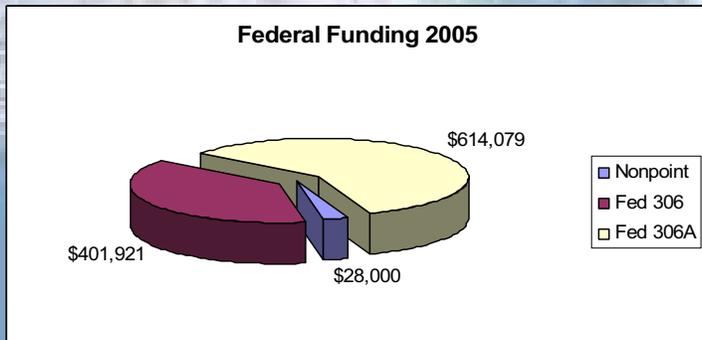
The 2005 Indiana Legislative Session brought interesting changes to the Indiana LMCP. The passage of House Bill 1008 moved the Division of Soil Conservation from the DNR to the newly created Indiana State Department of Agriculture. The LMCP staff and program coordination responsibilities were to remain with the DNR Nature Preserves Division. However, the entire associated budget was transferred to the newly created agency.

The LMCP received a line item appropriation in the Budget Bill. DNR and State Budget Agency staff met during the transition period and secured funding for the LMCP in the State Budget Bill. At the outset of 2005 the state was projected having an almost a \$600 million deficit for the budget year beginning July 1. Because Indiana operates under a constitutional requirement to balance its budget, agencies were directed to prepare operating budgets with a 7% reduction in base funding. The State Budget Bill HB 1001 appropriated \$143,000 of dedicated cigarette tax funds to the Coastal Program; however this funding was reduced to \$132,990 due to the 7% budget reduction. LMCP programmatic funding increased in 2005. This represents a net increase in dedicated funding for the program as the only dedicated funding previously was for the Program Manager position. However, the staff support the LMCP receives may have been reduced during this transition. The LMCP previously benefited from its alliance with Division of Soil Conservation staff time on personnel, technical, GIS, Web, and other assorted administrative support tasks. While the LMCP lost direct linkage to these positions, it maintains some of the support through the networked program. The LMCP transferred a Programmatic Administrative position from Soil Conservation as part of the transition to the Division of Nature Preserves. With the addition of the state funded Program Assistant and the addition of the Coastal Nonpoint Pollution Coordinator position in early January 2005, the LMCP doubled dedicated program staffing over previously established levels.

Funding from State, Local, and Nonprofit organizations includes programmatic operating funds and project specific funding. Total match provided for the 2005 award was \$1.044 M. The breakout of this match is presented in the figure to the right. A more detailed discussion of the cost and match breakout is presented in the respective sections of this report.

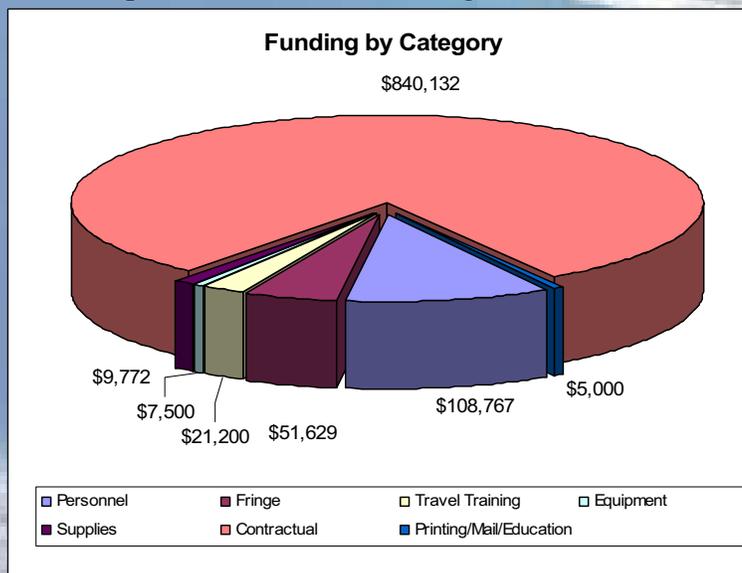


The LMCP received Federal funds in three categories: 1) Section 306, 2) Section 306A, and 3) Nonpoint Pollution Control. The largest funding component in 2005 was the Section 306A funds. These funds are eligible to be used for property acquisition and low cost construction projects. The Section 306 funds can be used for planning, education and outreach, technical assistance, research, and other non-construction related projects. The Nonpoint funding can be used to further the Nonpoint control plan.



Staff support is an important factor in one of the major components of the LMCP, technical support. LMCP staff enhance the State's role in planning for and managing natural and cultural resources in the coastal region and support partnerships between federal, state and local government agencies and organizations. As important as staffing is to support the program, the LMCP realizes the importance of passing funding through to local and state partners to achieve on the ground work.

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Major Components of the Lake Michigan Coastal Program -

Based on Existing Policies and Laws

The Lake Michigan Coastal Program was developed on the strength of Indiana's existing policies and laws that address land and water uses and resource protection. The program document serves as a comprehensive reference that identifies entities that carry out existing programs, policies, and laws to manage coastal resources. The program document also serves as a reference for the identification of partnership and coordination opportunities. Through an extensive public process, 10 issue-areas were identified. Indiana's existing policies and laws were detailed for each of these areas.

- Procedural Framework
- Coastal Hazards
- Water Quality
- Water Quantity
- Natural Areas, Fisheries, Wildlife, and Native and Exotic Species
- Recreation, Access, and Cultural Resources
- Economic Development
- Pollution Prevention, Recycling, Reuse, and Waste Management
- Air Quality
- Property Rights

Coastal Advisory Board

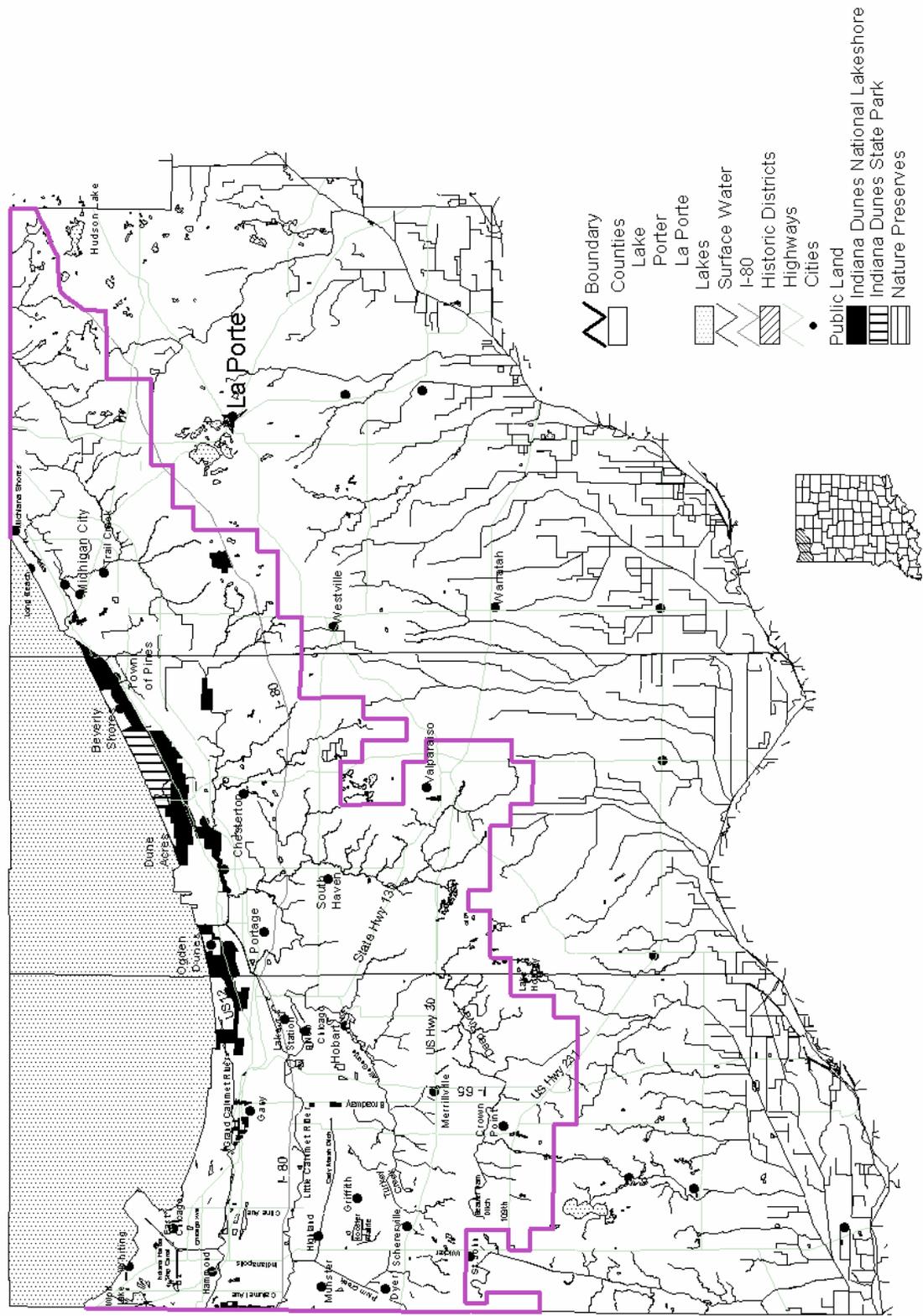
The Coastal Advisory Board (CAB) serves as a stakeholder advisory group. One of the functions of the CAB is to provide input for the Coastal Grants Program. The first meeting of the CAB was April 29, 2003. The CAB consists of representatives from northwest Indiana and is representative of the broad range of interests and experience in the coastal region.

Coastal Program Area

The Coastal Program Area defines the lands and waters eligible for financial and technical assistance through the Lake Michigan Coastal Program. Based on public participation and comment, the proposed program boundary was established to approximate the region's watershed. The watershed encompasses the majority of the area that drains into Indiana's portion of Lake Michigan through its rivers, streams, ditches, wetlands, lakes, and groundwater. A watershed approach provides a comprehensive approach to planning for and managing natural resources that focuses on producing environmental results while incorporating the communities that depend on those natural resources. A watershed approach can also leverage financial and other resources, improve coordination among intergovernmental jurisdictions, and reduce duplication of efforts and conflicting actions. The boundary follows the 45-mile shoreline and the approximately 54 miles along an east-west trajectory across the Valparaiso Moraine.

Included within the boundary are lands subject to lake flooding and erosion, estuaries and wetlands, ecologically significant areas formed by glacial Lake Michigan, coastal recreation areas, and areas of cultural and historic significance to the region.

Lake Michigan Coastal Program Area



Coastal Program Network

There are numerous state and local entities that are responsible for managing resources in the coastal region. The role of these entities remains unchanged. The Lake Michigan Coastal Program sets forth a framework, based on existing policies, laws, and programs, that links existing agencies and laws into a comprehensive system.

In January 2006 the LMCP conducted the first annual Indiana Coastal Partners Meeting for state agency staff. The LMCP staff presented information on the various program components and answered many questions regarding ongoing and future initiatives. This meeting was the first step in reinforcing the coastal partner's network at the state level. Several workgroups were formed as part of this initiative and the state coastal partners will work to improve things such as Grant Coordination, Nonpoint Pollution Control, and Federal Consistency.

Indiana Lake Michigan Coastal Grants Program

The Coastal Grants Program makes funding available through an annual competitive grants process. The LMCP makes approximately 80% of its cooperative award from NOAA available for the grant program. The Coastal Grant program is guided by public input each year. Approximately 25 members of the public attended the first annual public priorities meeting July 13, 2005 meeting, with many providing input to the LMCP and the Coastal Advisory Board regarding priorities for the upcoming 2006 funding cycle.

Federal Consistency

Federal actions are usually exempt from state laws and regulations. The Coastal Zone Management Act affords the state the ability to review all actions that may have a detrimental impact within the coastal area. Through Federal Consistency federal actions which affect coastal resources must be conducted consistently to the maximum extent practicable with the existing state laws detailed in the program document. Actions of federal agencies subject to federal consistency include direct activities, federal licenses, permits, or other required federal approvals to non-federal applicants, and financial assistance programs. Federal consistency encourages early coordination and participation on federal actions that affect the Coastal Program Area.

Coastal Areas of Significance

Some coastal areas are particularly significant or have special conditions that warrant increased attention. These areas are distinguished by either their unique coastal-related qualities or the intense competition for use of their resources. State agencies, local governments, organizations, and the general public can nominate coastal Areas of Significance.

Coastal Areas of Significance are an important planning concept as well as important with regards to the Coastal Grants program. Federal program guidance requires that the expenditure of funds for the acquisition or restoration of resources must occur within a Coastal Area of Significance in the Coastal Area. In addition, areas identified as a Coastal Area of significance will receive heightened attention toward improving interagency cooperation, technical

assistance, and local planning. The full implementation of the Coastal Areas of Significance process will benefit greatly from the current Coastal and Estuarine Land Conservation Program planning initiative.

There are two categories of Coastal Areas of Significance:

Areas of Particular Concern (APC) - are identified as broad groups of coastal areas that face similar problems for which priorities can be defined. These areas are significant for their ecological, recreational, historic, cultural, or economic values. The program document describes the primary issues facing the area, guidelines on priority uses of these areas, and criteria for identification.

Areas for Preservation and Restoration (APR) - are specific areas that require protection or restoration for their conservation, ecological, or recreational values. These are public or otherwise protected sites where the preservation and restoration of the area's unique values are or will become the dominant public policies. Although funds may also be used to acquire APR, Indiana remains sensitive to the potential impacts on local economies that might result.

Coastal Nonpoint Pollution Control Program

The Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), includes a provision, Section 6217, which requires that states and territories with approved coastal management programs develop a coastal nonpoint pollution control program (CNPCP) to address water quality impairment of coastal waters. Indiana's CNPCP document identifies the programs and enforceable authorities that will be used to control nonpoint pollution in each of six nonpoint source categories, as defined in the Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Water.

Coastal and Estuarine Land Conservation Program (CELCP)

The Coastal and Estuarine Land Conservation Program (CELCP) is an opportunity for the state to identify important resource areas in the coastal region. The Department of Commerce, Justice, and State Appropriations Act of 2002 (Public Law 107-77), directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program "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," giving priority to lands which can be effectively managed and protected and that have significant ecological value.

Section 309 Needs Assessment and Strategy

Section 309 of the Coastal Zone Management Act (CZMA), as amended in 1990 and again in 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.

Part II. COASTAL ADVISORY BOARD

Public input and involvement is a key component of the work performed by the Indiana Lake Michigan Coastal Program (LMCP). The LMCP involves the public in every major project it undertakes. However, the main public input mechanism that was crafted into the LMCP Program Document is a public advisory board.

The Lake Michigan Coastal Program receives input and guidance from the Coastal Advisory Board. The Board is comprised of 27 members, 19 voting and 8 ex-officio non-voting members. The Board provides a forum for public input on regional issues affecting Lake Michigan coastal resources. Voting members of the Coastal Advisory Board 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.

Meetings are held quarterly and rotate among locations in the Coastal region. The Chair or a simple majority of the Board can call a special meeting of the board.

2005-2006 Coastal Advisory Board Meetings

- January 26, 2005 – Regular Meeting
- April 20, 2005 – Regular Meeting
- July 13, 2005 – Regular Meeting
- September 21 – Special Meeting
- October 12, 2005 – Regular Meeting
- January 18, 2006 – Regular Meeting

2005-2006 Coastal Advisory Board Officers

Chair – Charlotte Read
Vice-chair – Dorreen Carey
Secretary – Tim Morgan

The Coastal Advisory Board performs vital roles including:

Stakeholder Representation: Providing a diverse perspective on coastal issues and a close connection between the Lake Michigan Coastal Program and local communities and citizens.

Priority Setting: Assisting in setting priorities for the Coastal Grants Program through Board meetings, public meetings, and by recommending grant program guidance and project evaluation criteria.

Public Involvement: Providing a forum for public input on the Coastal Grants Program through annual public meetings for comments on program guidance and through opportunities for public comment at quarterly meetings.

Planning and Coordination: Assisting the Lake Michigan Coastal program with identifying and planning Coastal Areas of Significance.

COASTAL ADVISORY BOARD MISSION STATEMENT -

The Coastal Advisory Board provides a public forum for diverse stakeholders to assist with the implementation of the Lake Michigan Coastal Program.

COASTAL ADVISORY BOARD MEMBERSHIP 2005-2007

Voting Members:

Agriculture

Edgar Corns, Lake County Soil and Water Conservation District Board

Citizen

J. Allen Johnson, Lake County

Henry Bliss, Porter County

Vacant, LaPorte County

Environment

Charlotte Read, Save the Dunes Council

Historical Resources

John Heidbreder, President, Lake County Sheriff's House Foundation

Indiana Dunes National Lakeshore

Dale Engquist, Superintendent

Industry and Business

Kay Nelson

Lake Dependent Uses

John Smolar, Director, Portage Port Authority

Lake Michigan Aquatic Resources

Jack Hires, NW Indiana Steelheaders

Local Land Trusts or Land-holding Nature Conservancies

Paul Labus, The Nature Conservancy

Local Parks and Recreation

Tim Morgan, Superintendent, LaPorte County Park and Recreation Department

Northwestern Indiana Regional Planning Commission

Kevin Breitzke, Commission Secretary

Port of Indiana at Burns Harbor

Stephen Mosher, Port Director

Tourism

Vacant currently

Universities

Dr. Mark Reshkin, Professor Emeritus, Indiana University Northwest

Lake County City or Town

Dorreen Carey, Environmental Affairs Coordinator for the City of Gary

Porter County City or Town

David Pilz, City Engineer for the City of Valparaiso

LaPorte County City or Town

Vacant currently

Non-voting Members:

IDEM

Vacant, Director of NW Regional Office

INDOT

Ben Lawrence, Environmental Assessment

IDOC

Vacant currently

NRCS

Bill Moran, District Conservationist

USFWS

Liz McCloskey, Northern Indiana Office

Illinois-Indiana Sea Grant

Leslie Dorworth, Associate Director

U.S. EPA, Region 5

Karen Rodriguez, Great Lakes National Program Office

U.S. Army Corps of Engineers

Great Lakes and Ohio River Division, Chicago District

Part III. LMCP STRATEGIC PLANNING INITIATIVE

Background

The LMCP commenced the development of the first ever Coastal Strategic Plan on November 20, 2005. Over the course of several planning meetings LMCP staff:

- 1) conducted a S.W.O.T. (Strengths, Weaknesses, Opportunities, and Threats) analysis;
- 2) Reviewed historical documentation;
- 3) Developed a Vision Statement;
- 4) Crafted four Program Goals, associated Objectives and Actions; and
- 5) Developed a Timeline of key events and associated staff responsibilities.

The Vision, Goals, and associated Objectives are included below. The Actions identified in the Strategic Plan are not included due to their variability and changing nature. The Goals and Objectives will be reviewed and revised on an annual basis, while the Actions may change on a monthly basis depending upon perceived need and relative importance.

LMCP Vision Statement

The Vision of the LMCP is to facilitate the coordination of Coastal Resource Protection, and Preservation through accountable and efficient planning, practice and stewardship.

Goal 1: Provide financial and technical assistance to state, local and regional government and NGOs to protect, preserve and properly manage coastal resources

Objective 1-1 – To implement annual grant program to protect and preserve coastal resources

Objective 1-2 – To provide other financial opportunities to protect and preserve coastal resources

Objective 1-3 – To provide technical assistance to protect and preserve coastal resources

Goal 2: Implement program documents through coordination of networked partners.

Objective 2-1 – To engage Network Partners, as identified in program document, in the implementation of the Coastal Program.

Objective 2-2 – To improve and maintain communication within and among networked partners.

Goal 3: Develop and maintain a transparent and comprehensive program through regular self assessment and public involvement.

Objective 3-1 - To develop and present program information in a user-friendly format

Objective 3-2 - To increase and maintain opportunities for public involvement in the program assessment process

Objective 3-3 - To conduct programmatic self-assessments on a regularly scheduled basis

Objective 3-4 - To assure adequate internal staff support and development

Goal 4: Empower Coastal Community to become active stewards of coastal resources

Objective 4-1 - To support local group's outreach and education efforts

Objective 4-2 - To provide a mechanism for coastal communities and other entities to interact with one another as stewards of coastal resources

Objective 4-3 - To promote a sustainable quality of life in the coastal region.

Objective 4-4 - To provide education and outreach to coastal community

Improved Coordination and Planning

The purpose of the Strategic Plan is to improve coordination and planning among LMCP programs and those of our networked partners. The LMCP presented the Strategic Plan in its entirety to State Network Partners. It is the intent of the LMCP that the Plan be reviewed and integrated into the actions of Network Partners. The framework and associated timeline allow for better coordination of efforts where more than one agency has an interest and associated authority. In addition, the creation of the Strategic Plan and associated Timeline are crucial to the ongoing operation of the LMCP dedicated programs. Without guidance and planning the LMCP would function from a reactive position rather than a proactive one.

Part IV. FEDERAL CONSISTENCY

Background

The term “federal consistency” refers to the requirement of the Coastal Zone Management Act, (CZMA), 16 U.S.C. 1451, 1456 et seq., and implementing regulations at 15 CFR Part 930, that certain federal actions that affect any land or water use or natural resource of a state's coastal zone be consistent with the state's federally approved coastal program. Indiana's coastal program is based upon existing state laws, which will be considered as Indiana's enforceable policies for the purposes of federal consistency. It is important to note that Indiana’s decisions for federal consistency purposes will be based on whether an existing state law, as described in Chapter 5 of the LMCP Program Document, would apply to the proposed action. Consistency will only be required of actions addressed by state laws, regardless of whether it is conducted by a local, state, or federal entity.

The following federal actions are subject to federal consistency:

1. Federal agency activities;
2. Federal license or permit activities- activities by private enterprise or by state or local government which require federal approval of some form; and
3. Federal financial assistance to state and local governments.

The federal consistency requirement encourages cooperation, coordination, and communication among governmental entities. Federal consistency also gives the state an effective voice in actions of the federal government affecting the state’s coastal zone.

The Indiana LMCP is a comprehensive networked program that relies on the appropriate state agencies to evaluate the federal actions outlined above for consistency. Each of the state agencies networked with the LMCP manages its own responsibilities, issues its own permits, administers its own federal grant monies, etc. The DNR, as the lead state agency, coordinates federal consistency reviews with these state agencies and serves as the point of contact for consistency reviews.

Nonrule Policy Document Guidance

A workgroup was formed within the Department of Natural Resources, to develop a draft to help implement Federal Consistency. All divisions within the Department of Natural Resources were invited to assist. There was participation by the Division of Water, Division of Soil Conservation, Division of Forestry, Division of Fish and Wildlife, Division of Nature Preserves, Division of Outdoor Recreation, Division of Engineering, Division of Law Enforcement, Division of Entomology and Plant Pathology, Division of State Parks and Reservoirs, and Division of Historic Preservation and Archaeology.

The Natural Resources Commission approved the Nonrule Policy Document at the January 20,

2004 meeting. The document became effective on March 1, 2004. The document outlines both the internal review timeline and process and the public comment timeline and process.

Public Input Process

Public comments on proposed actions are accepted for a period of ten (10) days after posting to the Indiana Federal Consistency Register website or emailing of public notice, whichever occurs later. Any person who asserts the activity would not meet federal consistency must state with reasonable particularity the state law or laws that would be violated.

The LMCP provides the applicant, and any person who has offered timely comments, with written electronic notice of its intention to concur or object to a certification of federal consistency. Once the LMCP issues notice of action on a given project/proposal any person may supplement the record of the LMCP within five (5) days of notice. In addition to the web posting the LMCP also maintains and utilizes an electronic distribution list of interested parties who want to receive electronic notification of new consistency determinations.

Consistency Review Determinations

| Project ID | Date Received | Project Description | Determination |
|------------------------------|---------------|---|---------------|
| 445E3DF5E6BF | 4/5/04 | Town of Merrillville HUD Grant – Waterline project | Consistent |
| 21EB213EE11E | 4/19/04 | Town of Merrillville HUD Grant – Waterline project | Consistent |
| 16E4F69D7FD5 | 7/16/04 | Gary/Chicago Airport | Consistent |
| B8D703D19FFE | 6/8/05 | NIPSCO Incidental Take Permit | Consistent |
| 531E74F7C2E3 | 6/9/05 | US Steel Wastewater Treatment Plant Demolition | Consistent |
| 1BFD93FCEC2A | 6/28/05 | Revisions to Magnuson-Stevens Conservation and Management Fishery Act modifications | Consistent |
| FDC80C202DD3 | 10/3/05 | NIPSCO Bailly Generating Station Intake Dredging | Consistent |

During the time period April 2004 through March 2006 the LMCP received seven Consistency Determination Requests. These requests range from utility line placement to maintenance dredging. None of the proposed projects violated State Laws as proposed and thus were found consistent by the LMCP and networked state partners. All applicants obtained the necessary state and Federal permits or licenses and conducted the work accordingly.

Process Flow

The LMCP further refined the process outlined in the Nonrule Policy Document to clarify the timeline and review flow for applicants and partner review staff. The two following diagrams illustrate the state review process for Consistency Determinations. The diagrams are separated into 1) Federal Agency Action and Federal Financial Assistance and 2) Federal Permit/License Action. The distinction is based upon the applicable review timeline. The process between the two is the same with the exception of timeline and the ability to seek an extension to the review period for Federal Permit/License Actions.

Future Improvements

The LMCP is currently working with partner programs in the Department of Natural Resources to streamline the Federal Consistency review process by combining it with the Environmental Review process. This coordination will reduce redundancy in staff review and improve efficiency of the Federal Consistency review process by utilizing the existing review process established for the Environmental Review.

**Federal Agency Action
Federal Financial Assistance
Federal Consistency Flow Chart**

Applicant Submits Consistency Determination to LMCP 60 Days prior to action

Public Comment Period (10 Days)

LMCP Internal Process
LMCP assigns Fed Consistency Project Number (FCP), distributes via email to reviewers, publishes to website in LMCP Federal Consistency Register, provides notice to interested parties

Agency Review Process (40 Days)

Public Comment to Supplement Information (5 Days)

LMCP Issues Initial Determination (w/in 40 days)

Final Determination
(w/in 60 Days)

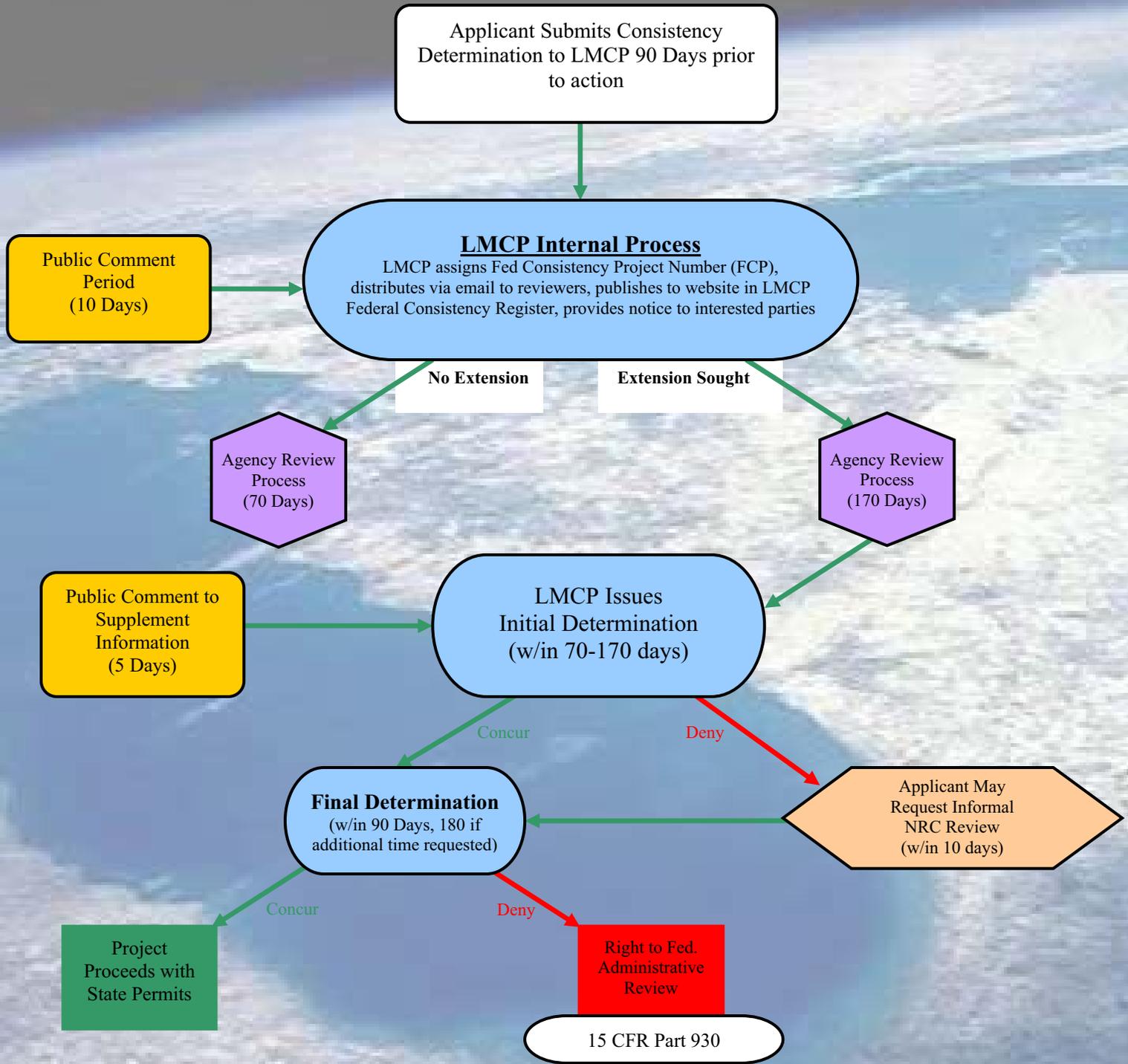
Applicant May Request Informal NRC Review (w/in 10 days)

Project Proceeds with State Permit Process

Right to Fed. Administrative Review

15 CFR Part 930

**Federal Permit Action
Federal Consistency Flow
Chart**



Part V. PERFORMANCE INDICATORS

Background

As part of the Federal Coastal Management Program the Indiana LMCP is required to provide performance reports to our Federal Sponsor. The primary goal of the CZMA Performance Measurement System is to track indicators of effectiveness of the coastal management programs and reserves at the national level. The measures are designed to encompass the practices of the 34 participating Coastal States and Territories. As such the measures were designed to be broad based and not region specific.

The NOAA Office of Coastal and Resource Management (OCRM) worked with seven states and territories to develop the Pilot Performance Management System in 2003 and 2004. However, all Coastal State and Territory programs continue to work with NOAA to refine the definitions of each Performance Category to assure consistency across programs. This roll out to all state and territory programs is phased into three years by content area. The NOAA OCRM is responsible for reporting some measures for individual states and the states are responsible for reporting the remaining measures.

| Report Year | Grant Year | Performance Measure Category |
|-------------|------------|--|
| 2006 | 2005 | Phase 1a and 1b – Public Access and Coordination |
| 2007 | 2006 | Phase 2 – Habitat and Water Quality |
| 2008 | 2007 | Coastal Hazards and Community Development & Coastal Dependent Uses |

The Performance Measurement System is a partnership endeavor both at the State and Federal level. Due to the fact that the Indiana LMCP is a networked program a majority of the data reported will be based upon other Agency's data. The LMCP is required to report on the Performance Measures for Year 1 by June 30, 2006.

For 2006 LMCP will report on a total of 19 measures for Grant Year 2005. There are ten Public Access and nine Government Coordination & Decision Making measures in total. Of these there are three "Contextual Measures" and sixteen Performance Measures. The Contextual Measures utilize data to present percentage information that is easily comparable between states and programs hence putting the information into context.

Year 1 - Public Access - Performance Measures

PA1. Number of dollars spent on activities that provide or enhance public access to the coast

PA2. Number of dollars leveraged by CZMA funds for activities that provide or enhance public access to the coast

PA3. Number of approved CZM programs that have a process to periodically assess the public demand for increased and/or improved public access sites within the coastal zone

PA4. Number new sites that provide public access to the coast, by category
a) beach/shoreline access

- b) recreational boat access
 - c) other natural/cultural resource access
- PA5. Number of existing public access sites that have been enhanced, by category
- a) beach/shoreline access
 - b) recreational boat access
 - c) other natural/cultural resource access
- PA6. Number of sites where public access is protected or maintained through CZM permitting activities, by category
- a) beach/shoreline access
 - b) recreational boat access
 - c) other natural/cultural resource access
- PA7. Percent of public that feels they have adequate access to the coast for recreation purposes

Year 1 - Public Access - Contextual Measures

- PA8. Percent of acres in coastal zone open for public use
- PA9. Percent of total miles of beach in coastal zone open for public use
- PA10. Number of coastal sites open for public use, by category:
- a) beach/shoreline access
 - b) recreational boat access
 - c) other natural/cultural resource access

Year 1 - Government Coordination & Decision Making – Performance Measures

- GCD1. Number of CZM programs that support local governments through:
- a) technical assistance programs (i.e. dedicated staff time)
 - b) financial assistance
- GCD2. Percent of CZMA funds used to support local governments through:
- a) technical assistance programs (i.e. dedicated staff time)
 - b) financial assistance
- GCD3. Percent of federal consistency projects that are consistent with program standards, by category:
- a) Percent of projects consistent with program standards as originally proposed
 - 1) federal agency activities
 - 2) federal license or permit activities
 - 3) projects implemented under Outer Continental Shelf (OCS) plans
 - 4) federal financial assistance to state agencies and local governments
 - b) Percent of projects consistent with program standards as a result of consultation and modifications
 - 1) federal agency activities
 - 2) federal license or permit activities
 - 3) projects implemented under OCS plans
 - 4) federal financial assistance to state agencies and local governments
- GCD4. Number of educational activities (including stewardship events) and training opportunities offered by the CZM program

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- GCD5. Number of participants in educational activities and training opportunities offered by the CZM program
- GCD6. Number of CZMA dollars spent per year on research and tools (including surveys) to improve coastal management decision-making
- GCD7. Number of approved CZM programs that have adopted streamlined permitting processes (through joint interagency review, general permits, etc.)
- GCD8. Number of approved CZM programs that have up-to-date program management plans
- GCD9. Number of approved CZM programs that have program guides to improve public understanding of the program

Part VI. EDUCATION AND OUTREACH

The LMCP has increased attention on Education and Outreach activities during the last year. This increased focus is intended to raise the level of public awareness on Great Lakes issues. The Education and Outreach is divided into two components: 1) Coordinated, and 2) Project Specific.

Coordinated Efforts

The LMCP has sponsored Coast Week for the past four years. The first Coast Week sponsored and coordinated by the LMCP was 2003. Planning for Coast Week 2004 received greater support and involved more partners. The LMCP convened a planning group of state, local, federal, and nonprofit partners. This group worked to coordinate activities and sponsor activities of their own during the week of September 11-18, 2004. Planning for Coast Week 2005 involved new partners and new approaches. The City of Gary hosted a Clean Water Fair as part of the Marquette Park Lagoons Coastal Grant Project and provided space for partners to share information regarding clean water efforts. The City of Michigan City hosted an Edutainment event for area school children in partnership with numerous organizations.

Project Specific Efforts

Coast Week 2004

The LMCP sponsored two projects during Coast Week 2004 – Diving into Biology Live Dive, and South Shore Coast Week Special. The Diving into Biology Live Dive utilized modern teleconferencing technology to provide a two way video and audio link for students and divers in Lake Michigan. During this event 12 schools and 200+ students learned about aquatic biology and science of Lake Michigan. The South Shore Coast Week Special was an event cosponsored by the Northern Indiana Commuter Transportation District (NICTD). The NICTD donated the use of a two car train for this event. The LMCP arranged for interpretive presentations on four topics: Economics of the Region – Kay Nelson, Natural Resources – Spencer Cortwright, History of Trains – Mitch Markovitz. The event was free of charge to the public and in excess of 70 people participated in this two hour event.

Coast Week 2005

The LMCP sponsored two projects during Coast Week 2005 – Diving into Indiana's Maritime History, and South Shore Coast Week Special. The Diving into Biology Live Dive utilized modern teleconferencing technology to provide a two way video and audio link for students and divers in Lake Michigan. During this event 7 schools and 150+ students learned about the Lake Michigan maritime history. The South Shore Coast Week Special was an event cosponsored by the Northern Indiana Commuter Transportation District (NICTD). The NICTD donated the use of a two car train for this event. The LMCP arranged for interpretive presentations on four topics: Natural Resources of the Region – Paul Labus, History of the National Lakeshore - Dale Engquist, Industry and Quality of Life – Kay Nelson, Regional Planning – John Swanson,



and History of Trains – Mitch Markovitz. The event was free of charge to the public and in excess of 55 people participated in this two hour event.

The LMCP purchased and distributed 2,500 iron-on colorable T-shirt decals to promote Coast Week 2005. In addition, the LMCP in coordination with partners printed and distributed in excess of 250 Coast Week posters with the calendar of events. This was in addition to the Coast Week website designed and maintained by DNR staff.

Ecosystems of the Indiana Coastal Region

The LMCP commissioned a new educational poster in 2004-05. The poster entitled *Ecosystems of the Indiana Coastal Region* presents in stunning beauty information on the top ten ecosystems types of the Coastal Area. The LMCP commissioned Barb Labus to develop this poster. LMCP staff and staff from the DNR Division of Nature Preserves worked closely with Ms. Labus in developing the theme and associated information. With assistance from the 2002 NOAA Cooperative Agreement the LMCP paid for a run of 25,000 of these posters. The LMCP held a formal poster release ceremony at Indiana Dunes State Park Nature Center on January 13, 2006. The LMCP invited Federal, State, and Local elected officials as well as representatives from our regional partners to this event. Ms. Labus attended and conducted a poster signing session immediately after the ceremonies. Approximately 35 people attended this event. The LMCP plans to commission the Lake Michigan Ecosystem poster during the 2006 project year.



Sign Design Contest

The LMCP launched a public design contest on January 13, 2006. The design is for a Welcome to the Lake Michigan Basin highway sign. The sign will be posted at 28 locations throughout the Coastal Region at pre-identified locations where major roadways intersect the Lake Michigan drainage basin using dedicated state funding.



The project is intended to raise public awareness of the extent of the drainage area as well as the tremendous resource embodied by Lake Michigan. The submittal deadline for entries was March 10, 2006. The LMCP received 43 entries for this contest. The LMCP in partnership with DNR staff and members of the Coastal Advisory Board voted to select a group of finalists from the entry pool. The finalists will be posted to the LMCP website for an open public vote to determine the contest winner. The LMCP plans to unveil the new sign as part of Coast Week 2006.

Urban Stream Restoration/Water Quality Project

The LMCP provided a Coastal Grant to the Hoosier Riverwatch program in 2004 to provide water quality education, and a full-range of training and hands-on involvement opportunities, for youth and adults in the Lake Michigan watershed within Indiana.



A brief summary of the activities and programs held during this time period are listed below.

- Two representatives from Lake and Porter Counties attended the Riverwatch Volunteer Instructor training in Milford, IN, April 1-2, 2004. These Instructors were provided with teaching trunks full of the supplies needed to perform Riverwatch Basic training workshops in their home counties.
- Presented a session at the Indiana Water Resources Association Conference – Valparaiso, Summer 2004.
- Six Hoosier Riverwatch Basic Training Workshops were held in Porter County. Seventy-six area residents were trained in volunteer water monitoring techniques.
 - June 15, 2004, Indiana Dunes Environmental Learning Center, Chesterton
 - September 10, 2004, Chesterton Public Library, Chesterton
 - June 6, 2005, Indiana Dunes Environmental Learning Center, Chesterton
 - July 15, 2005, Indiana Dunes Environmental Learning Center, Chesterton
 - July 23, 2005, Indiana Dunes Environmental Learning Center, Chesterton
 - September 10, 2005, Indiana Dunes Environmental Learning Center, Chesterton
- One Riverwatch Field Day, which provided advanced training for 8 Basic workshop participants, was held on October 7, 2005 at Coffee Creek.
- One workshop entitled “Protecting Our Watersheds,” which provided community service/action training with an urban streams focus for 5 area residents, was held at the Chesterton Public Library on September 11, 2004.
- One workshop entitled “Healthy Water, Healthy People” was held on September 13, 2005 at Sunset Hill County Park in Porter County. Eighteen teachers, non-formal educators, and local residents received training and activity trunks containing everything necessary to conduct all the activities presented during the workshop. Overall, the activity trunks and file boxes included materials for 9 activities! The participants also received other posters and take home materials for their classroom. In addition, each participant also received materials to participate in National Make A Splash and World Water Monitoring Day 2005.
- 3 Riverwatch Water Monitoring Equipment Loaner Trunks were purchased and provided to Lake, Porter, and LaPorte Counties to support monitoring by trained volunteer monitors.
- 5 Volunteer Monitoring Equipment Packages and 5 Trade-in Equipment Packages were provided through a competitive process to eligible grant applicants (schools, nonprofits, governmental agencies) within the watershed.

Part VII. INDIANA COASTAL GRANTS PROGRAM

Overview of the History of the 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 Coastal Program instituted an annual competitive Grants Program in 2003. 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 the LMCP total Federal award is set aside for the Grants Program. Indiana made \$900,000 available for the 2005 funding cycle.

Allocation of 2005 Large Scale Coastal Grants – maximum award \$100,000 per project

Low Cost Construction

- Improvements in Public Access
- Natural Area Restoration
- Cultural Restoration
- Historical Restoration

Land Acquisition (maximum award increased to \$150,000 in 2006)

- Improvements in Connectivity
- Natural Area Preservation
- Cultural Area Preservation
- Historical Area Preservation

Planning / Outreach

- Improvements in Coordination / Planning
- Natural Area Management
- Cultural Resource Management
- Historical Resource Management

Allocation of 2005 Small Scale Coastal Grants – maximum award \$5,000 per project

- Outreach and Education
- Resource Management

Grant Workshops

LMCP held three grant workshops, one in each of the program area's counties.

- Monday, November 22nd at Michigan City Public Library, Michigan City
- Wednesday, December 1st at Northwest Indiana Regional Planning Commission, Portage
- Thursday, December 9th at Hobart City Council Chamber, Hobart

Coastal Advisory Board Funding Priorities

The Coastal Advisory Board voted for the 2005 Funding Cycle priorities:

- Natural Area Restoration
- Natural Area Preservation
- Natural Area Management

Grant Process

• Coastal Advisory Board - Public Input Meeting

The Coastal Advisory Board holds an annual public meeting to solicit input on the funding priorities for the upcoming grant cycle.

• Coastal Advisory Board - Grant Committee Meetings

A committee made up of 3 CAB members meets to discuss public input. This committee also reviews applications and proposes funding recommendations to the entire Board.

• Coastal Advisory Board - Project Priorities Meetings

The CAB votes on the priorities for the upcoming funding cycle.

• Post Request for Proposals

• Hold Grant Workshops

• Application Deadline Closes

• Coastal Advisory Board - Project Summary Presentation

The CAB Grant committee discusses applications and votes on funding recommendations.

• Technical Review Team Meeting

A Review Committee made up of representatives of various DNR Divisions meet to discuss CAB comments and recommendations, and then score applications. They forward the scores onto the Director of the DNR for final selection.

• Project Selections Announced

LMCP forwards the projects on to NOAA for full federal approval.

• Applicants meet with LMCP Program Specialist

LMCP submits projects for Section 106 and Environmental Review

• NOAA Approval / Release of Grant Funds

Our federal sponsor ultimately approves our project selections and releases the award.

• Final State Approval / Release of Funds

A Grant Agreement is presented to the applicant to sign. Projects may begin only after the signature process is complete

Projects Awarded in 2005

Seven projects were awarded for the 2005 Funding Cycle of Coastal Grants Program for a total Federal request of \$285,213 while providing \$285,392 in local match. All projects received final approval from NOAA in August 2005 and are in the beginning stages of project implementation.

Lake County Parks and Recreation Department - \$49,850 / \$50,000

Oak Ridge Prairie County Park-Site enhancement and native plant project

Oak Ridge Prairie is owned and managed by the Lake County Parks and Recreation Department and consists of a variety of native and restored ecological areas. A portion of the park is overrun with invasive vegetation, primarily Eurasian buckthorn, and threatens the adjacent high quality savanna. A total of 66 acres will be restored by aggressively removing the woody exotics.

City of Hobart, Indiana -\$100,000 / \$100,000

Fred Rose Park Shoreline Natural Area Restoration and Stabilization

Fred Rose Park is located along the shoreline of Lake George in an urbanized area of Hobart. The shoreline in Fred Rose Park was identified in the Turkey Creek/Deep River Watershed Management Plan as a priority concern. Therefore, this project will restore a native community to an eroding embankment using bioengineering methods. A total of 700 feet of embankment will be stabilized and restored using pre-planted coconut fiber logs with turf reinforcement and shrub plantings shoreward of the fiber logs. The fiber logs will be planted with native emergent vegetation. An additional 1,300 feet of embankment will receive more vigorous treatment. The project will also result in the removal of 506 tons of sediment, improving water quality and fish habitat.



Fred Rose Park in Hobart

Town of Munster Board of Parks and Recreation - \$37,950/ \$37,950

Heritage Park Oak Woodland Restoration

Heritage Park is an 11-acre wooded property located on an old dune ridge in Munster, Indiana. A tree health and vegetation survey was complete in 2004 and found that the property was suffering from lack of fire and invaded by invasive plant species. Restoration of this site will consist of removal and stump herbicide treatment of non-native tree species, shrub and herbaceous species and reintroduction of native plants species for a black oak sand savanna community. Education of the natural history of the dune ridge is also integral to this project.

DNR – Division of Nature Preserves - \$25,000/ \$25,000

Clark and Pine East Dune and Swale Restoration

The Clark and Pine East Dune and Swale project is a restoration of 30 acres of a globally rare dune and swale natural community, which also includes habitat for numerous state listed plant and animal species. The project involves the removal of invasive non-native and native woody

species from a portion of the Clark and Pine East Dune and Swale property, owned by the Division of Nature Preserves. The approach will use a combination of mechanical and hand clearing methods, as well as herbicide use and follow-up herbicide treatment as needed.

Town of Merrillville Department of Parks and Recreation - \$100,000 / \$100,000
Pruzin Park Habitat Restoration and Education

Pruzin Park is a 22-acre public park located on the northern end of Merrillville, Indiana. The area is one of the most densely populated neighborhoods of the Town. The overall goal of this project is to redevelop the existing underutilized park into active facility with a variety of programs focused on environmental and ecological restoration and education. The project will also aim to create a high quality prairie and wetland complex by reducing non-native plant species, stabilizing drainage areas, and planting native wetland and prairie species in 10 acres of the park. This goal will be met by completing a study of the area, produce a conceptual drawing for the project and produce engineering designs.

Save the Dunes Conservation Fund - \$17,413 / \$17,442.39
Improving Capacity for Land Management Planning

As the need to balance Lake Michigan coastal lands protection with development is increasingly being recognized by the public and elected officials in Northwest Indiana, communities that adopt conservation goals and land holdings for conservation continue to expand. To ensure that conservation goals are implemented and the expansion of protected lands effectively contributes to natural resource protection, it is imperative that entities newly pursuing land conservation



(including land acquisition, management, and monitoring) have the capacity and resources necessary for such activities. Save the Dunes Conservation Fund will work with other land holding entities throughout the region to investigate land conservation planning needs and practices in the area, develop an umbrella planning template with varying levels of complexity to share with other entities to help build capacity, and demonstrate components of the template by developing land management plans for four SDCF properties in Indiana's Lake Michigan Coastal Program area.

First workshop held on March 3, 2006 at the Barker House in Michigan City

Save the Dunes Conservation Fund - \$5,000 / \$5,000
Eliminating Off-Road Vehicle Damage to Natural Areas

Off Road Vehicles (ORVs) cause significant damage to natural areas in the Lake Michigan Coastal area. Uncontrolled access to public and private lands is increasing, almost all land managers are experiencing natural areas degradation from inappropriate ORV use. Damage from continued ORV use threatens to undermine existing restoration and preservation efforts. A one day workshop will convene, various stakeholders identified and invited, to discuss mitigation measures for degraded natural areas and develop public outreach tools to convey the interests, concerns and measures to eliminate any degradation of natural areas due to ORV use.

Status of Projects Awarded to Date

2002

| Project Sponsor and Title | | Project Goal | Federal Award/Match | Status |
|--------------------------------|--|---|------------------------------|----------|
| DNR-State Parks and Reservoirs | Indiana Dunes State Park Natural Resource Management Plan | Create a park wide natural resource management to combat exotics and protect high quality habitat | \$50,000/\$12,500 | Complete |
| DNR – Nature Preserves | Heritage Database Update Project | Revisit study sites in Coastal Area and update Heritage Database | \$202,577/\$74,264 | Complete |
| The Nature Conservancy | Strategic Weed Management Plan – Indiana Toleston Macro-site | Build framework to assess threat of invasives, develop strategies to address threats | \$100,000/\$25,000 | Complete |
| City of Portage | Marquette Plan I | Develop Comprehensive plan for 24 miles of Lake MI shoreline and coastal area | \$160,000/\$40,000 | Complete |
| 2002 TOTAL | | | \$512,577 / \$151,764 | |

2003

| Project Sponsor and Title | Project Goal | Federal Award/Match | Status |
|---------------------------------|---|---------------------|-------------|
| Purdue University North Central | Diversity, distribution and habitat of aquatic plant communities in Indiana dunes | \$36,282/\$17,610 | In-Progress |
| City of Hobart | Lake George Aquatic Habitat Improvement Project | \$100,000/\$100,000 | Complete |
| Michigan City | Karwick Nature Park Trail and Public Fishing Access Development | \$100,000/\$100,000 | In-Progress |
| DNR-Nature Preserves | Hoosier Prairie Wetland, Prairie and Associated Savanna Restoration | \$50,000/\$50,000 | In-Progress |
| Lake County Parks Department | Deep River Headwaters Natural Area Protection | \$65,800/\$65,847 | Complete |
| Michigan City | Breakwater Crib Timbers: Historical Preservation Display | \$3,500/\$7,085 | Complete |
| Michigan City | Trail Creek Dune-Riverine Complex Archaeological Survey | \$5,000/\$5,000 | Complete |

| Project Sponsor and Title | | Project Goal | Federal Award/Match | Status |
|---|---|---|----------------------------|-------------|
| Purdue University North Central | Conservation Genetics of Rare Aquatic Plants of the Coastal Region | Investigate genetic diversity among rare aquatic plant populations in intradunal ponds | \$15,568/\$7,043 | In-Progress |
| Center for Interactive Learning Collaboration | CILC Vista: Creating a Community Partnership for Coastal Water Preservation | Educate students in issues, community initiatives which build an understanding of coastal waters | \$50,000/\$33,000 | In-Progress |
| DNR – Nature Preserves | Clark and Pine Dune and Swale East Restoration | Restore globally rare dune and swale natural community, remove invasive woody species | \$25,000/\$25,000 | In-Progress |
| Town of Michiana Shores | Restoration and Bank Stabilization of a Portion of White Ditch | Restore 1250 ft. of White Ditch banks, partner with LaPorte Co. Drainage Board | \$60,296/\$60,296 | In-Progress |
| Save the Dunes Conservation Fund | Indiana Coastal Restoration Action Team | Establish an action team to coordinate restoration resources in coastal area, provide training needed | \$69,950/\$55,998 | In-Progress |
| Portage Parks Department | Salt Creek Protection | Acquire 130 acres of Salt Creek corridor: associated wetlands/uplands | \$100,000/\$100,000 | Complete |
| Lake County Parks Department | Chase St. Savanna and Wetland Protection | Acquire 84 acres of oak savanna and wetlands | \$100,000/\$100,000 | Complete |
| 2003 TOTAL | | | \$781,396/\$726,879 | |

2004

| Project Sponsor and Title | Project Goal | Federal Award/Match | Status |
|------------------------------------|--|---------------------|-------------|
| Indiana University Northwest | Little Calumet River Prairie and Wetlands | \$15,131/\$24,406 | In-Progress |
| City of Hobart | Lake George Aquatic Habitat Improvement at Pavese Park | \$35,000/\$35,000 | Complete |
| Town of Michiana Shores | Preservation of Greenspace and Establishment of Public Access | \$14,653/\$14,652 | In-Progress |
| Michigan City | 8 th and Dickson St. Trail Creek Public Access (Passive Park) | \$100,000/\$100,000 | In-Progress |
| University of Michigan | Fish Spawning and Nursery Areas in Harbors and River Mouths | \$100,000/\$67,000 | In-Progress |
| Gary Sanitary District | Marquette Park Lagoons Restoration Assessment | \$100,000/\$66,667 | Complete |
| Coffee Creek Watershed Conservancy | Coffee Creek Watershed Data Collection | \$68,837/\$46,264 | Complete |

| Project Sponsor and Title | | Project Goal | Federal Award/Match | Status |
|---|---|--|--------------------------------|-------------|
| LaPorte County Parks Department | Joint Management Plan for Sebert County Park and Wintergreen Woods | Develop a joint management plan for two adjacent properties: a dedicated nature preserve and a managed natural area | \$4,392/\$2,164 | Complete |
| Purdue University Calumet | Demonstration of Oak Savanna Restoration in Disturbed Lake Michigan sand dune | Conduct an experimental study for oak savanna restoration in an abandoned sand mine | \$38,832/\$25,888 | In-Progress |
| Michigan City | Hansen Park Reconstruction Study | Complete study and design for public access to Trail Creek in a 10 acre underutilized urban park | \$24,000/\$16,000 | In-Progress |
| 2004 TOTAL | | | \$500,845/\$398,041 | |
| Multiple Funding: 2002, 2004, and Great Lakes Coastal Restoration Grants | | | | |
| Project Sponsor and Title | | Project Goal | Federal Award/Match | Status |
| DNR-State Parks and Reservoirs | Dunes Creek Restoration | Remove 480' concrete conduit, 3,775 yd ³ fill and parking lot to "daylight" a portion of Dunes Creek. Design and Restore with native plant species. | \$425,000/\$425,000 | Complete |
| Overall TOTAL: | | | \$2,219,818/\$1,701,684 | |

Project Highlights

The Lake Michigan Coastal Grants Program is proud to showcase a series of accomplishments that occurred during the 2005-2006 Annual Report period. The partnerships that have developed over the last year have allowed for the success of creative projects that have restored and protected hundreds of acres of unique natural habitat, educated numerous citizens about our natural resources and celebrated our region's diverse ecological processes and rich culture and history.

Dunes Creek Restoration at Indiana Dunes State Park Indiana Department of Natural Resources – Division of State Parks and Reservoirs Completed: March 2006

The LMCP partnered with DNR Division of State Parks and Reservoirs and Division of Engineering in the restoration, or “daylighting” of 2.75 acres Dunes Creek under the West Parking Lot in Indiana Dunes State Park by removing 480’ of culvert.

Dunes Creek was once part of the larger marsh ecosystem adjacent to the Lake Michigan Shoreline. The Great Marsh was drained and ditched for development in the early 20th



century altering the Dunes Creek watershed. Dunes State Park has a chronic problem with high E. coli levels that often require the beach to be closed to swimmers. This project removed overburden and waste concrete from a channelized portion of Dunes Creek. Match was provided by a separately planned Campground restoration and realignment project. That project involved the planning and redesign of the Dunes State Park Campground to minimize environmental damage

from overuse. The Campground project will reduce stormwater volumes and preserve native plant and animal species.

Lake George Aquatic Habitat Improvement City of Hobart

Completed: February 2006

The LMCP supported the City of Hobart in 2003 and 2004 to restore approximately 1500 ft. of shoreline on Lake George.

In 2002, the City of Hobart completed a watershed management plan for the Deep River/Turkey Creek watershed, which drains into Lake Michigan. Restoration of the shoreline at Jerry Pavese Park on



Lake George was one of the highest priorities identified by the community; consequently restoration of the site was included in the Watershed Management plan, and approved by the Indiana Department of Environmental Management. This project will provide many long lasting benefits to the community, including the enhancement of a locally owned and managed urban park, improvements in water quality and aquatic habitat due to decreased sediment loads, improved spawning habitat due to reduction of siltation, reduced opportunity for establishment of aquatic invasive plant species, increased opportunities for sport fishing due to improved water quality and the addition of shoreline habitat, and increased recreational usage of an underutilized natural resource.

Deep River Headwaters Natural Area Protection and Chase Street Savanna and Wetland Protection

Lake County Parks and Recreation Department

Completed: March 2006

The 84 acre Chase Street Savanna is located north and south of the Oak Savanna Trail and east of Chase Street in Merrillville. LCPRD will manage this quality oak savanna and wetlands as a preserved natural area. According to the US Department of Interior wetlands maps, the subject area contains approximately twenty acres of designated wetlands. The purchase of this property has protected what could be the last remnants of mesic sand savannah within the region.



Lake County Parks and Recreation Department also acquired fee-simple, two 20-acre parcels of land that border the current 257-acre Deep River Headwaters land base and approximately 18 acres of state-protected property. The new acreage provides additional refuge and a contiguous buffer for the quality wetlands that are located within the Deep Rivers Headwaters. The area of protection includes natural community types rare to the State of Indiana such as wetlands, savanna, and sedge meadow.

Salt Creek Protection

City of Portage Department of Parks and Recreation

Completed: February 2006



Portage Department of Parks and Recreation leveraged Coastal Grants funding with an Indiana Heritage Trust award to purchase a 129.7 acre section of the Salt Creek Corridor that runs through the City of Portage from the south to the north.

This property is distinguished by Salt Creek which centrally divides the parcel. Much of the west side is of the wetland ecological type. Salt Creek itself, as well as these low lying areas comprise a vast water retention and passage area that host an abundance of plant, animal, and insect species. The area to the east of Salt Creek, while also containing vast wetland and marsh areas, features large sections of upland and bottomland forest with steep banks dropping to the

creek. The property also 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 secured and preserved a beautifully diverse piece of property that is a vital component of the developing plan to obtain the entire Salt Creek corridor within the City of Portage. This corridor will become a natural greenway crossing the city from south to north and will connect to pedestrian trails that travel east to west.

Breakwater Crib Timbers

City of Michigan City

Completed: December 2005

In the early 1800's, oak timbers were used to create "cribs" in Chicago which were then floated across Lake Michigan to an area near the inlet of Trail Creek in Michigan City, Indiana. The cribs were filled with rocks and sunk into place; a wooden boardwalk finished the top of the East Breakwater, creating a safe harbor for this lakefront community. The boardwalk has been replaced twice in the past 169 years, and the U. S. Army Corps of Engineers upgraded the boardwalk again in 2004 to repair erosion damage which occurred in 1998. During this renovation, some of the original oak timbers were removed in order to create a new concrete wall designed to prevent future erosion.

The City of Michigan City created an informational/historical display to hold several of these original timbers along with historical text and graphics. This preserves some timbers and tells the story behind the East Breakwater for the education of future generations. This will be the first of many historical displays featuring information about Michigan City. The display is located placed in the Michigan City's City Hall.

Indiana Coastal Restoration Action Team

Save the Dunes Conservation Fund

In Progress

Save the Dunes Conservation Fund, a 501(c)3 organization, established the Coastal Restoration Action Team. This team coordinates restoration resources in the Lake Michigan coastal region, and is a partnership between public and private organizations. The purpose is



to assess restoration needs in order to coordinate and provide training on these restoration



techniques: wetland restoration, exotic species identification, cutting and removal of exotics, herbicide application, biocontrol, native seed collection and propagation, and prescribed burning.

SDCF's creative match approach allowed them to access LMCP funds, as they committed to placing a Conservation Easement on property owned by the Conservation Fund located within

the coastal program. The easement holder will be the Indiana Department of Natural Resources (IDNR), Division of Nature Preserves. This parcel is Classified Wildlife Habitat (IDNR). And contains a forested fen, rare wetland habitat, and has been declared endangered Indiana Bat habitat by US Fish and Wildlife.

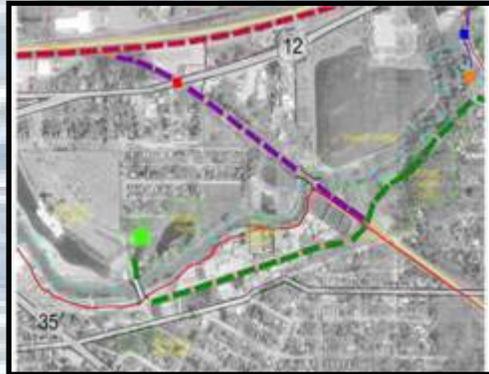
8th and Dickson St. Passive Park Trail Creek Public Access / Hansen Park Reconstruction Study

City of Michigan City

In-Progress

The City of Michigan City received a series of grants and local funding sources to implement a comprehensive trail and public access plan along Trail Creek. The LMCP partnered in this endeavor by supporting the following projects:

The Passive Park project will create an access point to Trail Creek with the construction of an ADA accessible parking area with trail, benches, natural landscaping, and fishing and canoe access. This 4.2-acre area will be included in the Michigan City Bike Trails system.



The Hansen Park reconstruction study will be worked into the park department planning process for the future of Hansen Park. Hansen Park contains almost an acre of park land, with direct access to Trail Creek. The plan identified trails, as well as fishing and canoe access to be developed in the near future.

Natural Heritage Coastal Grant Summary

DNR Division of Nature Preserves

Completed: September, 2005

This project consisted of a variety of sub-projects, focused on listed species surveys and monitoring, vegetation sampling and description, presettlement vegetation mapping, and natural area management. Listed species surveys and monitoring included insects, vascular plants, and amphibians and reptiles, resulting in verification and/or discovery of hundreds of populations of these significant species, at many locations. Vegetation sampling and description was carried out at several Nature Preserves, resulting in summaries of vegetation change in response to management over several years. These summaries are being used by Nature Preserve managers to continue, or modify where needed, management methods. Presettlement vegetation was researched using early land survey data, and resulted in a presettlement vegetation map of the entire coastal region. Natural area management was carried out at several coastal Nature Preserves, and included invasive species mapping, and control of woody plants and invasive species, improving the quality and condition of natural communities. Overall, the project vastly improved our knowledge of the rare biota of the Indiana coastal region, and in the condition of several coastal region Nature Preserves.

Part IIX. COASTAL NONPOINT POLLUTION CONTROL PROGRAM (6217)

Purpose of the Coastal Nonpoint Pollution Control Program

As a part of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Congress created a stand-alone provision, Section 6217, which requires that states and territories with approved coastal management programs develop a coastal nonpoint pollution control program (CNPCP) to address water quality impairment of coastal waters. According to Section 6217, the program must be submitted to the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (USEPA) for approval.

According to *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Water* (1993), the purpose of the coastal nonpoint pollution control 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.”

The guidance also states that coastal nonpoint programs are not intended to supplant existing coastal zone management programs and nonpoint source management programs. Rather, they are to serve as an update and expansion of existing nonpoint source management programs, and are to be coordinated closely with existing coastal management programs. The legislative history indicates that the central purpose of Section 6217 is to strengthen the links between federal and state coastal zone management and water quality programs, and to enhance state and local efforts to manage land use activities that degrade coastal waters and coastal habitats. The legislative history further indicates that state coastal zone and water quality agencies have a shared responsibility for coastal nonpoint programs, which is analogous to the sharing of responsibility between NOAA and USEPA at the federal level.

Indiana’s CNPCP document identifies the programs and enforceable authorities used to control nonpoint pollution in each of six nonpoint source categories, as defined in the *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Water*. The six Nonpoint source pollution categories are:

1. Agriculture
2. Forestry
3. Urban and Rural Areas
4. Marinas
5. Hydromodification
6. Wetlands, Riparian Areas and Vegetated Treatment Systems

The *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* describes the 55 nonpoint source management measures states must address. The six federal nonpoint source categories and 55 management measures are described in each of the six category chapters of Indiana’s CNPCP document. The programs and/or practices that Indiana

uses to address each nonpoint source category are identified and summarized for each of the federally defined management measures.

Moreover, as NOAA and USEPA assert in their “Final Administrative Changes to the CNPCP Guidance,” states may focus resources on preventing and controlling significant impacts of nonpoint source pollution on coastal resources. In addition, NOAA and USEPA encourage coordination and integration of coastal nonpoint programs with other programs and water quality initiatives to establish priorities and develop strategies to meet CZARA 6217 program requirements.

In developing its CNPCP, Indiana intends to address all categories of nonpoint source pollution that currently do or may in the future present significant adverse effects to its coastal waters. However, Indiana will exclude those that do not and are not reasonably expected, individually or cumulatively, to present significant adverse effects to living coastal resources or human health.

Indiana’s goal in implementing the CNPCP is to employ the various management measures outlined in its CNPCP document to restore and protect the coastal waters of Lake Michigan within the program boundaries. This will be accomplished by coordinating efforts with identified partners and utilizing existing programs, laws, and statutes. In the case where no program exists to fully address a management measure, the CNPCP will work closely with its partners to close these gaps. In keeping with this goal, the Indiana CNPCP will develop a 15-year strategy, 5-year implementation plan (15/5 plan) to implement the program.

Each state participating in the Coastal Management Program and in developing its CNPCP is required to develop this 15/5 plan by NOAA and the USEPA. The 5-year implementation plan describes when, where and how program implementation will occur, including mechanisms for tracking and monitoring implementation. The plan also contains interim milestones and benchmarks, including a time frame, and will be updated as necessary, but at least every five years. Achieving the milestones and benchmarks of this plan serves as a basis for evaluating progress in achieving program implementation goals. The 5-year implementation plan is more specific than, and nested within, the longer-term 15-year program strategy for achieving full implementation of the 6217(g) management measures. The 5-year implementation plan is designed to ensure adequate progress in achieving the 15-year program strategy and should be integrated and consolidated with other federal and state water quality programs.

Additionally, the 15-year program strategy should include: a description of the means that the state will use to demonstrate progress in implementing the management measures; a basis for determining whether its program will succeed in ensuring implementation within the 15-year implementation period (e.g., implementation rates); and a process whereby the state will determine the need to use a backup authority and/or adopt additional enforceable policies and mechanisms to ensure implementation of the management measures within 15 years.

At least every five years, NOAA and EPA will evaluate Indiana’s progress in achieving the goals established through the 5-year implementation plan and the 15-year program strategy, including the success of existing authorities, coupled with voluntary or incentive-based programs, in achieving management measures implementation.

In cases in which implementation levels are not adequate to ensure implementation within 15 years of the date of conditional approval, the 5-year implementation plan will outline steps the state will take to improve progress, including application of existing authorities or the development of new enforceable policies and mechanisms to achieve full implementation of the 6217(g) management measures. Both NOAA and the USEPA will work with Indiana to develop guidance for the evaluation process which clarifies the roles of the federal agencies and seeks, to the maximum extent possible, to avoid duplication and ensure coordination with other program implementation and review processes.

Historical Information

In support of the development of the CNP, a watershed diagnostic study of the Little Calumet-Galien watershed was completed in April of 2001. This report highlighted 1) the conditions and trends in water resources within the watershed; 2) identified potential nonpoint source water quality problems; and 3) identified and prioritized watershed land treatment projects.

On November 24, 2003 the Indiana Lake Michigan Coastal Program held a 6217 work group meeting to cover 6217(g) guidance and develop subcommittees, based on this guidance, to address each of the six nonpoint categories and their respective corresponding management measures. These subcommittees met again on December 15, 2003 and January 20, 2004 to develop the priority nonpoint source concerns, outline the objectives, develop an implementation approach, and identify the existing state and federal programs that would be used to meet these goals.

Development of the actual CNPCP document was broken into six individual report sections representing each of the nonpoint source categories. Individuals representing the IDNR, Indiana Department of Environmental Management (IDEM), and Purdue University were given the task of compiling the draft CNPCP document based upon their area of expertise. These sections were later combined into the draft report which was submitted to NOAA and USEPA for review.

In July of 2005 the “Data Compilation and Analysis for the Coastal Nonpoint Source Management Plan” report was completed by the Indiana Geological Survey (IGS). The IGS completed this report with funding from IDEM’s Section 319 Grant Program (ARN: A305-4-59) for Indiana’s CNP.

The IGS collected and analyzed all available water quality data obtained from IDEM, USGS, ECTF (E. coli), and IDNR during their respective water quality monitoring activities within the Little Calumet-Galien watershed. This information, coupled with GIS data, was used by the IGS to determine any trends in the database and identify potential data gaps within the watershed. The report also provides a plan for future trend monitoring within the coastal area based on existing monitoring sites, analysis of probable point and nonpoint sources, and identified data gaps.

Approval Status

Indiana submitted its CNPCP document to NOAA and USEPA in January of 2005 for review. Based on this document and supplemental information provided by the Indiana Coastal Nonpoint

Program (CNP), NOAA and USEPA have provided the CNP with a series of draft findings for “Conditions of Approval” dated June 29, 2005, July 11, 2005, March 6 2006, and March 28, 2006. These findings were issued by NOAA and USEPA to allow the CNP to make required clarifications or address any programmatic issues before the final “Conditions of Approval” are issued. NOAA and USEPA will continue to provide the CNP with status updates about program approval, including most importantly when the findings are published in the Federal Register.

Indiana anticipates receiving conditional approval of its CNP in late-spring or early-summer of 2006. The conditions will call for Indiana to enhance its management programs and/or develop new implementation mechanisms. Once the CNP meets these conditions, NOAA and EPA will fully approve the program.

When NOAA and EPA make the decision to fully approve the CNP, they will develop a Full Approval Decision Memo and publish a notice of intent in the Federal Register. A 30-day public comment period is provided before Full Approval is granted. The Conditional Approval Findings and Full Approval Decision Memos are available for download.

Current and Future Projects

The current and future projects of the CNP, in large part, look to address the conditions that have been placed on the program by NOAA and USEPA. NOAA and USEPA have provided timeframes for which these conditions are to be met. However, it is to be noted that NOAA and USEPA are flexible in this matter, if the CNP can demonstrate that it is making progress towards addressing these conditions. The CNP will continue to work with its partners in 2006 and the coming years to address those gaps identified in the conditions of approval.

For those management measures in which Indiana has programs in place that conform to NOAA and USEPA (g) guidance, the CNP will begin development of a 15-year strategy, 5-year implementation plan in 2006. Based on the March 28, 2006 draft comments and Conditions of Approval received from NOAA and USEPA, the CNP anticipates implementing the Pollution Prevention Management Measure under the Urban and Rural Areas nonpoint category. Found below in Figure X, is the preliminary timeline for implementation of the Pollution Prevention Management Measure in 2006. The CNP will work closely with its partners to develop this plan and to begin implementation of the first 5-year period in 2006.

Pollution Prevention Management Measure 2006 Implementation Timeline.

| Task | 2006 | | | | | | | | | | | |
|--------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Re-establish workgroup | | | | | | | | | | | | |
| Coast Week planning | | | | | | | | | | | | |
| ID outreach & ed. programs | | | | | | | | | | | | |
| Develop tracking & monitoring system | | | | | | | | | | | | |
| MOA's | | | | | | | | | | | | |
| Public meeting/ forum (CAB) | | | | | | | | | | | | |
| Implement programs | | | | | | | | | | | | |
| Coast Week | | | | | | | | | | | | |
| Tracking & monitoring annual report | | | | | | | | | | | | |

The LMCP CNP's largest initiative for 2006 is the development of a Clean Marinas Program which conforms to the (g) guidance for Marinas and Recreational Boating. The CNP plans to use this program to address a number of the Conditions of Approval issued by NOAA and USEPA for the Marinas and Recreational Boating nonpoint category. As of 2006, there are 20 marinas operating within the coastal program area with approximately 1,750 boat slips. Additionally, a new marina/condo development is being developed along Burns Ditch in Portage which would include another 300 slips once completed. Each of these marinas can be a potential source of nonpoint pollution to Lake Michigan through their day-to-day operations.



The CNP is working closely with IDEM to develop the Clean Marina Program. Indiana's Clean Marina Program will largely be modeled after other state's programs and be voluntary in nature. The first meeting for this initiative took place on March 21, 2006. The CNP and IDEM are currently developing a survey to be distributed to Indiana's four largest marinas within the coastal program area. This survey will be used as a guide to what level of effort will be required to achieve success with the program. After reviewing the surveys, the CNP and IDEM plan to hold a series of stakeholder meetings with the marina operators to keep them abreast of the program's development. The CNP and IDEM will likely bring in other partners as the program continues to develop. The CNP anticipates having the Clean Marina Program operational within two years and administered internally.

In line with the development of an Indiana Clean Marina Program, the CNP recently worked with the LaPorte County MS4 coordinator to develop a questionnaire to be delivered to several marinas located within LaPorte County. This questionnaire was largely based on topics to be included on Indiana's Clean Marina Program checklist for becoming a certified marina. The survey will help LaPorte County develop a strategy to address those marinas located within designated MS4 communities. Marinas that change their day-to-day practices and begin implementing BMP's will be well prepared once the Clean Marina Program becomes fully operational.



Other current projects specifically deal with watershed planning, development, and implementation within the coastal program area. The CNP is actively participating in this effort by sitting on two watershed planning steering committees (Trail Creek and Salt Creek) and has provided input and funding for another (Dunes Creek). The CNP's intent is to work with the watershed planning committee members and communities to incorporate, where appropriate, (g) guidance within these watershed plans and implement them.

Porter County Convention and Visitors' Bureau was awarded a LMCP 6217 grant to install educational signage at the new Porter County Visitor Center which is currently under construction. The signage will focus on a number of stormwater BMP's that are being installed onsite that comply with (g) guidance. The BMP's proposed for the site include a stormwater wetland and treatment swales, a rain garden, pervious pavement, and curb cuts that would allow stormwater to run off from the road into the swales. A documentary is also being developed as part of this project. (The photograph to the right shows a stormwater wetland and swale installed at the Porter County Jail with LMCP grant funding. It is shown for conceptual purposes.)



The CNP is also participating in the Hoosier Riverwatch program by training volunteer stream monitors. Hoosier Riverwatch is administered through the Indiana DNR's Division of Fish & Wildlife and is a network partner of the LMCP. Hoosier Riverwatch is a network of volunteers that monitor water quality throughout the state of Indiana. The volunteers collect aquatic insects, stream habitat, and water chemistry data from their adopted sites as part of this program. The CNP plans to host at least one volunteer monitoring training day within the coastal program area in 2006. The hope is to engage the public to become active stewards of their respective subwatersheds by conducting and submitting water quality monitoring data to the Hoosier Riverwatch database. Hoosier Riverwatch collaborates with agencies and volunteers to:

- Increase public involvement in water quality issues through hands-on training of volunteers in stream monitoring and cleanup activities.
- Educate local communities about the relationship between land use and water quality
- Provide water quality information to citizens and governmental agencies working to protect Indiana's rivers and streams.



Part IX. COASTAL AND ESTUARINE LAND CONSERVATION PROGRAM PLAN

Background

The Coastal and Estuarine Land Conservation Program (CELCP) is an opportunity for the state to identify important resource areas in the coastal region. The Department of Commerce, Justice, and State Appropriations Act of 2002 (Public Law 107-77), directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program “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,” giving priority to lands which can be effectively managed and protected and that have significant ecological value.

The national criteria, as defined by NOAA OCRM, for projects and project areas are:

- Protects 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;
- Gives priority to lands which can be effectively managed and protected and that have significant ecological value;
- Directly advances the goals, objectives, or implementation of the state’s coastal management plan or program, NERR management plans approved under the CZMA, national objectives of the CZMA, or a regional or state watershed protection plan involving coastal states with approved coastal management plans; and
- Is consistent with the state’s approved coastal management program.

Process

In order to participate in this program the LMCP is responsible for developing a CELCP plan. The plan is to include an assessment of priority land conservation needs and clear guidance for nominating and selecting land conservation projects within the state. The LMCP utilized a two phase in developing the Indiana CELCP plan. Phase I of the development process utilized the existing skill and technical ability of Indiana University and the Indiana Biodiversity Initiative project (IBI). Phase II of the development process involved the formation of a Public Technical Workgroup.

The Phase II of the CELCP plan development involved the creation of a Public Technical Workgroup (PTW). This workgroup consists of university staff; local, regional, state, and federal government staff; local landholding trusts and nonprofits; and interested other parties. The first formal presentation of information regarding the IBI output took place at the October 12, 2005 Coastal Advisory Board meeting. The LMCP has convened three PTW meetings to date.

- Meeting 1 – December 8, 2005 – NIRPC
- Meeting 2 – January 5, 2006 – NIRPC
- Meeting 3 – March 29, 2006 – Indiana Dunes State Park Nature Center Auditorium

Meeting 1

The first PTW meeting agenda included a presentation by Dr. Vicky Meretsky from IU and a discussion and overview of the CELCP process. LMCP staff facilitated the workgroup session. Discussion focused on work to date and the steps that would be required to incorporate the IBI data into an acceptable format. Members of the PTW provided comments and suggestions regarding additional data to include as a supplement to the existing IBI data. Suggestions included stream, multi-use trail, and powerline corridors to connect fragmented habitat. In addition, members of the PTW provided some information regarding additional managed areas to include as well as additional areas of ecological importance.

Meeting 2

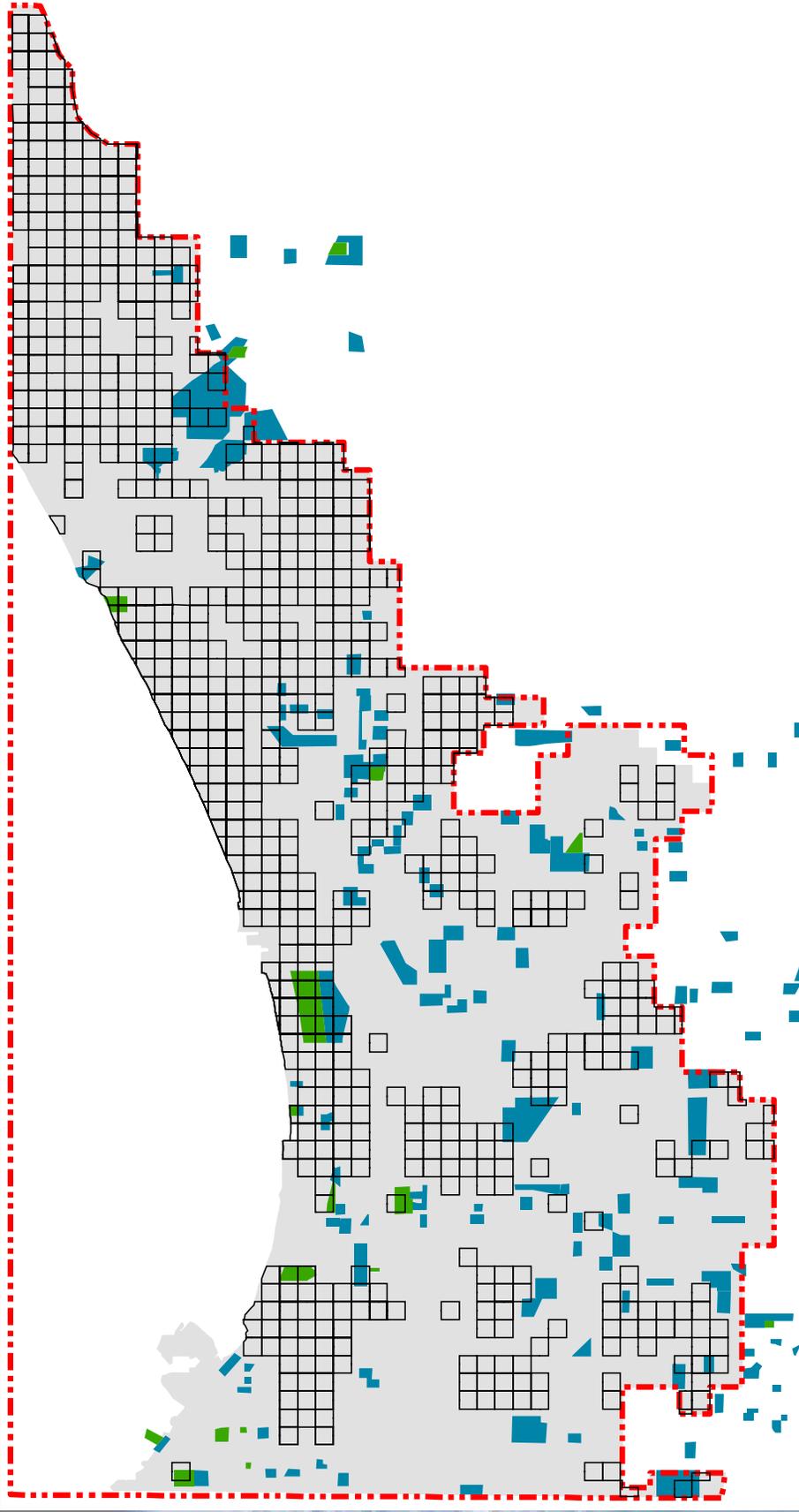
The second PTW meeting focused on process. The LMCP is required to develop a project solicitation and nomination process. Members of the PTW worked in small groups and developed a list of factors to include in this process. The LMCP staff will compile this information and develop a nomination process for PTW review and comment.

Meeting 3

The third PTW meeting focused on filling information gaps. The LMCP in coordination with Dr. Meretsky updated the IBI maps to include data layers suggested during the first PTW meeting. The LMCP staff discussed the data changes and solicited feedback from PTW members regarding the inclusiveness of managed areas and ecologically sensitive areas on the IBI maps for the planning area.

Next Steps

There are several next steps in the full development of the Indiana CELCP Plan. The LMCP and partners will: 1) incorporate additional data layers into the priority area identification, 2) work to complete to planning map, 3) develop the project nomination process, 4) fully develop CELCP Plan and submit for public review and comment, and 5) submit the CELCP Plan to NOAA for review and approval.



Threat Assessment and Prioritization - Predicted areas of residential development (blue) and open space (green), 2000-2030, from the Northwestern Indiana Regional Planning Commission report "2030 Connections." Black outlines show areas identified as ecologically important from IBI. Excerpted from IU *Biodiversity Conservation Possibilities and Threat Assessment for the Indiana Lake Michigan Coastal Management Program*

Focus on Indiana Biodiversity Initiative

As Excerpted from: *Biodiversity Conservation Possibilities and Threat Assessment for the Indiana Lake Michigan Coastal Management Program*; Meretsky et. al, March 1, 2006

Indiana Biodiversity Initiative goals, methods, and products. The Indiana Biodiversity Initiative is a group of agency, organization, and academic natural resource and conservation biology managers and researchers working together to develop a common basis for conservation land-use planning in Indiana. We use a sequence of mapping exercises to identify areas that offer strong potential to conserve biodiversity. We develop maps of areas with high potential for biodiversity conservation for the natural regions of Indiana (Homoya et al. 1985). Our map base is a kilometer grid that matches the UTM grid.

We begin with the plant species and high-quality plant community information from the Indiana Heritage Database, the GAP map of general land cover of Indiana, the National Wetlands Inventory (NWI) of wetlands of Indiana, and the map of existing areas protected for conservation (primarily public lands, with some additional lands such as Nature Conservancy holdings). We use these three maps in Phase I to identify the plant-related features for conservation and we use C-Plan, a spatial-optimizing program that identifies land areas that fulfill a conservation objective using the smallest footprint. Because of this spatial optimizing, C-Plan identifies those areas with the highest concentration of desirable characteristics – numbers of rare species, availability of high-quality habitats, or large blocks of more common habitats.

After the areas with high plant conservation potential have been identified, we use those and the map of existing areas protected for conservation as a starting point for identifying lands that protect animal species, in Phase II. Because we lack the time and information to identify lands that meet needs of all animal species in a given natural region, we identify umbrella species (Lambeck 1997) whose habitat needs encompass the habitat needs of many other species. For each natural region, 6-9 species are selected and their habitat needs are modeled. Then, using a supplement to the ArcView GIS program, we identify areas that meet the habitat needs of the umbrella species while avoiding habitats that would be hostile to them (often, urban habitats, for example). The animal modeling program gives preference to areas that are already protected, or that were identified for plant conservation, when these are appropriate, so as to continue to minimize the extent of the land areas identified and to cluster habitat blocks.

The final product for any given natural region is a map identifying those square kilometer blocks that have best met the plant and animal conservation criteria of the two phases of the select process. We also suggest possible corridors, often river corridors, but also ridgelines and even powerlines, which may serve to connect blocks of habitat. We provide users with the map as well as with a wide range of auxiliary maps, the color orthophotos, and the appropriate USGS 1:100,000 maps. A “conservation features” layer permits users to click on any particular cell and learn what animal species models select that cell, how much area is available in several habitat types within the cell, and how many rare plants or high-quality plant communities have been identified in the square.

Part X. SECTION 309 NEEDS ASSESSMENT AND STRATEGY

Background Information

Section 309 of the Coastal Zone Management Act (CZMA), as amended in 1990 and again in 1996, establishes a voluntary grants program to encourage states and territories with approved programs to develop program enhancements in one or more of the following areas:

| | |
|---|---------------------------------|
| ✓ Wetlands | ✓ Lake debris |
| ✓ Public access | ✓ Lake resources |
| ✓ Coastal hazards | ✓ Special Area Management Plans |
| ✓ Cumulative and secondary impacts | ✓ Aquaculture |
| ✓ Energy and government facility siting | |

Under this program the Secretary of Commerce is authorized to make awards to states and territories to develop and submit for federal approval program changes that support attainment of the objectives of one or more of the enhancement areas. The Office of Ocean and Coastal Resource Management (OCRM) provides guidance to states and territories for developing or updating previous Assessment and Strategy documents. The OCRM guidance provides a recommended format to address each enhancement area in the document.

Indiana 309 Development Process

The LMCP contracted with J.R. Benoit Consulting to develop the Indiana 309 document. This firm has many years of Coastal Management experience. Its proprietor was the Program Manager for the Massachusetts Coastal Management Program and then served as the Director of the Office of Coastal Resource Management with the National Oceanic and Atmospheric Administration.

The Indiana 309 planning process was implemented in phases. During the first phase the consultant conducted a document review and preliminary assessment. Based upon the findings of the document review the consultant generated a preliminary list of findings to be used in meetings with State Agency staff and public meetings. Input gathered from the Agency staff meetings shaped the general ranking of the nine issue areas and the associated goals and actions.

Public participation is an important element of the Indiana Coastal Program and was a high priority for development of the 309 Assessment and Strategy. Public input for the development of this document was provided through meetings with the Coastal Advisory Board (CAB) and the general public.

Coastal Advisory Board Input

Three meetings were held to obtain input from the CAB. The first meeting was on July 21, 2004 for the purpose of introducing the CAB to Section 309 and to request their participation in the process of developing the Assessment and Strategy document. Briefing materials explaining Section 309 were prepared in advance and distributed at the meeting. The second meeting with

the CAB was held on September 21, 2004 to have an initial discussion on the nine 309 Enhancement Areas. The consensus of the meeting was that wetlands, public access, coastal hazards, CSI and SAMP would likely be identified as Medium/High priority, and energy/facility siting, lake debris, lake resources and aquaculture identified as Low priority. The third meeting with the CAB was on January 10, 2004 to review the Public Draft of the Assessment document.

Public Input

Three meetings were held to receive input from the general public on draft versions of this document. The first two meetings were held on September 21, 2004 and January 10, 2005 to receive input and discuss the Public Draft of the Assessment document. A third meeting with the general public was held on March 5, 2005 to review a combined Draft Assessment and Strategy. The Final Draft of the Indiana 309 Assessment and Multi-Year Strategy was made available for public review and comment from May 13, 2005 until June 17, 2005. A public meeting was held on May 17, 2005 at the Northwestern Indiana Regional Planning Commission (NIRPC) located in Portage, Indiana. The final draft of the document was posted for a 30 day public comment period that ended June 17, 2005. The comments received were incorporated into the final document and noted accordingly.

Document Issue Areas, Goals, and Scope of Work

Public Access

Goal 1: Improve the information available to the state regarding public access in the coastal area.

The state will develop a comprehensive inventory of existing public access sites within the Indiana coastal area and incorporate the new information into the SCORP database. Following the collection of the new public access information the state will conduct an assessment of coastal user needs and perceptions in order to better understand how to best provide future public access opportunities in the coastal area.

Goal 2: Improve the information available for the public regarding public access in the coastal area.

Based on the public access inventory completed in FY 06, the state will develop and publish one or more coastal access guides that cover the coastal area.

Coastal Hazards

Goal 1: Enhance the capacity of local communities to prevent and minimize coastal hazard threats to people and property.

The state will develop one or more hazard mitigation model ordinances for adoption by local communities. The purpose of the ordinance(s) will be to protect the natural function of coastal features (e.g., lakefront dunes) that serve to prevent or minimize damage from flooding and/or erosion.

Goal 2: *Improve the information available for mitigation planning to reduce the threat from coastal hazards.*

The state will develop a network of permanent reference sites that will be used to annually survey and monitor lake shoreline changes. The shoreline change information will be used to enhance the implementation of existing state and local regulatory and nonregulatory (i.e., sand nourishment) programs.

Lake Michigan Resources

Goal: *Develop a management plan for significant underwater archeological resources in state waters of Lake Michigan.*

The state will conduct an inventory of significant underwater archaeological resources and develop a management plan for the enjoyment and protection of those resources.

Wetlands

Goal: *Conduct an inventory of coastal wetlands.*

Indiana's Counties, in cooperation with the State of Indiana, are obtaining spring 2005, leaf-off, color-infrared, orthorectified statewide aerial photography. The state will produce Land Use Land Cover maps from this new aerial photography and will delineate coastal wetland types. The resulting maps will be incorporated into state planning and regulatory programs.

Cumulative and Secondary Impacts

Goal 1: *Enhance the capacity of County Health Departments to ensure the proper functioning of on-site septic systems.*

The state will develop new guidelines and procedures for adoption by the Indiana State Department of Health (ISDH) and County Health Departments. The guidelines and procedures will reflect the best available technology for the placement, design, and installation of coastal on-site septic systems.

Goal 2: *Improve the information available regarding the location of on-site septic systems.*

The state will develop a GIS map of onsite septic system locations in a selected coastal community to be adopted by that community to support implementation of ISDH Residential Sewage Disposal provisions.

Summary Of Estimated 309 Expenditure per Year

| | FY 06 | FY 07 | FY 08 | FY 09 | FY 10 |
|--------------------------------------|-------|-------|-------|-------|-------|
| Public Access | | | | | |
| <i>Inventory/Database</i> | 62 | | | | |
| <i>Needs Survey</i> | | 70 | | | |
| <i>Outreach/publications</i> | | 30 | | | |
| Wetlands | | | | | |
| <i>Analysis</i> | 25 | | | | |
| <i>Field Check</i> | | 50 | | | |
| CSI | | | | | |
| <i>Community Capacity Assessment</i> | | | 50 | 50 | 50 |
| <i>GIS Mapping</i> | | | 50 | | |
| Hazards | | | | | |
| <i>Ordinance</i> | | | 50 | | |
| <i>Inventory/development</i> | | | | | |
| <i>Technical Assistance</i> | | | | 50 | |
| <i>Install Benchmarks</i> | | | | 50 | |
| Lake Resources | | | | | |
| <i>Archaeological Inventory</i> | | | | | 100 |
| Total | 87 | 150 | 150 | 150 | 150 |

Note: The total amount of funding available to the state for Section 309 projects vary on an annual basis. During the Assessment and Strategy process the assumption was made that the LMCP would receive approximately \$150,000 per annum for this endeavor. Upon release of the 2006 funding guidance the LMCP was awarded \$87,000 for 2006. The amount for ongoing years is unknown at this time.

Next Steps

The Section 309 Process was developed as a mechanism for states to conduct a periodic self-assessment. In so doing the state becomes eligible for one time funding to help enact the changes proposed in the strategy. Indiana LMCP plans to take full advantage of this opportunity and to work with our networked partners in implementing the Section 309 Strategy. LMCP staff are working with networked partners identified in to implement the projects set forth for the 2006 cycle.

Part XI. CONCLUSION

Summary

In summary it has been a very busy three and a half years for the LMCP since program approval. The LMCP:

- Hired the LMCP Program Specialist and Coastal Nonpoint Coordinator;
- Moved from the DNR Division of Soil Conservation to the Division of Nature Preserves;
- Developed and implemented the Coastal Grants Program
- Developed and implemented Federal Consistency;
- Developed the Coastal Nonpoint Pollution Control Program (6217);
- Began development of the Coastal and Estuarine Land Conservation Program plan (CELCP);
- Contracted for and developed the Section 309 Needs Assessment and Strategy;
- Developed the first ever LMCP Strategic Plan;
- Conducted the first ever LMCP Network Partners Meeting;
- Coordinated Coast Week 2003, 2004, 2005;
- Commissioned and released the *Ecosystems of the Indiana Coastal Region*;
- Solicited design entries for the “Welcome to the Lake Michigan Watershed” sign; and
- Continued to provide technical support to our partners in the Coastal Region.

Looking to the Future

The LMCP is primed for continuing our Purpose into the future. The challenges of tomorrow are the thoughts of today. With a staff of four dedicated full time employees and a network of hundreds the LMCP will continue to grow in ability to coordinate coastal management activities in Indiana. The early connections are made and now is the time that the partnerships are forged and nurtured to address future needs. The LMCP will continue to strive to reduce programmatic redundancies and to streamline processes where appropriate. It will continue to provide financial and technical support to state, regional, local, and nonprofit partners. Projects such as Marquette Phase II, Indiana Clean Marinas Program, Coastal and Estuarine Land Conservation Program, Coastal Nonpoint Pollution Control Program, and the Coastal Grants Program will carry the LMCP and associated networked partners down the road of sustainable coastal resource management.

Together we can work to make a difference!

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For more information on the Program in general visit: <http://www.in.gov/dnr/lakemich>

For Lake Michigan Coastal Grants Program details visit: <http://www.in.gov/dnr/lakemich/grants/coastalgrants.html>

For more information about the §6217 Program visit: www.in.gov/dnr/lakemich/issues/cprprogram.htm

For more information about Federal Consistency visit: www.in.gov/dnr/lakemich/federal/index.html



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COASTAL PROGRAM

