



**Indiana Lake Michigan Coastal Grants Program
2007 Funding Cycle Project Summaries**

LAND ACQUISITION

Applicant: City of Michigan City

Project Title: Acquisition of Trail Creek frontage at Liberty Trail

Project Type: Natural Area Preservation

Federal Request: \$7,500

Local Share: \$7,500

Purchase 120' x 50' strip of land along Trail Creek for preservation and possible future trail use. The site is owned by Harrow Product, Inc. They are a willing seller. The cost is estimated at this time with final cost to be determined by appraisal.

LOW COST CONSTRUCTION

Applicant: Department of Natural Resources, Division of State Parks and Reservoirs

Project Title: Natural Resource Management Plan Implementation

Project Type: Natural Area Restoration

Federal Request: \$7,200

Local Share: \$7,200

Project is to accomplish implementation of the 2005-2010 natural resource management plan. Focus will be primarily on the eradication of herbaceous and woody invasive species such as oriental bittersweet (*Celastrus orbiculata*), bush honeysuckles (*Lonicera* spp.), Japanese barberry (*Berberis thunbergii*), privet (*Ligustrum* spp.), and garlic mustard (*Alliaria petiolata*) per the NRMP. Other tasks will include those ID'd in the NRMP, such as; mapping invasive populations, progress measurement/documentation, and fire break construction for protection of infrastructure. Project will include two 90 day stewardship positions and materials such as herbicides/surfactants, and dyes.

Applicant: Lake County Board of Commissioners

Project Title: Fancher Lake Natural Area Restoration Project

Project Type: Natural Area Restoration

Federal Request: \$100,000

Local Share: \$100,000

The Board of Commissioners County of Lake (BCCOL) has introduced a watershed protection and water quality enhancement program to preserve, protect, and restore natural areas at County-owned parks and facilities throughout Lake County. The Board of Commissioners believes that significant portions of County-owned properties can be dedicated for natural preservation or restored as natural habitat. The proposed Fancher Lake Restoration Project reflects the Board's commitment to restore county-owned land to natural habitat. The BCCOL also wishes to enhance public access to the restored natural areas to increase public awareness of the importance of natural habitat preservation, protection, and restoration, as well as increase recreational opportunities in South Lake County.

The BCCOL is proposing to restore several acres of natural area at the Lake County Fair Grounds, in Crown Point, IN. The project involves restoring the area surrounding Fancher Lake to a natural area. The project involves conducting a plant inventory; removing invasive species; designing habitat restoration plans and specifications; replanting appropriate native species to restore natural wetlands, wet sedge meadow, and prairie habitats; and care of the natural area during the reestablishment period. To increase public access and recreational opportunities, the project also includes boardwalk structures and pier. The project involves creative informational signage to enhance the educational experience of patrons visiting the Fancher Lake Natural Area Restoration Project site. The BCCOL is also proposing a fishing pier and bird watching viewing

area along the lakeshore. The habitat viewing area will include bench seating and permanently-mounted telescopes.

The proposed project is a collaborative project including the following project partners: Lake County Solid Waste Management District; Lake County Department of Parks and Recreation; Lake County Surveyors Office; Lake County Public Works Department.

Applicant: DNR – Division of Nature Preserves

Project Title: Calumet Prairie Woody Plant Control

Project Type: Natural Area Restoration

Federal Request: \$50,000

Local Share: \$50,000

Calumet Prairie Nature Preserve is a 140 acre natural area containing prairie and marsh plant communities. Native and non-native invasive woody plant species, such as quaking aspen (*Populus tremuloides*), are a serious threat to this prairie. This project would restore 15 acres of wet prairie by controlling these invasive woody plant species. Furthermore, this restoration will improve habitat for numerous state listed plant and animal species.

The project goal is to reduce the presence of native and non-native invasive woody plant species by 90% within the project area. This goal will be achieved by hand cutting target plant species, herbiciding cut stumps, hauling out and chipping the cut brush, and retreating shrubs and trees that resprout from the initial treatment.

Applicant: DNR – Division of Nature Preserves

Project Title: Hoosier Prairie Inholdings – Buckthorn control

Project Type: Natural Area Restoration

Federal Request: \$6,500

Local Share: \$6,500

Hoosier Prairie Nature Preserve is a 800 acre preserve containing prairie, marsh and oak savanna. Buckthorn (*Rhamnus frangula*) poses a serious threat to the prairie and oak savannas by invading and replacing native vegetation. This project would build on current work being done on the preserve in blocks 8 and 11 and Gaylord North. Buckthorn will be cut and removed and cut stems will be treated with herbicide. There will be a follow-up treatment of re-sprouts. Work will be done in the dormant season to minimize damage to the ground and vegetation.

Applicant: DNR – Division of Nature Preserves

Project Title: Hoosier Cattail Removal Demonstration

Project Type: Natural Area Restoration

Federal Request: \$10,000

Local Share: \$10,000

Hoosier Prairie is the largest remaining prairie/savanna complex in Indiana, and is a National Natural Landmark. It is over 300 acres and is by the towns of Griffith, Schererville, and Highland in Lake County.

Cattails (*Typha angustifolia* and *T.x glauca*) have become established throughout the wetlands of Hoosier Prairie Nature Preserve at densities approaching 100% cover. Several techniques to control them have been tested at other locations, but no one treatment has been shown to be superior to the others in terms of efficiency, control achieved, and promotion of the extant native flora. The goal of this project is to remove cattails on 13.3 acres of Block 4. Three different techniques (mowing, spraying, and wicking) will be used in their most appropriate application.

Applicant: Portage Parks Department

Project Title: Little Calumet River Public Access and Restoration Area

Project Type: Natural Area Restoration / Recreational - Public Access Improvements

Federal Request: \$100,000

Local Share: \$313,669

Grant funds will be used to complete enhancement / restoration activities on ten acres at the Little Calumet River Public Access and Restoration Area, in Portage. The Portage Parks Foundation is donating the land to the Portage Parks Department to provide the required match and to allow for restoration and future management.

The project entails upland forest enhancement, floodplain forest enhancement, developing additional trails for nature appreciation and to gain angler and canoe access to the Little Calumet River, and preparing a property management plan.

The restoration component includes removal of undesirable trees, shrubs and herbaceous species through cutting and herbicide applications. Target invasive species are Phragmites, garlic mustard and boxelder. Native floodplain forest species will be planted at a rate of 150 seedlings per acre along with seeding native understory plants. Wetlands will be enhanced by creating shallow scrapes, reseeding and installing plugs. An additional 1200 feet of trails will be constructed and interpretive signage will be installed along the trails. The 10 acres is immediately adjacent to a project funded in 2006 by LMCP. The property is located immediately south of the Little Calumet River and property owned by the National Lakeshore. The 10 acres provides a natural buffer between the National Lakeshore property to the north and the commercial development at Ameriplex to the south. The management plan will guide parks staff in vegetation management and future monitoring

Applicant: Town of Ogden Dunes, IN

Project Title: Long Lake Marsh Restoration Project

Project Type: Natural Area Restoration

Federal Request: \$15,700

Local Share: \$15,700

This project's purpose is to enhance the habitat and ecosystem of Long Lake Marsh, a 1.5-acre finger of Long Lake in the Indiana Dunes National Lakeshore (INDU) that extends into Ogden Dunes. Owned by the town, this marsh has been degraded by stormwater run-off, the dumping of yard waste, and invasive species such as Loosestrife and non-native cattails.

18-month objectives include:

- Diagnose stressors and develop baseline quality indicators, i.e., nutrient load, water quality, native species, and macro invertebrates, before December 31, 2007.
- Achieve 80% control of invasives before the end of the grant cycle.
- Reduce stormwater run-off impacts through bank stabilization and by planting filtering native species before the grant cycle ends.
- Increase the number of native species in the tract by 90% before September 2008.
- Develop a group of Stakeholders before February 2008 to oversee long-term management issues.

As of May 2006, approval is underway with the Army Corp. of Engineers and IDEM for the removal, during the grant period, of decomposed yard waste from some of the marsh. This endeavor will be undertaken during site preparation efforts.

A basic planting plan has been developed by J.F. New that will probably require more work. Partners include the Ogden Dunes Volunteer Fire Department (ODVFD) (prescribed burn), the Ogden Dunes Community Fund (cash donation), and the Save the Dunes Conservation Fund (SDCF)(technical assistance) (See Attachments C,D,E). If necessary, efforts will also be coordinated with INDU. Finally, to achieve long-term success., a group of stakeholders/volunteers will be initiated. As noted in the budget, ODVFD involvement is providing a substantial in-kind match (Supplies) to the project. In addition, the Ogden Dunes Community Fund has indicated that it will provide monetary support.

Applicant: DNR _ Division of Nature Preserves
Project Title: Suman Fen Reed Canary Grass Removal
Project Type: Natural Area Restoration
Federal Request: \$22,500

Local Share: \$22,500

The Tetrick tract of Suman Fen is part of the Moraine Nature Preserve complex. It is 23 acres and is located in Section 28 of Jackson Township in Porter County. The tract was planted with Reed Canary Grass (*Phalaris arundinacea*) after being farmed. Reed Canary grass now covers 100% of the tract, and is a very significant threat to the adjacent high quality fen to the east of the tract. It is spreading vegetatively and producing seed that is being vectored into the fen by wildlife movement. The goal of this project is to completely remove the Reed Canary Grass with herbicide treatment and prescribed fire. The initial herbicide treatment will be a broadcast application in Fall 2007. A prescribed fire to remove the duff will be conducted in the 07/08 burn season. A follow-up herbicide treatment will be a spot application in Fall 2008 to kill any escaped plants and seedlings. Revegetation of the tract with native species will be a subsequent project, and is not part of this project.

Applicant: Portage Parks Department
Project Title: Salt Creek Habitat Restortation Project, Phase I
Project Type: Natural Area Restoration
Federal Request: \$100,000

Local Share: \$105,360

The City of Portage and the Portage Parks and Recreation Department are involved in an aggressive plan to develop and preserve several natural resources within the middle to northern section of the City of Portage. The City of Portage's North Side Plan, Congressman Visclosky's Marquette Plan and the Save the Dunes' Watershed Management Plan all emphasize the importance that is being given to the appropriate development of the Lake Michigan Coastal zone area. There are a number of environmental and societal factors that have combined to place increasing demands on the streams in Northwest Indiana, including the Salt Creek. The proposed Salt Creek Habitat Restoration Project will concentrate on stream and habitat restoration along a 1.78 mile portion of Salt Creek, from the southern boundary of Imagination Glen Park to the intersection of US Rt 20. Portage Parks and Recreation Department will work with Rivertenders and Northwest Indiana Steelheaders to implement this project. Both organizations have an extensive experience with projects that have addressed eliminating stream bank erosion, increasing creek flow, creating and improving fish habitat and providing appropriate access to streams and creeks. The project will concentrate on log removal, bank improvement strategies, introducing habitat improving structures (lunkers) and establishing proper and accessible access points at several locations. This project is designed to address an opportunity presented to the City of Portage to develop a beautiful natural area and provide for both active and passive outdoor recreation experiences to residents and visitors to Portage, while restoring and improving the natural habitat of Salt Creek. A secondary benefit of this project will be establishing a blueway corridor from the trail head in Imagination Glen Park through Salt Creek and the Little Calumet River with access to Lake Michigan and Portage's future Lakefront Park.

Applicant: City of Michigan City
Project Title: Restoration on Trail Creek and fishing habitat at Karwick Nature Park
Project Type: Natural Area Restoration
Federal Request: \$33,000

Local Share: \$38,480

Karwick Nature Park going upstream to US Highway 35. Bank erosion is a continuing problem because there are no structures to contain it. Also, by constructing underwater lunkers,

fish habitat benefits, the banks are lined with stone to stop erosion, and dead falls are dragged to the side. This helps to increase flow as well.

Applicant: City of Michigan City

Project Title: Karwick Nature Park Bridge over Trail Creek

Project Type: Recreational / Public Access Improvement

Federal Request: \$100,000

Local Share: \$184,000

In 2000, Michigan City developed a vision to reclaim the use of a former city garbage dump from the 1960's and provide access via a bridge over Trail Creek to 13 additional acres of natural forest owned by Michigan City along the banks of Trail Creek. As a result of the persistence, dedication and leadership of two consecutive Michigan City mayors, Mayor Sheila Brillson and Mayor Chuck Oberlie, the first phase of this vision, Karwick Nature Park, is now under construction. This 23 acre city-owned parcel is bisected by the Trail Creek waterway. The western half is land-locked by the Norfolk-Western railway, CSX railway, Cheney Run ditch and Trail Creek itself. The inaccessibility of the western half of the parcel has spared these 12 acres from development over the past several decades and is a rare gem of pristine, undisturbed, natural wildlife habitat near the geographic center of Michigan City. The eastern half of the parcel was a city garbage dump for many years in the 1960's.

The stark dichotomy of past land uses, garbage dump versus undisturbed wildlife habitat, for these two areas that are literally 'across the creek' from one another present a one-of-kind opportunity: a bridge with a duality of purpose that not only transports visitors across Trail Creek, but also provides an aesthetic visual bridge to the cultural and environmental significance of natural resource preservation. The proposed bridge across Trail Creek from Karwick Nature Park to 12 acres of an Area of Particular Concern will extend public access providing both passive recreation and significant educational opportunities for the nearby Krueger Middle School students that are within walking distance to this 23 acre site. What better way to inspire our youth than to immerse them in a wildlife habitat by simply walking across a 80-foot long bridge?

EDUCATION AND OUTREACH

Applicant: Alliance for the Great Lakes

Project Title: Indiana Adopt-a-Beach Clean Up and Environmental Education

Project Type: Natural Resource Outreach / Awareness

Federal Request: \$14,000

Local Share: \$14,000

The Alliance for the Great Lakes is requesting funding to coordinate the 2007 coastal cleanup in September during Coast Week, and to further nurture stewardship among youth through its year-round Adopt-a-Beach program and its *Great Lakes In My World* educational curriculum.

Building on past work, 2007 will be the second year the Alliance will coordinate the yearly cleanup in Indiana. During 2006, the Alliance expects to host 700 volunteers during Coast Week to clean up six beach sites in Indiana. In 2007, the Alliance plans to expand the program by partnering with Indiana Dunes National Lakeshore, Great Lakes Research and Education Center, Charter School of the Dunes and Northwestern Indiana Regional Planning Commission (NIRPC) to nurture future stewards using our newly developed *Great Lakes in My World* curriculum. This curriculum meets state mandated teaching requirements in Indiana, and it fills a much needed niche for education on the Great Lakes. The Alliance has already introduced the curriculum in Indiana via National Park Service and NIRPC staff. Through funding from the Indiana Lake Michigan Coastal Program and local community foundations, the Alliance will link students using the curriculum to the year-round Adopt-a-Beach program at five to seven sites. By linking classroom curriculum to on-the-ground stewardship, the students' natural resource education is reinforced by real world experiences.

Through this work the Alliance will:

1. Improve environmental conditions at Indiana's beaches and shoreline areas through the clean-up efforts of volunteers, community organizations and school groups during Coast Week and the year-round Adopt-a-Beach efforts.
2. Educate Indiana students and instructors on the threats facing our Great Lakes to build future advocates who will care for Indiana's coastal resources.

Applicant: Purdue University Calumet

Project Title: Coastal Education Public Seminars

Project Type: Education / Outreach

Federal Request: \$2,500

Local Share: \$2,500

The proposed project is a proactive array of environmental education lectures that will raise the awareness of Northwest Indiana residents concerning the coastal resources that are readily available in the Lake Michigan watershed. Experts will provide insight on the impacts be it positive or negative that we, the citizens living in the watershed have on coastal resources via our everyday activities and choices. Four lectures are planned for the 2007 funding cycle, beginning in the winter and will be held at The Center, Purdue University Calumet in Hammond, Indiana. Suggested topics include: stormwater runoff and management through home rain gardens and onsite water infiltration; green building techniques such as green roofs, bioswales; how cultural industrial heritage shaped the coastal resources; how new developments along the lakeshore will impact coastal resources; water saving techniques for the home and how and why household hazardous waste disposal affects water quality; how and why stream dynamics impact coastal resources; and other potential issues of concern in the watershed. Lectures will be conducted and outreach materials pertaining to the lectures will be produced to reach approximately 500 local citizens. If funded, the project principal investigators will work closely with the Coastal Program Outreach Coordinator to ensure the effective information sharing, broad promotion of program materials and linkages across other state and local education programs.

Applicant: Indiana Department of Natural Resources – Division of State Parks and Reservoirs

Project Title: History Comes Alive: Interpreting the Dunes Past and Present

Project Type: Education and Outreach

Federal Request: \$100,000

Local Share: \$150,000

Project is to implement the Park Interpretive Plan at Indiana Dunes State Park (the only State Park located on Lake Michigan and in the Coastal program area). The interpretive plan identifies the major stories/themes of the Indiana Dunes State Park, and sets forth strategies being utilized or planned at the park level to convey these stories and ensure consistency along the route. The main project will be a complete interpretive exhibit/display renovation inside the Indiana Dunes State Park Nature Center. New, updated, interactive displays featuring the park's history (cultural and natural) will replace older, outdated, and deteriorating displays. Additionally, interpretive wayside displays are planned for the exterior of the nature center, where natural communities are maintained for both visitors to walk through, and interpretive programs to be led through.

Applicant: Portage Department of Parks and Recreation

Project Title: Portage Outdoor Science Education Program

Project Type: Education/Outreach

Federal Request: \$50,000

Local Share: \$50,000

Portage Parks and Recreation Department will partner with the Portage Township Schools to develop a K-12 outdoor science education curriculum. The proposed project will be to develop a series of field trip-based lesson plans specifically developed for each of the thirteen different grade levels. The educational sessions will focus on five separate and diverse natural areas within Portage including a fen, a natural dune area on the Lake Michigan shoreline, an upland wooded 16 acre parcel, a black oak savanna and over three miles of Salt Creek, one of northwest Indiana's best steelhead fishing tributaries. Each series of lesson plans will include classroom-based pre-fieldtrip instruction on a particular subject. Subject matter for the outdoor science curriculum will include environmental and conservation issues, preservation practices, habitat identification, wildlife biology, geology, botany, meteorology/water cycle and ecosystems. All materials will meet the Indiana Academic Standards as established by the Indiana Department of Education.

PLANNING / COORDINATION / MANAGEMENT

Applicant: Wildlife Habitat Council of NW Indiana

Project Title: Ecological Management of Indiana's Industrial Coastal Habitats

Project Type: Natural Area Management Planning

Federal Request: \$29,914

Local Share: \$35,000

The goal of this project is to increase the acreage of quality wildlife habitat on industrial and corporate managed lands on the IH&SC/Grand Calumet AOC, as well as in other, smaller geographic clusters of industry located on Indiana's Lake Michigan Coastal Zone. The result from this project will be an integrated approach to private sector involvement in the restoration of habitats and creation of new native landscapes on Indiana's Lake Michigan basin for the maximum benefit of citizens and to increase quality riparian and upland habitat.

Objectives:

1. Map and delineate existing habitats or potential areas for habitats on industrial properties, with their owners, and in relation to industrial infrastructures such as Right of Ways, pipelines, facilities, etc.
2. Develop criteria for habitat restoration and native landscapes on industrial and corporate properties, including criteria for community outreach and public participation.
3. Design and produce a toolkit for implementation of habitat restoration and native landscapes by industrial and corporate landowners on Indiana's Lake Michigan Coastal Zone. This product will be a hands-on, design-style manual for how to restore habitats in the diverse Tolleston Dune floodplain ecosystem and how to plant native landscapes of local plant species.
4. Facilitate partnerships for next phase of work leading to habitat restoration with IDNR Coastal Program and community.

The goal to increase wildlife habitats on industrial properties can be met primarily through the efforts of private landowners in coordination with the Indiana DNR and other agencies. WHC's habitat restoration programs such as habitat restoration and land stewardship on private properties, will be instrumental to generating corporate participation in local habitat restoration efforts (see www.wildlifehc.org). Increasing the amount of private landowner participation in wildlife habitat enhancement is key to increasing the amount of land within Indiana's coastal area that is managed to favor wildlife.