

Subgoal 5

Does the public have access to abundant open space, shoreline, and natural areas, and does the public have enhanced opportunities for interaction with the Lake Michigan ecosystem?

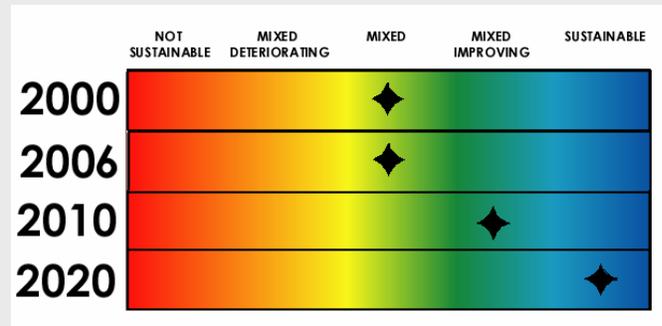
Status

Currently, the status of the goal is mixed due to the competing needs of the public and the ecosystem.

Indicators (State of the Lakes Ecosystem Indicators by Number)

- 7000 - Urban Density
- 7001 - Brownfield Redevelopment
- 7002 - Land Cover- Land Conversion
- 7053 - Green Planning Process
- 7054 - Extent of Hardened Shoreline
- 8114 - Habitat Fragmentation
- 8129 - Area, Quality, and Protection of Special Lakeshore Communities - Alvars; Cobble Beaches; Islands; Sand Dunes
- 8132 - Nearshore Land Use
- 8136 - Extent and Quality of Nearshore Natural Land Cover
- 8149 - Protected Nearshore Areas
- 8163 - Status of Protection of Special Places, Species

Lake Michigan Target Dates for Sustainability



Challenges

- Fish advisories for sport caught fish
- Recreation harbor maintenance needs and funding shortfalls
- Land cost driven by sprawl makes purchase for preservation more costly
- Diminishing federal resources (land and water conservation funding) for purchasing land for open space and recreation
- Prevent recreation users from spreading invasive species (See chapter 8)
- Funding for recreation harbors

Next Steps

- Partner with the growing coastal zone management programs in the Lake Michigan basin to ensure that the issue of public access to the lake is balanced with protection of the ecosystem
- Support *cladophora* research
- Support a green marina dialogue
- Determine protection status of world's largest collection of fresh water sand dunes
- Public involvement in preservation and stewardship of special natural areas with public access for sport and recreational activities should be fostered by the following:
 - Broaden the dialogue with state and local government land-use planners and decision-makers to balance environmental and recreational needs
 - Provide tools for local communities to understand the value of the resource from a lakewide perspective and develop long-term management programs
 - Identify open space multi-use opportunities and tools for such things as flood retention parks, and open space with commuter bike trails, among others

Background

To move to mixed/improving status by 2010 and finally to sustainable status by 2020, there is a need to find a better balance between public access and ecosystem protection. The Lake Michigan LaMP focuses on the health of the Lake Michigan ecosystem, so management actions implemented under the LaMP are to take an ecosystem approach to remediation and protection. The 1994 SOLEC Integration Paper developed by USEPA and Environment Canada states that "Governments have traditionally addressed human activities on a

piecemeal basis, separating decision making on environmental quality from decision making on natural resource management or on social or economic issues.... An ecosystem approach to management is a holistic approach that recognizes the interconnectedness of and addresses the linkages occurring among air, water, land, and living things."

Interacting with the Ecosystem

For thousands of years, the abundant natural resources of the Great Lakes system attracted inhabitants to its shores. The fresh water, abundant

The Marquette Plan to Open the Indiana Shoreline

In 1985, U.S. Congressman Pete Visclosky developed a plan for Northwest Indiana to reclaim former industrial lands for public use in a paper titled "The Marquette Project." The vision, now called the Marquette Greenway Plan, has three guiding principles: (1) a transformation of 75 percent of the Lake Michigan shoreline for public use, (2) a minimum 200-foot setback from the shoreline for all new structures and facilities, and (3) a continuous pedestrian/bicycle trail along the shoreline. An agreement was facilitated between the mayors of East Chicago, Gary, Hammond, Portage, and Whiting. All five cities signed a memorandum of understanding to collectively pursue a master plan for the Lake Michigan shoreline. The master plan will provide the cities with a detailed map analysis and evaluation of the shoreline and its potential for public recreational use.

The first phase of the project, completed in January of 2005, developed a study of the land that will serve as a guide for future regional planning efforts and implementation of the Marquette Plan. It focused on the Indiana shoreline from the Illinois/Indiana state line to the Port of Indiana-Burns Harbor. Implementation of the Plan will begin in 2006 in Portage with a project to demolish Midwest Steel's former water treatment plant. The project will be accomplished in cooperation with the Army Corps of Engineers and the National Park Service. Once demolition is complete, the city plans to build a lake-front park on the site. Phase II of the Plan was launched in February of 2006 and will continue development of the Plan from the Port of Indiana-Burns Harbor to the Michigan/Indiana state line.

In November of 2005, it was announced that the Marquette Plan received a \$20 million federal funding authorization in the Energy & Water Appropriations Act of 2006 for projects that will reclaim sites along the Lake Michigan shoreline for public recreational use. Under the legislation, the \$20 million will be cost-shared, with 65 percent coming from the federal government and 35 percent coming from a non-federal funding source.

Marquette Plan Honored by American Society of Landscape Architects

The American Society of Landscape Architects awarded the Marquette Plan design with an Honor Award. It received the award in recognition of the vision to build a long-term reinvestment strategy on a broad scale, but with the recognition that a critical component of the effort is to implement shorter term projects. The success of these projects will help build the support necessary for the "achievement of the plan's longer term goals.

More information is available at: www.il-asla.org/awards_2005_honor_jjr.html.



Proposed Lake Michigan Water Trail

The creation of Great Lakes automobile and bike trails around Lake Michigan and the creation of several water trails around the lake has led to discussions of linking the emerging water trails into a larger system of water trails by the U.S. National Park Service (NPS) and LaMP committees.

The Lake Michigan Water Trail program would encourage coordination among lakefront communities to develop a water trail segment that links their communities and provide a safe, educational, and legal access experience to Lake Michigan. Water trail creation brings together a broad coalition of interested groups including public land managing entities, self-powered boating interests, environmental and historical groups, private property owners, tourism offices, and physical activity advocates. The Rivers and Trails Program of the NPS will provide technical assistance to communities who wish to participate in water trail development.

In the Great Lakes, NPS Wisconsin staff assisted in developing three water trails in Lake Superior (one in Minnesota, Wisconsin, and Michigan), one in Lake Huron, and are currently embarking on one in northwestern Lake Michigan.

Creating a water trail on the northwest shore of Lake Michigan raises the challenge of how to link with an existing water trail segment on Lake Michigan's southwest shore and to expand around the lake. Spearheaded by the Northeastern Illinois Planning Commission, Openlands Project, and the Illinois Paddling Council, the Northeastern Illinois Regional Water Trails Plan was developed in 2002 and includes the Lake Michigan shore from Indiana to Wisconsin. Wisconsin has 365 miles in planning; Michigan has 735 miles needed; and Indiana identified 42 miles.

For more information, contact Angie Tornes at angie_tornes@nps.gov.

Lake Michigan Water Trails

There are many existing water trails in the Lake Michigan basin. Information about them can be found online at the resources listed below.

Illinois

- Northeastern Illinois Watertrails: www.openlands.org/watertrails.asp and http://gorp.away.com/gorp/location/il/pad_chic.htm
- Chicago Portage Canoe Trail: http://users.rcn.com/clonk/CCFPD/MINI/#Canoe_trail.htm
- Illinois DNR Canoeing Opportunities: http://dnr.state.il.us/lands/Landmgt/Programs/Canoe_trail.htm

Indiana

- Indiana's Canoe Trails: www.in.gov/dnr/outdoor/canoe/index.htm

Michigan

- Michigan's Canoe Trails: http://gorp.away.com/gorp/resource/us_river/mi.htm
- Keweenaw Water Trail: www.kewaunaw.org/watertrail.htm
- Hiawatha Watertrail: www.hiawathawatertrail.org

Wisconsin

- Wisconsin Lake Michigan Watertrail: www.kayakwisconsin.net/watertrail
- Capitol Water Trails, Inc., Madison, Wisconsin: www.capitolwatertrails.org/index.htm

and diverse fishery, stands of trees, mineral wealth, and fertile soils formed the basis for the quality of life and the economy. The opportunity of using water for drinking, power, and transportation was a key element in the economic equation of the time. The magnitude and diversity of the Great Lakes adds a challenging dimension to most endeavors.

The interaction of Lake Michigan residents with their ecosystem today is still based on natural resources but is less "hands-on", for while the plows still till the soil, the pork belly futures get sold in the Chicago Commodities Exchange pits far removed from the resource. More interaction is now self-selection of activities in which residents are seeking quality of life by being outdoors, often on or near the water. The interaction termed "recreation" is so highly valued by society that special purpose governmental units on the federal, state, tribal, and local levels are charged with protecting natural resources by providing and promoting recreation services utilizing public funds. Recreation takes place on the land, and on, in, and under the water. Scuba diving at old ship wrecks and other natural phenomenon in the lake is a growth sport and opportunities abound to discover other natural and cultural sites.

An entire industry exists to entice visitors to share the region's natural resource-based activities. Studies document that these nature-based tourism activities provide a significant net positive gain for the health of the residents and to the regional and national economy. To sustain this interaction with a positive net gain to the economy, the environment, and society, critical coastal areas must be open and accessible; water must be of high quality and sufficient quantity; sensitive cultural, habitat and biodiversity areas protected; and attention paid to climate change and lake level interaction.

The Green Infrastructure movement is becoming more widespread as a way to educate and inform communities of the important values of open space. Stated simply, green infrastructure is the system of connected parks, trails, and stream corridors that provide conservation and recreation benefits to a community. This connected system is as important as the more traditional infrastructure such as roads and utility corridors for electric power transmission, water and sewer and public safety.

Benefits in communities with well developed green infrastructure include a higher quality of life for

Fast Facts

- The Land and Water Conservation Fund 2004 survey reports that the Fund has seen shrinking appropriations for the last several years.
- A 2005 study by the Great Lakes Commission and the U.S. Army Corps of Engineers on Great Lakes recreational boating values that industry at \$22 billion.
- Of 27 National Park Service Heritage Areas, only 3 are in the Lake Michigan basin.



KEY

- Circle Tour road route
- - - Spur route
- - - Connecting route
- Cities and towns
- MI States
- 🌲 National forests
- 🌊 National lakeshore
- 🚢 Ferry

The Lake Michigan Circle Tour
Courtesy of The Great Lakes Commission

residents. Healthy green infrastructure also minimizes non-point source pollution problems, provides transportation alternatives, and improves overall environmental quality, public health, and quality of life. If collocated where possible, it can benefit open space and trails.

Development pressures within the Great Lakes basin will continue to increase. Great Lakes communities need to consider growth management planning to ensure that future community expansion, whether residential, commercial, or industrial, does not have negative impacts on the important resources values of the Great Lakes.

Local, state, tribal, and federal government agencies have widely varied natural resource ethics and cannot deliver all that is needed to ensure a

Sleeping Bear Dunes Developing New General Plan

The Sleeping Bear Dunes National Lakeshore announced the beginning of a General Management Plan/Wilderness Study/Environmental Impact Statement process. The General Management Plan will establish the overall direction for the park, setting broad goals for managing the area over the next 20 plus years. The plan will develop the desired resource conditions and visitor experiences that are to be achieved and maintained throughout the park.

These will be based on such factors as the park's purpose and significance, applicable laws and policies, resource and impact analysis, and public expectations and concerns. The plan also will outline the kinds of resource management activities, visitor activities, and developments that would be appropriate in the park in the future.

The Wilderness Study will evaluate the wilderness characteristics and values of lands within Sleeping Bear Dunes National Lakeshore using definitions found in the Wilderness Act of 1964. The study may result in an entirely new configuration of lands recommended for possible designation as wilderness.

The General Management Plan and Wilderness Study will be accompanied by an Environmental Impact Statement, which will evaluate the potential impacts of the alternative management approaches and the possible designation of wilderness within the park.

More information is available at: www.nps.gov/slbe

sustainable future of protection for the Great Lakes. Ultimately, local stewardship of important resources will cumulatively protect the Great Lakes.

Public Interaction with the Lake Michigan Watershed

According to the Federal Interagency Ecosystem Management Task Force, an ecosystem is defined as: "... an interconnected community of living things, including humans, and the physical environment with which they interact. As such, ecosystems form the cornerstones of sustainable economies. The goal of the ecosystem approach is to restore and maintain the health, sustainability, and biological diversity of ecosystems while supporting sustainable economies and communities" (1995). Based on a collaboratively developed vision of desired future conditions, the ecosystem approach integrates ecological, economic, and social factors that affect a management unit defined by ecological—not political—boundaries. The foundation of the ecosystem approach is relating human beings and their activities to the ecosystems that contain them.

As access to Lake Michigan increases, so does the pressure for development. Growth of summer homes and year-round homes on the shoreline leads to more road construction, pollution from increased use of automobiles, and human use of areas that interrupts the natural web of basin life. In response, Smart Growth policies are being developed and pursued by many communities, and resources such as the "Wisconsin Planning Guide for Smart Growth" (see www.dnr.state.wi.us/org/es/science/landuse/smart_growth/index.htm for more information) and the Northeastern Illinois Planning Commission's "Environmental Considerations in Comprehensive Planning: A Manual for Local Officials" (see www.nipc.org for more information), and the Northwest Indiana Regional Planning Commission's "Water Resources Protection and Conservation Toolkit" (see www.nirpc.org for more information) are becoming more widely available.

Outdoor Recreation Opportunities

Outdoor recreation in the Great Lakes basin is an important component of the region's economy. The region offers outstanding tourism and recreational opportunities ranging from wilderness activities in pristine national parks to swimming at beaches in

major cities. A well-defined four-season climate supports many types of recreation ranging from ice fishing, skiing, and snowmobiling in the winter to golf, fishing, boating, and swimming in the summer. There are approximately 40 state parks in or near the Lake Michigan basin as well as national lakeshore parks and fish and wildlife refuges. These can be visited by following the Circle Tour route around Lake Michigan. The Great Lakes Commission, in cooperation with the Great Lakes states and provinces in the 1980s and 1990s, coordinated the creation of the Circle Tours along existing roadways. The Lake Michigan Circle Tour route is marked by signs that feature Lake Michigan and the four surrounding states. In addition, guides prepared by states and localities that highlight enjoyable areas are important tools for promoting public access as well as critical ecosystem protection.

The Many Benefits of Open Space

Open space plays an important role in supporting the economy. According to the National Association of State Park Directors, use of geologically or environmentally sensitive areas as open space or for recreational purposes can reduce potential property damage costs. Hazards that can be mitigated through conservation of open space include flooding, slope instability, and structural fire damage. The combination of habitat protection and recreation is often the highest and best use of lands that are too fragile for development. The cost of not protecting such assets as slopes, aquifers, woodlots, wetlands, fens, alvars, floodways is incredibly high in the long run.

The eight Great Lakes states have about 3.7 million registered recreational boats, or about a third of the nation's total. Michigan is second in the nation in the number of boat registrations and six Great Lakes states rank in the nation's top ten in total registrations.

Recreational Fishery and Parks Valued

The Great Lakes recreational fishery is valued at \$4.6 billion. The National Park Service (NPS) estimates expenditures related to visits at national and state parks at \$22 billion (1993 dollars). The NPS 2004 survey of states estimated demands for recreational facilities and open space acquisition for three-quarters of the states have unmet needs of 50%.

Next Steps

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