

Photo Credit: Jennifer Muladore, Huron Pines



MICHIGAN COASTAL NEWS

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State to Reassess Michigan's Coastal Boundary

The Michigan Coastal Management Program (MCMP), Department of Environmental Quality is launching a review of the State's coastal zone management boundary, set in 1979. The location of this administrative line along the coast has on-the-ground ramifications for Michigan's Great Lakes resources, coastal communities, and state and federal agencies. Consequently, an effort to redraw the line is a deliberative process subject to federal oversight and public review and comment.

The federal Coastal Zone Management Act (CZMA) authorizes coastal states to define their coastal boundaries and establish comprehensive programs to manage resources and balance competing uses within that boundary. For the Great Lakes states, the boundary defines the landward edge of a broad coastal zone that extends offshore to the border with Canada and/or other states. Within the zone are the ribbon of coastal mainland, islands, submerged lands, and waters that constitute a state's coastal program area. The MCMP may use funding from the National Oceanic and Atmospheric Administration (NOAA) to support administration and enforcement of state resource protection laws within the zone. The MCMP also passes through NOAA funding to communities, nonprofit organizations, universities, and state agencies to implement coastal management objectives outside the realm of state regulation.

Federal lands are excluded from state coastal zones. However, states exercise a rare authority over federal actions within the zones. The federal consistency provision of the CZMA gives states the power to review certain federal actions proposed within the zone to determine whether they are consistent with state coastal resource protection policies. Examples of actions subject to review are development of federal lands and issuance of federal licenses and permits. Federal agencies proposing actions that are not consistent with state coastal policies must work with the state to resolve the differences. The MDEQ is Michigan's lead agency for federal consistency reviews.

Michigan's natural, political, and economic coastal landscape has changed in the 30 years since the NOAA approved the current boundary. For instance, offshore and directional drilling for fossil fuels has been banned, while coastal wind energy development is a new reality. An early item on the boundary review agenda is weighing the net effect of these changes on the State's ability to manage resources and balance competing uses in the coastal zone. This accounting will help guide the boundary review team and stakeholders in identifying where to focus limited coastal management resources most strategically. Contact Cathie Cunningham Ballard for additional information at **(517) 335-3456** or cunninghamc1@michigan.gov.





Photo Credit: Paul Curtis, MDNR

Project Spotlight: State Park Management Planning

The Michigan Department of Natural Resources (MDNR) manages 41 state parks on the Great Lakes and connecting channels comprising over 108,000 acres of public lands. Visitors enjoy access to wind-swept dunes, sand and cobble beaches, forested dune and swale complexes, and other natural communities that mark the coast as pure Michigan. Many of these scenic landscapes are sensitive to foot traffic and other consequences of visitor use. They are also home to rare animals and plants, and some harbor archaeological sites and fragile artifacts. The potential for these resources to be "loved to death" by the public is real, and the MDNR is challenged to balance visitor use with resource protection.

The agency recently used a Coastal Zone Management grant to pilot a judicious and inclusive approach to state park management planning that aims to anticipate and pre-empt conflicts between recreation and resource stewardship.

The project focused on Thompson's Harbor, Rockport, and Negwegon, three current or prospective coastal state parks in the northeast Lower Peninsula. Together, they offer more than 22 miles of virtually unspoiled Lake Huron shoreline and almost 12,000 acres of recreational lands. All three sites shelter easily-damaged natural communities, animals and plants protected under state and federal law, and historic and cultural resources ranging from Native American structures to an abandoned quarry that supplied construction material for the Mackinac Bridge. Most visitors are local residents who appreciate the lightly-used and largely undeveloped character of the properties. Yet, business interests in neighboring communities imagine the parks as the cornerstone of a regional tourism industry, and want them developed and marketed to attract a substantial influx of visitors.

Crafting a management strategy to accommodate the MDNR mission and varied local visions for the three properties required the agency and community stakeholders to work together at two geographic scales. At the individual park level, the planning committee reviewed information on wildlife and ecosystems, historic features, education and recreation opportunities, and public input to divide the parks into "management zones," based on a management planning technique used by the National Park Service. The committee determined which areas of the park have resources so sensitive that visitor use should be prohibited, which areas could be developed to support high-impact recreation, and which areas fall into the gradations between the two ends of the management spectrum. The resulting zoning map formed the basis of the General Management Plan for each park.

At the regional scale, the committee considered how the special assets of each park could feature in an overall management and marketing strategy. Strung along a stretch of M-23 that takes less than an hour to drive, the committee agreed that the three parks are best managed and promoted as a package. For example, Rockport lies between the other two parks. Its central location makes it a candidate host site for a regional visitor center, and abandoned industrial areas create opportunities for campground development and other intensive recreational uses. The availability of these previously impacted lands will also take development pressure off the other two parks, whose lands are comparatively more sensitive to visitor impacts. Contact Paul Curtis, MDNR Park Management Plan Administrator, at **(517) 335-4832** or curtisp@michigan.gov for information on Michigan state park planning.

Classes Offered on Northern Michigan Land Use Management Topics

Planning commissioners, local officials, nonprofit organizations, and interested citizens from northern Michigan communities may find classes tailored to their needs in the winter and spring, 2009, sessions of the Land Use Education Academy. A partnership between the Northeast Michigan Council of Governments and the MSU Extension Regional Land Use Education network, the Academy classes address the planning, zoning, and resource management challenges and opportunities that commonly arise in rural communities. For example, two upcoming classes will explore methods and tools for researching, restoring, and preserving the historic buildings that impart character to northern Michigan downtowns and waterfronts. Another class will walk students through the process of obtaining and using grant funds for community projects. Information on the Academy classes is available at www.nemcog.org through the New Training Opportunities link.

The MSU Extension Regional Land Use Education network responds to the technical assistance needs of northern Michigan communities, for example, by clarifying points of the planning and zoning process, identifying options for growth management, and providing guidance on effective public involvement in community decisions. Contact Dr. Mary Ann Heidemann at **(989) 354-9870** or heidemannma@alpenacounty.org to suggest a topic for a Land Use Education Academy class or obtain information about Regional Land Use Educator services.



Photo Credit: Matt Smar, MDEQ

El Cajon Bay sinkhole, Alpena County

Lake Huron Biodiversity Conservation Strategy Focus of Binational Effort

Conservation organizations and agencies from the United States and Canada have hit the ground running to craft a collaborative strategy for protecting and restoring the native biodiversity of Lake Huron. On December 10 and 11, representatives from a variety of federal, state, provincial, tribal, and local governments and non-profits met in Port Huron for the first of a series of three conservation planning workshops. Participants identified a set of focal physical and biological features of the Lake Huron ecosystem and assessed the extent and severity of the major threats to their conservation. Stakeholder workshops to formulate priority actions for abating these threats and explore ways to gauge

their success are planned for later this winter and spring. In Michigan, The Nature Conservancy, Michigan Natural Features Inventory, and Michigan Sea Grant are leading the project with funding support from the U.S. Environmental Protection Agency - Great Lakes National Program Office and the Chrysler Foundation. The Ontario Ministry of Natural Resources, Environment Canada, and the Michigan Department of Natural Resources are also providing support. The project is benefiting from the knowledge and expertise of a steering committee with representation from a wide variety of organizations.

The brisk pace of the effort stems from the December, 2009 project deadline as well as the need to respond to unrelenting pressures on Lake Huron's environment, such as ongoing cottage and urban development along the coast. Intensifying interest in offshore wind energy and other emerging pressures add to the urgency. The relatively short timeframe is feasible because of the body of relevant work already in existence. Previous efforts on both sides of the border have given rise to the Lake Huron Binational Partnership, Great Lakes Fishery Commission Environmental Objectives for Lake Huron, Michigan Wildlife Action Plan, and other conservation initiatives for the watershed of varied scope and focus. The project will build on these plans to develop a unified biodiversity conservation strategy for the lake with roles for all levels of stakeholders, from the grassroots to federal and tribal governments.

Local engagement in the project is particularly important, given the complexity of the Lake Huron ecosystem. Lake Huron presents different faces to the communities around its shore. Saginaw Bay residents gaze over broad expanses of fertile coastal marsh to see the open horizon, while cottagers on Georgian Bay stand on a bold, rock-bound coast to look out on a lake dotted with countless islands. Local input will help shape a strategy that is meaningful for these "lakes within a lake," as well as for Lake Huron in its entirety. Contact Patrick Doran with The Nature Conservancy in Michigan for additional information on the project at **(517) 316-2279** or pdoran@tnc.org.

Project for Public Spaces' 19 Tips for Vibrant Waterfronts

From Chicago to Auckland, lively waterfronts share several characteristics. Convenient pedestrian and bike access, spaces designed for flexibility in programming, and a focus on water-oriented recreation and transport are part of the recipe for drawing diverse users. Certain types of mixed-use development entice people to linger into the evening hours in all sorts of weather, while local art, music, and other cultural events lend a unique, home-grown flavor to the visitor experience. These observations on successful urban waterfronts around the world are among the *10 Qualities of a Great Waterfront* compiled by the Manhattan-based Project for Public Spaces, a nonprofit organization dedicated to helping people turn public spaces into vital community places.

In the past, many coastal cities severed their waterfronts from downtown areas with unwelcoming industrial lands or roads built for high-volume traffic. Those actions reflected the prevailing planning and economic development philosophies of the time, but few communities would repeat the same moves today, knowing that urban waterfronts can be premier recreational and tourism assets. Nevertheless, the Project for Public Spaces notes that by building high-end housing on the water, for example, some communities are making a similar error, albeit in a different guise. Such single-use forms of development effectively restrict the range of options for public enjoyment of the waterfront, and dampen its potential to enrich the public life of the community. Citizen involvement in the planning process is central to crafting a vision for community waterfronts with broad public benefit, and the Project for Public Spaces lists *9 Steps to Creating a Great Waterfront* emphasizing that principle. Links to the *10 Qualities* and *9 Steps* are at [www.pps.org/info/newsletter/Waterfronts Placemaking/How to Create a Vibrant Waterfront](http://www.pps.org/info/newsletter/Waterfronts%20Placemaking/How%20to%20Create%20a%20Vibrant%20Waterfront).

Photo Credit: Thunder Bay National Marine Sanctuary



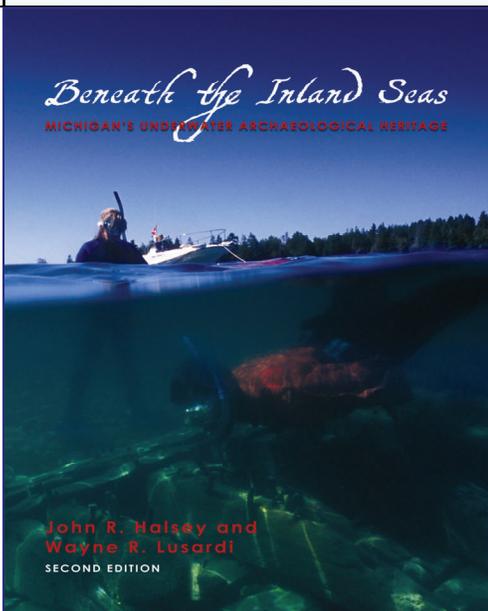
Student Teams Invited to Participate in 2009 Marine Robotics Competition

Next April 25, teams of high school and college students from around the Great Lakes will meet in Alpena to demonstrate rival solutions to a challenge that tests the bounds of their engineering and troubleshooting skills. Thunder Bay National Marine Sanctuary is hosting the Alpena event, which is a regional trial for the 8th Annual International Student Remotely-Operated Vehicle (ROV) Competition organized by the Marine Advanced Technology Education (MATE) Center in Monterey. ROVs are indispensable tools in ocean research, industry, and rescue operations. The competition aims to boost the number of students interested in pursuing marine technology careers while building their technical knowledge and abilities.

Each year, participating teams receive detailed information to guide the design and construction of their submersible ROVs. For the 2009 competition, the mission scenario is a submarine rescue training exercise. Teams are challenged to create and pilot an ROV that will inspect the submarine for damage, deliver emergency supplies, replenish the onboard air supply, and perform other tasks. The MATE Center has linked the mission specifications to its website at www.marinetech.org. Information on technical resources, tips, and free or discounted supplies and software is available on the website as well. Teams also prepare technical reports, poster displays, and engineering presentations on their vehicles as part of the competition. Frontrunners from the regional trials will advance to the finals and compete against teams from other areas of North America, China, United Kingdom, and other countries in Buzzards Bay, Massachusetts, June 24-26, 2009.

For students with a flair for math, science, and engineering, participating in the ROV design/build competition can be a high point of their high school and college years. The teamwork and problem-solving in an atmosphere of friendly rivalry with other bright and creative young people is a positive, memorable experience. The chance to meet marine technical professionals and prospective employers is also invaluable. Educators and mentors interested in organizing a student team for the Great Lakes regional trial can contact Cathy Green, Education and Outreach Coordinator for the Thunder Bay National Marine Sanctuary at **(989) 356-8805 extension 10** or cathy.green@noaa.gov.

Advances in Michigan Underwater Archaeology Detailed in Colorful New Book



Underwater archaeology is anything but a dry subject as presented in the pages of the *Beneath the Inland Seas: Michigan's Underwater Archaeological Heritage*, produced by *Michigan History* magazine. The second edition of this fully-illustrated book, released in July, is double the length of the 1990 edition to accommodate the new findings, new ideas, and other new developments of the intervening years. Establishment of the Thunder Bay National Marine Sanctuary in 2000 is arguably the single most significant development, as it has moved northern Lake Huron shipwrecks and other maritime heritage resources into the international spotlight, and catalyzed intensified exploration, research, and education efforts in the sanctuary and beyond. Many of the resulting discoveries are described in *Beneath the Inland Seas*.

Archaeology in Great Lakes waters is a passion as much as it is a scientific and historical discipline, and the book captures that aspect as well. Recreational divers, amateur shipwreck enthusiasts, and maritime historians continue to expand the body of knowledge about Great Lakes shipwrecks

and other historic resources. Some of them join the editors, State Archaeologist John Halsey and State Maritime Archaeologist Wayne Lusardi, in sharing their personal anecdotes, factual discoveries, and love of the Great Lakes in a series of vignettes of 19 shipwrecks from around Michigan's coast, a new feature in the second edition. The vignettes complement preceding chapters addressing the evolution of the vessels plying the lakes and the influences that shaped them, Michigan's bottomland preserves, and other aspects of underwater archaeology and recreational shipwreck diving. To acquire a copy of the book for \$19.95, call **(800) 366-3703**. For information on maritime archaeology in Michigan, contact Wayne Lusardi at **(989) 356-8805 extension 11**, or wayne.lusardi@noaa.gov.