



Michigan Department of Environmental Quality  
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<http://www.michigan.gov/deq>

## Office of the Great Lakes Activity Report Summer 2005

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### Listen to Lake Superior on KUMD Radio

Minnesota Sea Grant has teamed up with the radio station KUMD, to produce a radio program about Lake Superior science called "Listening to the Lake."

Every two weeks throughout the summer, KUMD (103.3 FM or <http://www.kumd.org>) will broadcast the five to eight minute program. Topics covered so far are the Lake Superior Beach Monitoring Program, rip currents, and sea lamprey control efforts. Listen for it during the station's Northland Morning/Coffee Break show, which airs between 8:15 and 8:45 a.m.

KUMD, broadcast from the University of Minnesota Duluth campus, is an independent public radio station offering a mix of community-based programs and jazz.

Future shows will air on August 24, and September 7. Topics will focus on metal corrosion in the harbor, coaster brook trout rehabilitation, stormwater runoff, and an educational Lake Superior boat trip.

Archived radio programs can be found on <http://www.seagrant.umn.edu/pubs/ll/>

### 2004 Toxic Strategy Report Released

The 2004 Annual Report of the The Canada-US Great Lakes Binational Toxics Strategy (GLBTS), "A beyond compliance Strategy to virtually eliminate persistent toxic substances from the Great Lakes", is now available on the web at <http://www.epa.gov/greatlakes/bns/>.

This past year saw continuing reductions in the twelve level 1 priority pollutants (including mercury, PCBs, dioxins/furans, hexachlorobenzene, Benzo(a)Pyrene, octachlorostyrene, alkyl lead and cancelled pesticides) both sides of the border. Of seventeen reduction goals set forth in the Strategy, ten have been met, three will be met by 2006, and the rest are well advanced toward their respective targets.

This report presents the latest pollution prevention and toxics reduction activities taking place under the GLBTS across the basin. Some examples include the work of the American Dental Association, in partnership with the Naval Institute for Dental and Biomedical Research, to develop and disseminate best management practices for dental mercury amalgam to dentists across the Great Lakes Basin; Ford Motor Company achieving a 79 percent phase-out of their PCB transformers globally in 2004, and committing to 95 percent phase-out by the end of 2006; activities of the Scrap Tire Pile Mitigation Support Project, led by USEPA, which has developed a scrap tire pile inventory, along with GIS mapping, and a training and outreach program to mitigate tire piles across the basin.

### Great Lakes Regional Collaboration

On July 7, 2005, the Great Lakes Regional Collaboration released a draft strategy to restore and protect the Great Lakes ecosystem. At the "Summit I" event in Duluth, Minnesota, senior representatives of the collaboration — U.S. Environmental Protection Agency Assistant Administrator Benjamin Grumbles, Wisconsin Gov. Jim Doyle, Duluth Mayor Herb Bergson, Superior, Wis., Mayor David Ross and Little Traverse Bay Bands of Odawa Indians Tribal Chairman Frank Ettawageshik — presented the strategy for public comment.

*Continued on page 2*

### Highlights

**High-Tech Buoy  
 on Grand Traverse Bay 2**

**Maritime Heritage Initiative 4**

In December 2004, President Bush signed an executive order directing EPA to lead a regional collaboration of national significance for the Great Lakes. The collaboration is a unique partnership of key members from federal, state, and local governments, tribes and stakeholders for the purpose of developing a strategic plan to restore and protect the lakes.

More than 1,500 people from government and nongovernmental organizations participated in the six-month effort to draft the strategy. Teams worked on eight critical environmental priorities including aquatic invasive species, habitat conservation and species management, near-shore waters and coastal areas, areas of concern, non-point sources, toxic pollutants, sound information base and representative indicators and sustainability. The reports of these teams form the basis for the draft action plan. They include recommendations for action and focus both on the long-term restoration of the Great Lakes and on the steps that must be taken over the next five years to most effectively achieve results.

The draft strategy still must be endorsed by the Great Lakes Regional Collaboration members. Following a 60-day public comment period, including five town-hall style meetings, the collaborations leadership will consider the draft recommendations and public comments as they develop a final strategy for approval by the collaboration membership. The final strategy is due to be released in Chicago in December 2005.

To read recommendations of the strategy teams and for more information about the Great Lakes Regional Collaboration go to <http://www.epa.gov/grtlakes/collaboration>. To comment on the draft strategy, go to <http://www.glrc.us>.

## Great Lakes High-Tech Buoy on West Grand Traverse Bay

A big splash was made by a 1,000 lb. anchor about two miles north of Traverse City on July 15, 2005 at 8:30 a.m., launching a collaborative effort to learn more about the dynamics of northern Lake Michigan and provide valuable real-time over-water weather data to a broad community of users.

The University of Michigan's Marine Hydrodynamics Laboratory deployed a data collection buoy in more than 150 feet of water in west Grand Traverse Bay, about two miles north of the Great Lakes Water Studies Institute offices at Northwestern Michigan College's Great Lakes Campus. The buoy radio-transmits data every 10 minutes to an antenna and computer server located at the Institute's office. This high-tech buoy measures wind speed, wind direction, current speed, current direction, wave height, wave period, air temperature and surface water temperature. After testing and field verification, a publicly available real-time web site

will be made available and it is also expected that the data from this buoy will also be made available through the National Weather Service's National Data Buoy Center: .

Northwestern Michigan College is providing key infrastructure to sustain a data-collection buoy system on Grand Traverse Bay through the antenna on top of the Great Lakes Campus building, use of the Great Lakes Maritime Academy's tugboat to launch the anchor and buoy, and outreach with the Great Lakes Water Studies Institute. Other key partners in the project include the Michigan Sea Grant College Program, the National Oceanic & Atmospheric Administration and the National Weather Service, and a host of local partner groups including the Inland Seas Education Association, The Watershed Center Grand Traverse Bay and the Great Lakes Children's Museum. University of Michigan provided the data collection buoy and the 1000 lb. anchor was custom made and donated to the project by Team Elmer's of Traverse City.



This buoy will eventually be part of a Lake Superior to Lake Ontario-wide Great Lakes observing system and modeled after the Integrated Ocean Observing System now being deployed across the world's oceans. These systems can be used to help predict events such as Tsunamis.

## Shedd Aquarium Dives Deeper Into Great Lakes Conservation

For more than 75 years, Shedd Aquarium, the world's largest indoor aquarium, has existed side by side with one of North America's largest bodies of fresh water: Lake Michigan. Starting on World Ocean Day on June 8, 2005, Shedd has intensified its commitment to the Great Lakes by launching a major conservation initiative to draw attention to the value – and the vulnerability – of the Great Lakes ecosystem.

Many of Shedd's exhibits, public programs, special events, and educational outreach will focus on Great Lakes conservation. Just one part of this conservation initiative is a new Great Lakes invasive species exhibit, scheduled to open in autumn 2005. Since the 1800s, more than 160 aquatic invasive species have become established in the Great Lakes. The exhibit will feature some of the most notorious intruders in the Great Lakes.

To find out more, visit <http://www.greatlakesforever.org> .

## Lake St. Clair Biennial Conference 2005

"IMPROVING OUR UNDERSTANDING OF THE HEART OF THE GREAT LAKES"

September 21st and 22nd  
Oaks Inn, Wallaceburg, Ontario

[http://www.scrca.on.ca/conf\\_home.asp](http://www.scrca.on.ca/conf_home.asp)

The conference will address common environmental management, monitoring, research, and implementation actions pertinent to the Lake St. Clair Ecosystem. The aim is to facilitate the exchange of information between resource managers, local officials, elected representatives, First Nations and Native American Tribal Groups, citizens' organizations, business/industry representatives, local residents and the media with an interest in the Lake St. Clair watershed.

We will feature oral and poster presentations distributed among the following themes:

- Land and Water Resource Uses of the Lake St. Clair Watershed
- Environmental Monitoring of Contaminant Sources and Trends
- Human Health
- Fish and Wildlife Health in the Lake St. Clair Watershed
- Habitat and Biodiversity
- Physical Conditions and Processes

The complete conference agenda is available online at [http://www.scrca.on.ca/conf\\_agenda\\_main.htm](http://www.scrca.on.ca/conf_agenda_main.htm)

For further information, contact Greg Mayne, Environment Canada, [greg.mayne@ec.gc.ca](mailto:greg.mayne@ec.gc.ca), 905-336-6021.

This conference is supported by Environment Canada, United States Environmental Protection Agency and Ontario Ministry of Environment in partnership with Walpole Island First Nation, Michigan Department of Environmental Quality and the Lake St. Clair Canadian Watershed Coordination Council.

## Thunder Bay National Marine Sanctuary Creates Destination and Dollars for Alpena Area

*Thanks to Sarah Lapshan for her contribution of this article from the Department of History, Arts and Libraries.*

What began as a pilot project just five years ago between the State of Michigan and the National Oceanic and Atmospheric Administration (NOAA) has proven itself to be a

relationship with incredible staying power. The state, primarily through the oversight and contributions of the Department of History, Arts and Libraries (HAL), and NOAA have, since 2000, co-managed the Thunder Bay National Marine Sanctuary and Underwater Preserve in Alpena.

This marine sanctuary is the national program's only freshwater preserve and only the second to focus solely on the protection of historic shipwrecks. It is also the only federal-state co-managed site in the system. Based on historical records, the sanctuary estimates that more than 100 shipwrecks lay within the 448-square-mile boundary. The mystique and appeal of these shipwrecks have attracted the attention of divers, historians, television producers, archaeologists and students. Perhaps most importantly, the sanctuary has garnered fierce support from the community.

For example, James C. Park, chairman of Besser Company (a leading supplier of concrete products headquartered in Alpena), cited the sanctuary as being "well managed" and "a positive force in the community." He said that because of the sanctuary, "the Alpena area has become a destination for travelers, which bring all the corresponding economic benefits to a high unemployment area of Michigan."

Many others, including local citizens, heads of local government, representatives of community newspapers and others have spoken in one voice about the importance of Thunder Bay National Marine Sanctuary to the area's continued livelihood.

Since receiving designation in October 2000, the marine sanctuary has placed mooring buoys that protect the most popular shipwrecks; there are education and outreach programs to further connect visitors and students to the sanctuary experience; and Thunder Bay is now home to a first-rate collection of maritime-history artifacts.

Perhaps the most ambitious development is the September 2005 opening of the Great Lakes Maritime Heritage Center. This new visitor and research facility at Thunder Bay is housed in the 20,000-square-foot former Fletcher Paper Company coating plant, part of a \$30 million project to adaptively reuse the Fletcher site and buildings as a hotel, conference center, brewpub and shops.

The Great Lakes Maritime Heritage Center will eventually feature more than 8,000 square feet of exhibits on the Great Lakes, shipwrecks, archaeology and maritime history, as well as live video feed from the bottom of the bay, making it possible for visitors to be virtual "divers for a day" – to see Michigan maritime history with their own eyes. The September opening will mark the immediate availability of an auditorium for showing films; an archaeological conservation laboratory; and an education resource room.

For more information about the Thunder Bay National Marine Sanctuary and Underwater Preserve, visit <http://thunderbay.noaa.gov>

## HAL's Michigan Maritime Heritage Initiative Helps Regions Bring 'Cultural Tourists' to Town

Thanks to Sarah Lapshan for her contribution of this article from the Department of History, Arts and Libraries.

Surrounded by the Great Lakes and flush with stories of the places and people who've lived and worked on the water for centuries, Michigan offers an unequalled opportunity for its communities to capitalize on the strong appeal of maritime heritage.

Recognizing an untapped resource, the Department of History, Arts and Libraries (HAL) sought a partnership with Travel Michigan and the Michigan Association of Public Broadcasters to regionally "package" our state's rich maritime history assets, creating new travel possibilities for the new breed of "cultural tourist" – a traveler who seeks to include cultural, arts, historic and heritage activities on his or her trip.

Department of History, Arts and Libraries Director Dr. William Anderson and Michigan Historical Center Director Sandra Clark began this effort by engaging a group of stakeholders, conducting a resource inventory, developing a basic "destination" design, and then holding open forums in different regions of the state to gauge the interest of local chambers of commerce, convention and visitors' bureaus, historical sites and museums, and tourism-related businesses.

The key question was, "Does your region or 'story' have enough critical mass to compel cultural tourists to visit the area for more than a night's stay?" In every case, the answer was a resounding "Yes!" and the result was the creation of several maritime heritage destination tours, now promoted to the public on the Travel Michigan Web site: <http://www.michigan.org>

Housed under the driving tours section of the site, the Michigan Maritime Heritage Destination tours give Web visitors the look and feel of selected regions. If visitors, for example, want to experience the sights and sounds of a famed Great Lakes shipwreck, they might choose "Echoes of the *Edmund Fitzgerald*." They can read about the weather conditions that fateful day, see comments from the captain's log, and follow the route of the doomed *Fitzgerald* as she made the journey from Marquette to her final resting place on the floor of Lake Superior.

If, after reading about the region's story, a would-be traveler wants to learn more, the site offers contact information for the area's local visitor and hospitality resources. In addition, each tour has a regional map, complete with featured stops and featured cities. The goal is to provide visitors with a thoroughly engaging and authentic Great Lakes experience that can only be found in Michigan.

In addition to the *Edmund Fitzgerald* tour, visitors to the Travel Michigan Web site will also find the following maritime-themed tours: the River Country Heritage Water Trail; Historic Harbortowns: Exploring Michigan's Beachtowns; the Upper Peninsula Maritime Trail; Northwest Michigan Ports of Call; and Lights of Lake Huron.

Development of the Michigan Maritime Heritage Destination and the efforts to promote it are ongoing for the Department of History, Arts and Libraries. If you have questions or suggestions relating to this initiative, please send an e-mail to Dr. Anderson at [halexec@michigan.gov](mailto:halexec@michigan.gov)

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