



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

Office of the Great Lakes Activity Report Winter 2006

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Great Lakes Regional Collaboration

The Great Lakes Regional Collaboration's strategy, released Monday, December 12, 2005, in Chicago, represents the culmination of a year of work by more than 1,500 Great Lakes experts and stakeholders to come up with a comprehensive assessment of the Great Lakes major needs and make recommendations for addressing them. The effort was initiated by an executive order from President Bush that recognized the lakes as a national treasure and charged the group to craft a plan to clean up the Great Lakes, the largest body of fresh water in the world.

The plan calls for \$20 billion in federal, state, local and private investments in such recommendations as modernizing waste treatment systems and restoring wetlands and other vital habitat. The plan also calls for new policy actions such as stopping ocean-going vessels from discharging aquatic invasive species into the lakes.

In addition to funding needs, the plan recommends changes in state and federal policies. The Council of Great Lakes Governors and Mayors in consultation with members of the Great Lakes Congressional Task Force and representatives of Great Lakes Tribes submitted a list of near term action items to President George W. Bush which address invasive species, coastal health, Areas of Concern, toxic pollutants, habitat and species, nonpoint source pollution, indicators, and sustainability.

The full text of the strategy is available online at:

<http://www.gllrc.us/strategy.html>

[December 12, 2005, joint letter](#) from the Council of Great Lakes Governors and the Great Lakes and St. Lawrence Cities Initiative to the President on near-term action items.

Great Lakes Basin Water Resources Agreements

On December 13, 2005, the Great Lakes Governors and Premiers met in Milwaukee, Wisconsin, for a formal document signing to amend the Great Lakes Charter. The documents consist of two elements:

- The [Great Lakes Basin Sustainable Water Resources Agreement](#) (the Agreement), a good-faith agreement among the 10 Great Lakes States and Provinces; and,
- The [Great Lakes Basin Water Resources Compact](#) (the Compact), a binding agreement among the eight Great Lakes States, the decision making standard to be used in evaluating future new or increased water uses is included in both the Agreement and the Compact.

Under the Annex agreements, the states and provinces will manage their own in-basin withdrawals using a basin-wide, resource-based standard while retaining flexibility regarding its application. Each jurisdiction will commit to establishing a program, including thresholds, to manage or regulate new or increased withdrawals consistent with the standard. The Michigan Senate's December action, responding to Governor Jennifer Granholm's call for passage of a water withdrawal statute, takes a significant step toward putting the type of program envisioned in the Annex into place in Michigan.

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The documents also note that the states and provinces will more aggressively conserve and improve efficient use of the resource, will make a strengthened commitment to work with U.S. Indian Tribes and Canadian First Nations, and that public participation is maintained in the process.

Following the agreement signing, individual state, provincial and congressional legislative actions are necessary to enact the provisions of the agreement. On the United States side, upon enactment into law of a compact in Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin, the United States Congress will be asked to ratify that document. No federal legislation is required in Canada.

Governor Granholm announced that she will ask the Michigan legislature to approve a compact implementing the agreement. The agreement and compact are necessary to implement the 2001 Annex to the Great Lakes Charter.

States Agree to Salmon Stocking Reductions

from the Michigan Department of Natural Resources

State fisheries management agencies for Lake Michigan have agreed to implement a 25 percent stocking reduction of Chinook salmon in Lake Michigan beginning with reduced stockings in 2006, according to Michigan Department of Natural Resources fisheries officials. Next spring, 3.2 million Chinook salmon fingerlings will be stocked by Michigan, Wisconsin, Illinois and Indiana, a reduction of just over 1 million fish from 2005.

The Chippewa-Ottawa Resource Authority (CORA) is also a partner management agency but does not stock any salmon. CORA does not object to the stocking reductions proposed by the state agencies, but has voiced concerns that such reductions may allow abundance of alewife to increase, potentially impeding rehabilitation of lake trout and other native species.

The agencies provided several opportunities for public input throughout the year beginning with a full scientific review of lake-wide data at a spring conference in Benton Harbor. Other opportunities for public involvement were provided by agency-held meetings, print, radio and web-based media, with a final conference on September 24, 2005, in Kenosha, Wisconsin.

Throughout the public review process, several key concerns by anglers were brought forward. Anglers suggested increasing the bag limit for Chinook salmon as a way to reduce the number of predators in the population. Most fisheries biologists do not believe higher bag limits would substantially reduce predation on alewives, so it was not embraced as an alternative to reduced stocking. Bag limits differ among states, and, in contrast to stocking levels, have not usually been considered subject to inter-state negotiations.



Chinook salmon - U.S. Fish and Wildlife Service

Other anglers' concerns included where stocking reductions would actually occur, noting that certain areas in the basin have good natural reproduction of Chinook salmon. Anglers also placed a high premium on maintaining diverse fisheries, including fall fisheries when salmon return to sites where they were stocked. Agencies will be considering these concerns as they develop site-specific reduction targets. Many anglers also called for increased stocking efforts of other salmon and trout species that do not impact alewife populations nearly to the same extent as Chinook salmon. While this is a reasonable request, agencies are limited in their ability to rear additional coho, brown trout or steelhead. These other species have much longer rearing cycles in a hatchery compared to Chinook salmon, and thus the agencies' abilities to produce additional fish are constrained by hatchery capacity issues.

In general, the public agreed with a 25 percent lake-wide reduction in stocking of Chinook salmon and the agencies are now taking this strategic stocking direction to the implementation phase. This will involve development by each state of specific tactics for meeting the stocking reduction goal and achieving desired objectives. In order to meet the 25 percent lake-wide reduction, the agencies have agreed to jurisdictional reductions in the amount of 30 percent for Michigan, 21 percent for Wisconsin, 17 percent for Illinois and 12 percent for Indiana. Michigan is taking a larger portion of the lake-wide cut because its rivers provide the bulk of the naturally produced salmon found in Lake Michigan. It is expected that all agencies will have tactical plans in place by early winter.

For further information, contact James Dexter at 269-685-6851, or Mary Dettloff at 517-335-3014.

Upper Lakes Plan of Study Revised

from the International Joint Commission

In May 2005, the IJC appointed the Upper Lakes Study Revision Team to expand the 2002 Plan of Study to include an investigation of past and on-going physical changes in the St. Clair River. The St. Clair River was incorporated into the plan of study because of the impacts physical changes might have on the water levels of lakes Michigan-Huron, on

Lake Superior outflow regulation and the IJC's Orders of Approval governing Lake Superior outflow regulation.

The IJC's Upper Lakes Plan of Study Revision Team has updated the 2002 plan of study to investigate improvements to Lake Superior outflow regulation. This document is now available on the the IJC website:

http://www.ijc.org/conseil_board/upper_greatlakes/upper_pub.php?language=english

Detroit River/Western Lake Erie Indicator Project

from the U. S. Fish and Wildlife Service

A new Canada-U.S. project for the Detroit River and Western Lake Erie has been announced. There is a long history of U.S.-Canada cooperation on investigating, monitoring, and managing the Great Lakes, including the Detroit River and Western Lake Erie. The Detroit River-Western Lake Erie ecosystem has many long-term data sets because of its manufacturing history that have contributed to many long-standing environmental and natural resource problems. This Detroit River-Western Lake Erie indicator project will:

- compile and analyze available, U.S. and Canadian data on various indicators of ecosystem status, quality, and trends, and the factors that affect them;
- translate and communicate indicator trends clearly for policy-makers and managers; and
- identify data gaps and future indicators to be able to comprehensively assess the state of this ecosystem.

There could be as many as 30 indicators with 30 or more years of data. The link below connects to the web site where five examples of indicator reports are provided.

http://www.epa.gov/med/grosseile_site/indicators/index.html

If you are interested in contributing to this project, please contact:

U.S. Co-Chair

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The project is intended to be completed by late fall of 2006 and become the focus of the next State of the Strait Conference in December 2006.

New Water Conservation Organization to be Headquartered in Chicago

from the U. S. Environmental Protection Agency

U.S. Environmental Protection Agency Administrator Stephen L. Johnson, Chicago Mayor Richard M. Daley, and Executive Director of the California Urban Water Conservation Council Mary Ann Dickinson have announced that the headquarters of a new water conservation organization will be in Chicago. The organization, the Alliance for Water Efficiency, will be a clearinghouse and advocate for water efficiency research, evaluation and education.

"Wise water use means more than just turning off a dripping faucet. Water efficiency is a smart, cost-effective solution to the quality and supply challenges facing one of our nation's most precious natural resources," said Administrator Johnson. "Together with partners like the Alliance for Water Efficiency, EPA is promoting the ethic of conserving our water resources - ensuring the availability of clean water for future generations of Americans."

"Water conservation is an important issue in Chicago as exemplified by our Water Agenda," said Mayor Daley. "We look forward to welcoming the alliance to Chicago and continuing to work on this important issue."

"We are delighted we could work with stakeholders nationwide to develop the goals and programs for a new national organization focused on water efficiency," said Executive Director Dickinson. "There is extraordinary interest from a wide variety of groups including water suppliers, government officials, environmentalists, plumbing and appliance manufacturers, irrigation professionals, and building developers to pull together a program of water efficiency options that will benefit the nation as a whole."

"This timely effort complements the leadership of Great Lakes governors as they advance water conservation and efficiency in the Annex 2001 Agreements later this week," said Benjamin H. Grumbles, EPA Assistant Administrator for Water.

Efficient use of water has numerous environmental and economic benefits including:

- * conserving and protecting water supplies
- * lowering water bills

- * avoiding the need for the construction of new treatment and distribution facilities
- * allowing for new growth using existing water resources
- * reducing wastewater
- * maintaining water flow for fish and aquatic creatures
- * reducing ground-water depletion and contamination
- * reducing pollution
- * minimizing the effects of drought

For more information on EPA's water conservation program:

<http://www.epa.gov/owm/water-efficiency>

For more information on the effort by the California Urban Water Conservation Council, visit:

http://www.cuwcc.org/national_cwe.lasso

or contact Tom Crane, tcrane@glc.org, or 734-971-9135.

First-Ever Aquatic Invasive Species Exhibit Opens at Shedd Aquarium

from the Shedd Aquarium, Chicago, Illinois

On January 5, 2006, more than 60 Great Lakes conservation leaders and government officials convened at Shedd Aquarium to celebrate the opening of the aquarium's new permanent exhibit featuring many of the invasive species threatening the Great Lakes. This exhibit marks the first time in Chicago that the public has had the opportunity to see many of these live animals and plants in person. The invasive species exhibit is part of Shedd's Great Lakes conservation initiative, which aims to draw public attention to the value and vulnerabilities of the Great Lakes.

Invasive species are plants or animals that arrive in a place where they didn't originate, then multiply, spread and do harm in their new environment. On average, a new invasive species is introduced every eight months, and at least 170 aquatic invasive species now live in the Great Lakes basin. The toll they are taking on the Great Lakes is severe and far reaching, from the shoreline pipes of power plants clogged by zebra mussels, to other lakes and rivers across the continent as species spread from the Great Lakes. The damages to industry from zebra mussels alone currently approach \$200 million annually and are growing as zebra mussels continue to spread. As the Great Lakes represent close to twenty percent of the world's fresh water, these occurrences affect millions of people.

Invasive species impact our lives here in the Great Lakes by reducing native game fishing and commercial fisheries; infesting boats, fishing gear and industrial equipment; reducing water quality and increasing algal blooms; and causing outbreaks of botulism in fish and birds.

The exhibit will offer close-up looks at both familiar and unfamiliar invasive species. Species featured in the exhibit,

located in the Local Waters gallery, include Asian carp, a snakehead, round gobies, alewives and rusty crayfish, among others.



Rusty Crayfish - Minnesota Sea Grant, Jeff Gunderson

Content and funding for the exhibit has been provided by the Integrated Systems for Invasive Species (ISIS) Project, Department of Biological Sciences, University of Notre Dame; the National Science Foundation; U.S. Fish and Wildlife Service; the 100th Meridian Initiative; the USDA Forest Service Eastern Region; and the Illinois-Indiana Sea Grant. Because it is on the shore of Lake Michigan, Shedd is dedicated to conserving the Great Lakes and educating the public on the connection between Lake Michigan and the oceans. For more information, visit:

<http://www.sheddaquarium.org>

Aquatic Invasive Species Outreach Workshop, March 9, 2006

The Office of the Great Lakes is hosting a workshop entitled, *AIS Prevention, Control, and Outreach Opportunities for Local Communities*, during Michigan State University's 2006 Agriculture and Natural Resources Week. The workshop will be held on Thursday, March 9th at the Kellogg Center, Room 105AB. The conference will provide participants with an understanding of the need to act on a local level, the importance of public awareness of aquatic invasive species and the problems they cause, the importance of prevention and control and what steps individuals and groups can take to prevent introduction and spread to rivers, lakes and streams in their community. Presentations will focus on new and existing programs available to communities to educate the public about preventative measures, grant opportunities, as well as techniques to manage and control invaders in their community. There is no cost for the workshop, but seating is limited, so please contact the Office of the Great Lakes at 517-335-4056 to register. For more information about the workshop, visit:

<http://www.michigan.gov/deqaquaticinvasives>

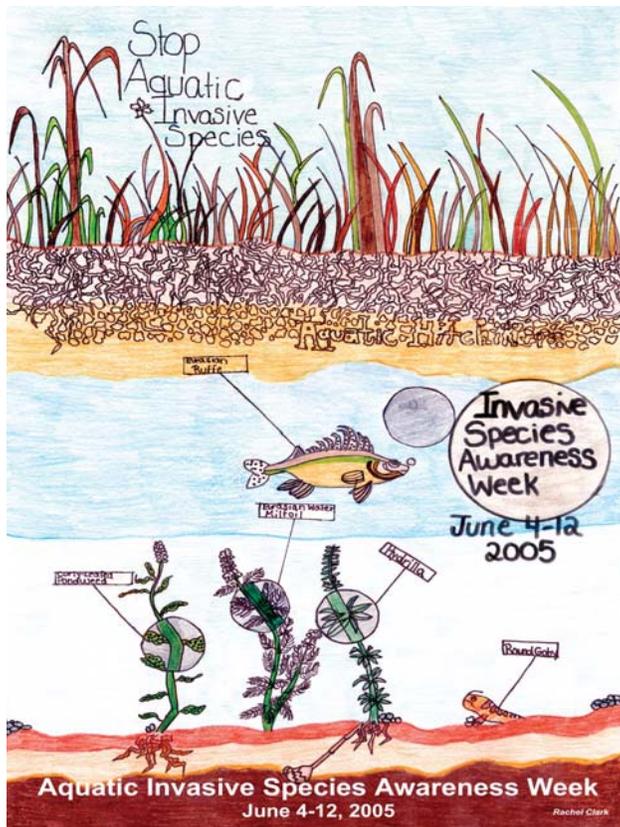
and click on 'Aquatic Invasive Species Awareness Week.'

Aquatic Invasive Species Student Poster Contest

The Department of Environmental Quality's Office of the Great Lakes is providing Michigan students, grades 6 through 8, an opportunity to use critical thinking and to demonstrate their knowledge of Great Lakes aquatic invasive species. There are over 160 aquatic invasive species (AIS) in Michigan waters, such as sea lamprey, zebra mussels, round goby and purple loosestrife, some of which are causing severe economic and ecological impacts.

Students are invited to design a poster to convey a message to their friends, family and neighbors about how to keep AIS from spreading to new lakes and rivers such as removing plants from boats and other watercrafts. Poster submissions must include an explanation, not more than 150 words, describing the information presented in the poster.

The winning poster will be selected based on the accuracy of the message, legibility and ability to be reproduced. The selected winning poster will be used to help raise public awareness of invasive species and the impacts they cause on the Great Lakes environment. Last year, over 700 creative posters were submitted from students throughout Michigan.



the 2005 winning poster by Rachel Clark

The winning student will have their poster signed by Governor Jennifer M. Granholm as the official poster for Aquatic Invasive Species Awareness Week, June 3-11, 2006, to be reproduced and distributed statewide and will have an opportunity to participate in an episode of Michigan United Conservation Clubs' Michigan Out-of-Doors™ Television. Winning and honorable mention entries will be posted on the Department of Environmental Quality website.

All submissions must be received no later than Friday, February 17, 2006. For more information about the poster contest, visit

<http://www.michigan.gov/deqaquaticinvasives>

or contact the Office of the Great Lakes at 517-335-4056.

Michigan Ballast Water Reporting Program

Again this year, the Michigan Department of Environmental Quality (MDEQ) is requiring all oceangoing and non oceangoing vessels operating on the Great Lakes to report whether ballast water management practices are being implemented. Section 3103a of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, requires the MDEQ to determine:

- Whether ballast water management practices that were provided by the Shipping Federation of Canada (Attachment A) are being complied with by all oceangoing vessels operating on the Great Lakes and the St. Lawrence waterway.
- Whether ballast water management practices that were provided by the Lake Carriers' Association and the Canadian Shipowners' Association to the MDEQ (Attachment B) are being complied with by all non oceangoing vessels operating on the Great Lakes and the St. Lawrence waterway.

In addition, the MDEQ will compile and maintain a list of all vessels determined to have complied with the ballast water management practices identified above during the last twelve months.

The MDEQ has provided the opportunity to report compliance with ballast water management practices via an electronic form available at the following Ballast Water Reporting web site:

<http://www.deq.state.mi.us/eforms/ballastwaterreporting.html>

Forms should be completed and returned to the MDEQ by February 24, 2006. A list of complying vessels is required by the statute to be available by March 1, 2006.

In 2005, the state of Michigan enacted additional ballast water regulation legislation. Public Act 33 of 2005 amends Part 31 of the NREPA (MCL 324.3103 et al.) to require oceangoing vessels to obtain a permit from the MDEQ for port operations in Michigan beginning January 1, 2007. Public Act 34 of 2005 also amends Part 31 of NREPA to establish penalties for discharging ballast water without a permit. A general permit for port operations is under development and will be available in 2006. The general permit will include conditions for port operations with and without ballast water discharges. Ballast water discharges will be authorized by the permit provided the discharge is in compliance with one or more of the ballast water treatment methods considered acceptable by the MDEQ in preventing the introduction of aquatic nuisance species. Applicants utilizing the ballast water treatment methods contained in the general permit may apply for permit coverage under the general permit. Applicants may propose alternative ballast water treatment methods not included in the general permit by demonstrating the treatment's effectiveness. Following a successful ballast water treatment demonstration, an individual ballast water discharge permit may be issued by the MDEQ. Notice of general permit availability will be posted on the MDEQ Ballast Water Reporting website, as well as at:

http://www.michigan.gov/deq/0,1607,7-135-3313_3682___00.html

Questions about the 2005 ballast water permit legislation should be directed to Mr. Barry Burns, MDEQ Water Bureau, at 517-335-3301. Questions regarding the current Ballast Water Reporting process should be directed to Mr. Jim Bredin, Office of the Great Lakes, at 517-335-4232.

Michigan Volunteer River, Stream and Creek Cleanup Grants Available for 2006

The Great Lakes Commission (GLC) and the Michigan Department of Environmental Quality (DEQ) are pleased to announce the release of the 2006 Grant Application Package (GAP) for Michigan's Volunteer River, Stream and Creek Cleanup Program (VRSCCP). A total of \$32,154 is available under the program for Fiscal Year (FY) 2006. This includes \$25,000 of FY 2006 funds and \$7,154 in carry-over funds from FY 2005. This funding is provided by the DEQ through fees collected from the sale of the State's Water Quality Protection license plates (Public Act 74 of 2000). The application deadline for Volunteer River, Stream and Creek Cleanup grants is February 24, 2006.

The Michigan VRSCCP provides small grants to local units of government to help implement cleanup of trash and debris within or along the banks of rivers, streams, and creeks to improve the waters in Michigan. Local units of government may partner with nonprofit organizations or other volunteer groups to carry out the cleanups. There is a

minimum local match requirement of 25 percent of the total project costs.



Volunteers work to stabilize the banks of Kid's Creek

The Volunteer Stream Cleanup GAP and application instructions are available online at

<http://www.glc.org/streamclean/app06>

The GAP contains detailed instructions, including eligibility requirements and other information for developing a proposal, evaluation criteria, and items that should be included with your application.

Applications will be reviewed and assessed by GLC and DEQ staff, with final decisions anticipated in March 2006. Grants are expected to be awarded in April. Contractual arrangements will be facilitated by the GLC, which is administering the VRSCCP on behalf of the DEQ.

For questions regarding the GAP or the application process, contact John Hummer at the GLC at 734-971-9135 or jhummer@glc.org.

Great Lakes Monitoring Exchange

from Binational.net, a collaboration between the U.S. Environmental Protection Agency and Environment Canada

At their Fall, 2001 meeting, the Binational Executive Committee (BEC) identified the need for a binational, basin-wide inventory of monitoring programs. The purpose of the inventory would be to raise awareness of ongoing activities, promote collaboration, and to identify monitoring gaps. This was seen as a necessary first step to improve the coordination of monitoring in the Great Lakes. To gather input towards the design and operation of the inventory, and to consult on other mechanisms for improving monitoring coordination, Great Lakes program managers were convened with monitoring and research managers at a series of workshops in 2002. Based on the outcome of these workshops, the following recommendations regarding the inventory were presented to Senior Management at the December, 2002 BEC meeting:

- The inventory should build on previous and on-going work of others;

- The input fields should be consistent with existing metadata standards
- It should be mandatory that BEC agencies (and affiliated agencies) contribute to the inventory; others should be encouraged to contribute;
- The inventory, and input form, needs to be on-line and should be accessible through binational.net;
- In order to ensure completeness, BEC agency representatives should sign off on their agencies' input. include information on where data/information is housed, and its accessibility.

BEC endorsed the establishment of the inventory, recognizing that the longer-term need was for information management on a binational, multi-agency scale. As a first step towards realizing this, the monitoring inventory will

The Great Lakes Monitoring Inventory has now been established on binational.net to allow agencies to share information about their monitoring programs in order to foster collaboration. Once populated, the Inventory will support searches by monitoring theme, location and agency. You are invited to browse the Inventory and, if you are conducting monitoring in the Great Lakes, to add a new record highlighting your activities. The Great Lakes Monitoring Exchange can be found at:

<http://binational.on.ec.gc.ca/bec/intro-e.cfm>



Go with the FLOW: Great Lakes Science Curriculum Available Online

from Michigan Sea Grant

Teaching young people about the Great Lakes just a got a little easier. Educators can now access a comprehensive online curriculum covering everything from the Great Lakes aquatic food web to wetlands and fisheries.

The dynamic lessons are part of Fisheries Learning On the Web, Project FLOW, developed by the Michigan Sea Grant at the University of Michigan. Project FLOW lessons are geared toward educators who teach upper elementary and middle school students. Each lesson features a hands-on classroom activity. See 'Fisheries Learning on the Web:'

<http://www.projectflow.us>

The Great Lakes: A Changing Ecosystem

Tuesday, March 7, 2006
Lincoln Room, Kellogg Center
Michigan State University
East Lansing, Michigan

Sponsored by:
Michigan State University
Department of Fisheries and Wildlife
Institute of Water Research
Michigan Sea Grant Extension
Office of the Great Lakes, Michigan Department of Environmental Quality

The Great Lakes are one of Michigan's most important and spectacular resources, and thus the state has a pivotal role in the protection and management of this unique and highly valuable resource. The Great Lakes are continuously faced with natural and human-induced changes that can have both positive and negative effects on water quality, quantity, productivity, and economic and recreational potential. In its 16th year, this annual conference will focus on changes in the Great Lakes, including fisheries, wildlife, exotic species, and pathogens and provide updates on Great Lakes collaboration efforts.

There is no charge to attend this conference, however, advanced registration is requested. Registration is accepted by mail, phone: 517-353-3742; fax: 517-353-1812, or on the website.

Please register by March 2.

For more information or to register visit:

<http://www.iwr.msu.edu/events/ANRWeek/>

For further information on the activities of the Office of the Great Lakes, contact:

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