



Advisor

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Share thoughts, advice on ecosystem priorities

Restoration workshops reach out to stakeholders

What do Great Lakes stakeholders think about ecosystem restoration? What are their concerns, their priorities and their opinions on how to address them? These and related questions form the centerpiece of a restoration priorities initiative fully underway in the region, thanks to a partnership between the Great Lakes Commission and the Great Lakes state Sea Grant Programs. With funding from the National Sea Grant College Program, state-by-state workshops will be held over the next five months to address these questions, and help inform and advance the development and implementation of priority actions.

Stakeholder advice will make a difference in shaping restoration priorities. The workshops, for example, provide an opportunity for participants to review the nine restoration themes recently released by the Council of Great Lakes Governors, and offer perspectives on their further development and implementation.

The initiative is off to a strong start, thanks to an initial workshop held in Ann Arbor, Mich., this past fall. Co-sponsored by the Michigan Office of the Great Lakes and the University of Michigan, the event brought together a diverse group of approximately 100 stakeholders, ready and willing to share their views.

Workshop outcomes were enlightening, with a series of facilitated breakout sessions yielding ten broad restoration themes. These included water resources management, withdrawals and diversions; aquatic nuisance species; wildlife and habitat; toxic contaminants; Areas of Concern and other toxic “hot spots;” nonpoint source pollution; land use planning; sustainability; commercial and recreational maritime transportation; and water-based recreation and beaches.

Participants also offered advice on the often daunting task of translating priorities into action. In developing any such strategy, critical elements to consider include public education, outreach and participation; science, monitoring and data access; funding; institutional arrangements; accountability and enforcement; priority setting; policy review and research; scale and focus; and action orientation.

“Restoration, by any definition, is inherently a community based process that will require unprecedented cooperation at all levels within and outside government,” said Mike Donahue, Commission president/CEO and a co-convenor of the event. “This workshop series will help open the lines of communication as regional interests close

“Restoration, by any definition, is inherently a community based process that will require unprecedented cooperation at all levels within and outside government.”

-Mike Donahue, president/CEO

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The Advisor is published bimonthly by the Great Lakes Commission. The Great Lakes Commission is a binational agency established in 1955 to promote the orderly, integrated and comprehensive development, use and conservation of the water and related natural resources of the Great Lakes basin and St. Lawrence River.

Commission News & Views

From the desk of the president/CEO...

Great Lakes Commission

The Great Lakes Commission is a binational public agency dedicated to the use, management and protection of the water, land and other natural resources of the Great Lakes-St. Lawrence system. In partnership with the eight Great Lakes states and provinces of Ontario and Québec, the Commission applies sustainable development principles in addressing issues of resource management, environmental protection, transportation and sustainable development. The Commission provides accurate and objective information on public policy issues; an effective forum for developing and coordinating public policy; and a unified, systemwide voice to advocate member interests.

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Cover photo: Tugboat at Duluth Harbor; Jerry Bielicki, U.S. Army Corps of Engineers

Its all in the definition

"If you can't define it, you can't solve it." This adage has stood the test of time, and for good reason. In the realm of public policy, we often find ourselves searching for solutions to problems that are ill-defined, undefined, or subject to multiple, mutually exclusive definitions. There's a corollary to this in another time-tested adage: "If you don't know where you're going, you won't know when you get there."

It's not difficult to identify instances where this simple wisdom was ignored at the nexus of Great Lakes science, planning and policy making. Terms like "virtual elimination," "zero discharge," and "ecosystem approach" come immediately to mind. Absent a viable, i.e., broadly accepted, definition, even the

most legitimate and innovative concept can be marginalized or rendered altogether meaningless.

We can't afford to make the same mistake when it comes to the notion of ecosystem "restoration." It's not difficult to understand why this term has captured our imagination. It's a rallying cry to give the lakes their due. It's also begun to capture the imagination of those in Washington who can make it happen.

What's our vision for the lakes? Do we want to restore the system to presettlement or preindustrial conditions, or to some more recent point in time? What do we want to restore, and for whom? Is there room for environmental, economic, social and cultural dimensions within the confines of this concept? These are all legitimate questions that need to be answered – soon! It is our responsibility, as taxpayers and managers of public funds, to make sure we know what we're investing in before checks are written or cashed.

The Great Lakes Commission coined the rallying cry of "Restore the Greatness!" back in 2000 at the urging of members of Congress who wanted to see a common theme – a "brand identity" – for the Great Lakes. As the larger restoration effort moves to the next level, the matter of definition becomes absolutely essential.

Allow me to get the discussion going. Let's define ecosystem restoration as "the reinstatement of beneficial uses of the water and related natural resources of the Great Lakes ecosystem through projects

"It is our responsibility, as taxpayers and managers of public funds, to make sure we know what we're investing in before checks are written or cashed."

and activities that improve environmental quality and ensure environmentally sound and sustainable resource use." The key concepts here are those of "beneficial use" and "sustainabil-

ity." The former acknowledges the multiple dimensions of the resource and prompts us to collectively identify priorities. The latter is just plain common sense: why bother restoring a resource to some preferred state if we can't maintain that state over time?

As we move from concept to application, we're also well-advised to regard restoration as something more than a finite set of specific projects. To determine **where we are**, we need research on baseline environmental conditions. To determine **where we want to be**, we need a community vision. To determine **how to get there**, we need a science-based strategic plan. Finally, to determine **when we've arrived**, we need monitoring and analysis.

Take any one component out of this equation, and only one thing will be certain: we'll be going around in circles.



Michael J. Donahue, Ph.D.

Online atlas aids hazardous spill preparation, response

The Inland Sensitivity Atlas series, the most comprehensive hazardous spill preparedness and response maps in the nation, has recently been completed by the Great Lakes Commission and its partners. Produced in association with the U.S. Environmental Protection Agency (U.S. EPA), Upper Mississippi River Basin Association and U.S. Geological Survey, the multilayer, GIS-based (Geographic Information System) maps provide spill responders and planners with a wide range of information to assist them in preventing and reacting to spills of oil and other hazardous substances.

The series is part of the Commission's decade-long work with the Great Lakes response community to prepare for and respond to spills of oil and hazardous substances impacting our air, land and water. With U.S.EPA funding, the Commission has been working with federal, tribal, state/provincial, local and private sector groups to identify potential sources of spills, identify environmental and economic vulnerabilities, define response strategies, and develop programs and documents to prevent, prepare and respond to these spills.

The Inland Sensitivity Atlas includes tens of thousands of data records on sensitive species, natural resource areas, economically sensitive resources, potential spill sources, response considerations and the geographic variables impacting response. To augment and comple-

ment it, the Commission has been working with area committees, designated under the Clean Water Act to plan and prepare for spills of oil and hazardous substances, to develop contingency plans, train in response management and exercise response techniques and protocols. In addition, Commission staff have assisted and participated in actual spill responses throughout the Great Lakes.

The maps, plans, exercises and training provided by the Commission under this work are also finding applications with such diverse projects as homeland security, tourism, natural resource damage assessments, modeling and economic assessments. These data are continually updated and new ways to display and deliver the products are being explored by the project team to ensure the long-term availability and reliability of the maps.

The final installments of the atlas will soon be published for distribution to the region's emergency response and management agencies. Other portions are now available online at www.glc.org/spills. Related information is available at the Freshwater Spills Information Clearinghouse, www.freshwaterspills.net. Contact Tom Rayburn: tray@glc.org.



This outtake from the recently complete Inland Sensitivity Atlas shows the area around the St. Ignace, Mich., on the Straits of Mackinac. Symbols here include markers for petroleum pipelines, water intakes, wetlands, waterfowl habitat, marinas, state-managed areas, and others.

Sooner than you think! Great Lakes Day in Washington

Make your reservations now for the upcoming "Great Lakes Day in Washington," on March 3, 2004 in Washington, D.C.

Legislative and appropriations priorities for the Great Lakes region will be the focus of the Great Lakes Congressional Breakfast, with a special emphasis on emerging restoration themes and the partnerships and congressional actions needed to achieve them. Invited speakers will be drawn from both Great Lakes regional leadership and Congress. The breakfast is jointly sponsored by the Great Lakes Commission and

Northeast-Midwest Institute.

Immediately following, the Commission-sponsored Great Lakes Issues Briefing will focus on specific legislative needs in detail and feature presentations by congressional staff and dialogue among participants. Invited speakers will be drawn from both Great Lakes regional leadership and Congress.

For registration information and other details see www.glc.org/greatlakesday, or contact: Jon MacDonagh-Dumler, jonmacd@glc.org

2003 ends with Great Lakes legislation pending

Great Lakes Day in Washington

March 3, 2004, Washington, D.C.

2004 Semiannual Meeting of the Great Lakes Commission/Great Lakes Sustainability Conference

May 3-6, 2004, Cleveland, Ohio

IAGLR 2004 Conference

May 24-28, 2004
Waterloo, Ontario

mark your calendar

The first session of the 108th Congress ended Dec. 9 with seven of 13 annual appropriations bills still pending, including those for operations of the Department of Agriculture, National Oceanic and Atmospheric Administration and U.S. Environmental Protection Agency (U.S. EPA). These entities will continue to operate at FY2003 levels until the Senate passes and president signs the Consolidated Appropriations Bill after Congress reconvenes in January. Meanwhile, House and Senate appropriations subcommittee staffs are working out differences over provisions in the current bill, which the House passed Dec. 8.

There were mixed outcomes for legislation affecting the seven priorities of the Commission's *Great Lakes Program to Ensure Environmental and Economic Prosperity*, with some still pending as noted above. **Cleaning up toxic hot spots** may get a boost if the Senate approves \$10.0 million for U.S. EPA under the Great Lakes Legacy Act. **Shutting the door on invasive species** struggled to get program funding, as appropriations and the National Invasive Species Act reauthorization bills stalled.

The picture is more favorable for **controlling**

nonpoint source pollution, as it appears that the Commission's Great Lakes Basin Program for Soil Erosion and Sediment Control and other relevant programs will receive comparable funding to last year, when they received significant appropriations under the 2002 Farm Bill. Funding was relatively unchanged for **restoring and conserving wetlands and critical coastal habitat**, though still below levels the Commission deems adequate.

With lake levels remaining low and problematic predictions for next year, it was a relief to receive approximately level funding for the Great Lakes Water Level Observation Network, one of many actions needed to **ensure the sustainable use of our water resources**. Appropriations for scientific laboratories and other entities that help **strengthen our decision support capability** were generally below requested levels.

Finally, Congress provided funds for work toward a new Soo Lock and other measures to **enhance the commercial and recreational value of our waterways**, but at modest levels. Look to future issues of the *Advisor* for final details of FY2004 funding decisions. Contact: Jon MacDonagh-Dumler, jonmacd@glc.org.

Computer models aid erosion control efforts

Erosion and sediment control efforts in three Great Lakes tributary watersheds are being aided by new computer models being developed with the assistance of the Great Lakes Commission.

In recent months, the Commission has convened local resource managers and other interested parties to inform the development of sediment transport models for the watersheds of Ohio's Cuyahoga and Sandusky rivers, and Michigan's Grand River. The models, which are being developed under the direction of the U.S. Army Corps of Engineers, will enable state and local resource agencies to predict the effects of various actions upon soil erosion and sedimentation, and more effectively target control efforts. Consequently, these models can help

minimize sediment accumulation in tributaries and harbors, reducing the need for dredging in navigation channels.

The modeling efforts are part of the ongoing Great Lakes Tributary Modeling Program, a federally-authorized initiative funded by the Corps. Similar efforts are underway or have been completed in the watersheds of Indiana's Grand Calumet and Burns Ditch Waterway/Little Cal River; Michigan's Raisin, Saginaw, Clinton, and St. Joseph rivers; Minnesota's Nemadji and St. Louis rivers; New York's Buffalo and Genesee rivers; Ohio's Maumee and Black rivers; Wisconsin's Menomonee River; and Pennsylvania's Mill and Cascade creeks.

See www.glc.org/tributary or contact: Tom Crane, tcrane@glc.org.

Commission efforts benefit Isle Royale National Park

Isle Royale National Park is one of the Great Lakes' most isolated, but spectacular, treasures. Though remote, the island archipelago is at the center of several stewardship activities currently pursued by Great Lakes Commission staff.

Those efforts include the development of a management plan for the park's numerous water resources, both inland and offshore, and an emergency plan to guard against the possibility of toxic spills in the park's pristine ecosystem. Both are cooperative ventures with the National Park Service (NPS).

"Isle Royale's unique because it's very isolated," said Mike Schneider, who's coordinating development of the park's water resources management plan (WRMP) for the Commission. "The relatively untouched environment makes it an important research asset, a benchmark for scientific studies."

The NPS seeks to protect surface and ground waters as integral components of a park's aquatic and terrestrial ecosystems. Human activities within the park (such as backpacking and camping), have the potential to affect the delicate park ecosystem, as do activities within the larger Lake Superior basin. The primary purpose of the WRMP is to assist park management with water-related decisions by providing information on potential threats to water resources and guidance on immediate actions that can prevent or mitigate water resource degradation. Contact: Michael Schneider, michaels@glc.org

Commission staff are also working with the U.S. Coast Guard, U.S. EPA, the state of Michigan, the NPS, the Canadian Coast Guard and others to develop strategies and a comprehensive response plan for use in the event of a catastrophic toxic spill. Concerns focus on the fuel oil stored at the park for maintenance operations and the more than 1,000 lake freighters that pass within a mile of its shores each year, some of which carry more than 200,000 gallons of fuel oil and lubricant. The effort is scheduled for completion by the start of the park's 2004 season. (See related story, page 3) Contact: Tom Rayburn, tray@glc.org

Commission staff are also serving Isle Royale National Park in a volunteer capacity. Christine Manninen, manager of the Commission's Communications and Internet Technology Program, is currently serving as president of the board of directors of the Isle Royale Natural History Association (IRNHA). IRNHA works in partnership with the NPS to promote the public's understanding, appreciation and enjoyment of both Isle Royale National Park and Keweenaw National Historical Park. A board member for five years, she will conclude her term as president in summer 2004. Contact: Christine Manninen, manninen@glc.org.



Mists cling to the many small islands that are part of Isle Royale National Park. Photo: Christine Manninen.

Robinson elected vice chair of Sea Grant Review Panel

Commissioner Nat Robinson, immediate past chair of the Great Lakes Commission, was recently elected vice chair of the National Sea Grant Review Panel.

The review panel acts as the executive body for the National Sea Grant College Program, advising the Secretary of Commerce, NOAA and the National Sea Grant Office on the protection and sustainable use of U.S. coastal, ocean and Great Lakes resources.

Robinson, chair of the Commission's Wisconsin Delegation, and Commissioner Frank Kudrna, chair of the Illinois Delegation, represent the Great Lakes region on the 15-member panel. Contact: Mike Donahue, mdonahue@glc.org.



Nat Robinson

Board assesses past progress, future opportunities

Shaping the Commission's agenda for 2004 – and beyond – was the order of the day when the Board of Directors convened Dec. 5, 2003, for its annual organizational meeting in Ann Arbor, Mich.



Gathered for the Board of Director's December meeting in Ann Arbor are, from left; Ken DeBeaussaert, Michigan; Frank Kudrna, Illinois; John Booser, Pennsylvania; Immediate Past Chair Nat Robinson, Wisconsin; Bill Carr, Ontario; Vice Chair Thomas Huntley, Minnesota; Chair Sam Speck, Ohio; Mike Donahue, president/CEO; and Michel LeFleur, Québec. Not pictured: John Goss, Indiana; and Gerald Mikol, New York.

Chair Sam Speck led discussions yielding board priorities for the coming year, and decisions on the nature and focus of advocacy efforts to advance member priorities. Decisions included a process for midterm review and revision of the Commission's

Five-Year Strategic Plan; format and content of 2004 "Great Lakes Day in Washington" activities; priorities for the 2004 iteration of the *Great Lakes Program to Ensure Environmental and Economic Prosperity*; enhanced approaches to congressional and administration relations; expansion of the Commission's air quality program; design and promotion of the ongoing Great Lakes Observing System initiative; and plans for a 50th anniversary celebration in 2005.

The board also approved the FY2003 audit statement and reviewed priorities for FY2004, featuring the largest budget and corresponding selection of programs and projects in the Commission's 48-year history. The board will next meet March 2, 2004, in Washington, D.C., in conjunction with Great Lakes Day activities the following day. Contact: Mike Donahue, mdonahue@glc.org.

Detecting, stopping ANS before they spread

Early detection and monitoring is a critical step in the prevention and control of aquatic nuisance species (ANS). Early detection and rapid response efforts increase the opportunities for successfully addressing the problem while populations are still localized.

The Great Lakes Commission is conducting a pilot project to develop recommendations for a coordinated system to detect new ANS invasions in the Lake Michigan basin and track their spread. The project could lead to the development of such a system for the entire Great Lakes and other freshwater ecosystems.

The project is building on an existing framework of resources developed by the Lake Michigan Monitoring Coordination Council. The Commission recently completed a survey of monitoring organizations in the Lake Michigan basin to determine which monitoring programs are capable of detecting new ANS invasions and monitoring their spread.

The project draws upon the expertise of the Great Lakes Panel on Aquatic Nuisance Species and will be integrated with a rapid response plan

the panel is developing to stop new invasions before they become firmly established.

Results of the survey will be available online in early 2004 at www.glc.org/ans/initiatives. A workshop, tentatively scheduled for spring 2004, will use the survey results to guide the development of project recommendations.

Funding for this project is provided by the U.S. EPA Great Lakes National Program Office. For more information, Contact: Sarah Whitney, swhitney@glc.org.

Restoration workshops (continued from page one)

ranks around a shared vision and the steps to achieve it."

Proceedings of the Michigan workshop are now online at www.glc.org/restwksbp. Planning for the balance of the workshops is in process, and dates and locations will be posted at www.glc.org/events as they are finalized. Contact Mike Donahue, mdonahue@glc.org or Jon Macdonagh-Dumler, jonmacd@glc.org.

See ANS Update online!

The Winter edition of *ANS Update*, the official publication of the Great Lakes Panel on Aquatic Nuisance Species, will be available online at www.glc.org/ans/ansupdate this January. Watch for it!

\$1.9 million for state soil erosion, water quality projects

In the 13 years since its inception, the Great Lakes Basin Program (GLBP) has made a marked difference in the region's water quality, land use and agricultural productivity. Coordinated by the Great Lakes Commission and supporting projects in every state of the Great Lakes basin, this federal/state partnership has kept an estimated 900,000 tons of sediment out of the region's waterways, and prevented approximately 1 million pounds each of phosphorous and nitrogen compounds from reaching those waters.

The goal of the program is to protect and improve water quality in the Great Lakes by reducing soil erosion and controlling sedimentation through financial incentives, information and education, and professional assistance. Its efforts over the past 12 months are summarized in the GLBP's newly released 2003 Annual Report, available online at www.glc.org/basin/pubs/keeping/pdf/0504.pdf.

Published as a special edition of the program's *Keeping It On the Land* newsletter, the report identifies and maps all 55 projects currently active under the federally funded GLBP, ranging in scale from less than \$5,000 all the way up to \$200,000 for sediment reduction and environmental restoration in the western Lake Erie basin.

"The program provides a great opportunity for a number of local agencies and organizations, such as conservation districts, county government and watershed councils, to leverage their own resources with federal dollars," said Jim

Bredin, chair of the Great Lakes Soil Erosion and Sedimentation Task Force, which oversees the program.

Over the past year the GLBP funded 44 new projects, both large- and small-scale. Among these were projects promoting the use of buffer strips among farmers to keep sediment and excessive nutrients out of waterways; supporting "soft engineering" practices to control erosion along river- and streambanks; stabilizing erosion-prone areas; education and outreach efforts, and more. Approximately \$1.9 million was directed to the 2003 projects, each of which provided at least a 25 percent match in nonfederal funding.

Task force members include representatives from the eight Great Lakes states, the partner agencies and other federal and regional interests. The program is a partnership between the Commission and the U.S. Department of Agriculture – National Resources Conservation Service, U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers, as well as state and local units of government and non-governmental organizations.

Contact: Gary Overmier, garyo@glc.org.



*Natural Resource Conservation Service staff and volunteers install erosion control measures under a Great Lakes Basin Program -funded project along the Detroit River.
(Photo courtesy Detroit-Wayne County Port Authority)*

Donahue reappointed to Corps advisory board

Mike Donahue, Commission president/ CEO, has been appointed to a second term on the U.S. Army Corps of Engineers' Environmental Advisory Board.

The board's nine appointees – drawn from academia, public service and nongovernmental organizations – advise the chief of engineers, Lt. Gen. Robert Flowers, on science, planning and policy regarding leading environmental

restoration issues and opportunities. Over the past year, the board has developed recommendations on independent scientific review of federal projects, explored opportunities for broad stakeholder participation, and offered observations on large scale restoration efforts following fact-finding tours of regions such as the Florida Everglades and Pacific Northwest.

Contact: Mike Donahue, mdonahue@glc.org.

Groundwater use: Are stronger laws needed?*

Keith Schneider, Michigan Land Use Institute

POINT
BOUNT



Keith Schneider is deputy director of the Michigan Land Use Institute and a former New York Times environmental reporter

The 19th-century policy of encouraging people to use as much water as they want, whenever they want, needs a 21st-century update. The recent court order to shut down four high-capacity wells supplying Nestle Water's spring water bottling plant in central Michigan is one example of why.

The ruling, by Mecosta County Circuit Court Judge Lawrence Root, shows just how vulnerable private concerns are to increasing competition for the abundant fresh water of the Great Lakes basin. Nestle's \$150 million investment in the bottling plant is in jeopardy because an overly narrow interpretation of state environmental statutes that cleared the way for the project has been overturned by Judge Root.

Property rights activists have built their movement on what they view as harms caused by government restrictions on the use of their land. But the Nestle Waters case is based, to a signifi-

cant degree, upon the real damages to property caused by government cooperation, not restriction. Just as weakening regulation of corporate business practices led to vast financial scandals that damaged the economy and cost ordinary Americans billions in lost investments, weak natural resource protection eventually leads to serious environmental and economic damage.

As it stands now, the Great Lakes basin still has no broad protection against those who would garner unto themselves billions of gallons of groundwater for private use. A planet-wide population desperate for new supplies of fresh water will go to extraordinary lengths to get them. Without strong laws based on groundwater's crucial importance to maintaining lake and stream levels, the traditional access to fresh water long enjoyed by Great Lakes residents and commercial sectors such as tourism, farming and industry, remains in danger.

counterpoint

Doug Roberts, Jr., Michigan Chamber of Commerce



Doug Roberts, Jr., is director of Environmental & Regulatory Affairs for the Michigan Chamber of Commerce.

Water is Michigan's defining natural resource. The waters within the Great Lakes Basin benefit residents through the creation of economic opportunities, support of recreational activities, and enhancement of surrounding ecosystems. The water resources must be protected through regulation that offers a balance between sound environmental protection and reasonable water use.

In 2002, the Michigan legislature enacted two important pieces of legislation that recognize this critical balance: Public Acts 177 and 148 of 2003.

- **Public Act 177** accomplishes two important goals: First, it establishes a mechanism to resolve disputes between groundwater users. Second, it protects aquifers from overuse by empowering state government to take appropriate action when water withdrawals exceed the recharge rate of the aquifer.

- **Public Act 148** establishes a statewide data

collection effort on the use of water and charges a council of experts to develop a map of areas where water shortages or conflicts exist.

The combination of data collection and reasonable water use restrictions established by these laws should help to protect critical aquifers.

The sweeping ruling by a Mecosta County Circuit Court Judge has created a sense of uncertainty about our state's regulatory structure. His opinion requiring groundwater users to receive both wetlands permits and inland lakes and streams permits is outside the bounds of anything the legislature ever envisioned or intended.

Given the fragile condition of Michigan's economy, with the loss of over 260,000 jobs in the last three years, the last thing Michigan needs are onerous restrictions on water use. We applaud the legislature for its prudence. We question the judicial activism that threatens the predictability of our water laws.

*On Nov. 25, a Michigan Circuit Court ordered Nestle's spring water bottling plant in central Michigan to cease operations, finding the withdrawals negatively impacted the water rights of others. The plant remains open while the decision is appealed.

Ontario imposes moratorium on new water takings

The government of Ontario has imposed a one-year moratorium on new and expanded permits for removing water from watersheds to stop what is described as a giveaway of the province's water resources.

"We will use this year to review our groundwater supplies and draft new rules for water taking," said Leona Dombrowsky, Ontario minister of the environment, in announcing the moratorium Dec. 18. "We will not grant new permits of this kind until we have new rules in place that will help us better protect our water resources."

Under newly elected Premier Dalton McGuinty, the province also plans to begin charging water-bottling companies and other permit holders that currently are able remove water from watersheds at no charge.

"Water bottlers and others who remove water out of a watershed cannot be permitted to just take more and more water," said Dombrowsky. "We need to fully understand the consequences of takings on both the watershed and local water

supplies. Nothing is more basic to life – and the quality of life – than an adequate supply of safe and clean water."

Two expert committees have also been formed to advise on a process for assessing threats to the province's drinking water and on how to implement strategies for protecting watersheds. The new steps address the Walkerton Inquiry's emphasis on protecting sources of drinking water as a key part of ensuring a sustainable supply of drinking water. The inquiry was conducted after seven people in that community died after drinking E. coli-contaminated water in May 2000.

The government will release a White Paper in February to consult on the planning aspects of source protection legislation, including the preparation, roles and responsibilities and approval of source protection plans.

Contact: Arthur Chamberlain, Ministry of the Environment, 416-314-5139

Did you know

The first locks on the St. Mary's River between lakes Superior and Huron opened in 1855. The locks quickly turned the Lake Superior region into a major source of iron ore, with shipments increasing from 1,500 tons their first year to 147,000 tons 10 years later, a nearly one-hundredfold increase! Source: U.S. Army Corps of Engineers.

IJC: Climate change presents Great Lakes challenges

A comprehensive report on an issue with significant implications for the Great Lakes, *Climate Change and Water Quality in the Great Lakes Basin*, has been released by the International Joint Commission's (IJC) Water Quality Board.

The report explores risks, opportunities, and responses associated with climate change and Great Lakes water quality. Also included are proceedings from the board's May 2003 climate change workshop, and practical insights on dealing with the consequences of climate change.

Evidence developed over the past decade has strengthened the view that climate change and associated impacts are valid concerns. The magnitude of changes presently occurring and projected to occur in our climate raises questions about not only the extent of their impact but also our ability to adapt, both globally and in the Great Lakes region.

Four key questions are addressed by a white paper included in the report: What are the Great Lakes water quality issues associated with climate change? What are potential impacts of climate change on beneficial uses? How might impacts vary across the Great Lakes region? What are the implications for decisionmaking?

The report suggests adaptation strategies and outlines the implications of climate change for economic activities, human health, water resources and ecosystems, as well as the communications and management challenges it presents.

The report is available on CD from the IJC's Great Lakes Regional Office and on the web at www.ijc.org/php/publications/html/climate/index.html. To request a copy or for more information, contact: commission@windsor.ijc.org.

Great Lakes Sustainability Conference

Join us May 5-6 in Cleveland as we focus on "Actions Toward a Sustainable Great Lakes." A follow up to last year's highly successful event, the Commission will be among many partners focusing on what is being done- and needs to be done- to achieve sustainability. The event is preceded by the Commission's 2004 Semiannual Meeting (May 4.) Registration details are available at www.glc.org/events.

Great Lakes highlighted at transportation summit

Michigan's transportation policy and infrastructure of the future was the central topic of a "Transportation Summit" convened in Lansing, Mich., December 3-4 by the Michigan Department of Transportation.

Dave Knight, a marine transportation specialist with the Great Lakes Commission, presented an overview of the state's marine transportation industry for a commerce and trade planning team at one of the summit's breakout sessions.

The summit drew more than 500 public officials, experts and stakeholders with an interest in regional transportation.

"Public input is critical in this process," said Michigan Gov. Jennifer Granholm, in opening the proceedings. "No single entity can deliver



Gov. Granholm

transportation alone. Advocates for the environment, neighborhoods, choices in travel, the construction community, consulting engineering community, public and private providers of transportation services and programs, the research and academic communities and the legislative branch of government must come together."

"In the end, the solutions we craft must be fiscally responsible, must improve our quality of life, and must provide a solid foundation for our state's economic health," said Granholm.

The summit featured action teams focusing on nine specific planning areas, including safety, land use, asset management, communications, coordination, mobility options, research and funding, in addition to the commerce and trade group. Participants identified three action proposals in each to be carried out by members of the relevant action team.

Contact; Dave Knight, dknight@glc.org

New hands at the helm: Naftzger, Grannemann

New leadership is in place at two of the Commission's partner agencies. David Naftzger has been named executive director of the Council of Great Lakes Governors, a position he formerly held in an acting capacity. Meanwhile, Norm Grannemann has been named by the U.S. Geological Survey (USGS) as its Great Lakes coordinator, with responsibility for promoting and coordinating USGS programs in the Great Lakes basin.

Naftzger succeeds Margaret Grant, who became deputy director of intergovernment affairs for the Bush Administration in June. Prior to joining the council in January 2002, he was director of the agriculture and international trade committee of the National Conference of State Legislatures in Washington, D.C.

Grannemann succeeds Donna Myers, who in

November became head of the USGS National Water Quality Assessment Program in Reston, Va..

He previously served as coordinator of the USGS groundwater resources program in Lansing, Mich., beginning in 1998.



Norm Grannemann

Myers departs the Great Lakes region after many years of outstanding work in water quality studies with the

USGS office in Columbus, Ohio, which she joined in 1985.

Ecosystem restoration
priorities workshops
www.glc.org/restwksph

Great Lakes Program to
Ensure Environmental and
Economic Prosperity
www.glc.org/restore/

ANS Update
www.glc.org/ans/ansupdate

Inland Sensitivity Atlas
www.glc.org/spills

Freshwater Spills
Information
Clearinghouse
www.freshwaterspills.net

Great Lakes Day in
Washington
www.glc.org/greatlakesday

Great Lakes Tributary
Modeling Program
www.glc.org/tributary

Great Lakes Panel on
Aquatic Nuisance Species
www.glc.org/ans/initiatives

Great Lakes Basin
Program for Soil Erosion
and Sediment Control
www.glc.org/basin

Great Lakes Science
Vessel Coordination
Workshop
www.canamglass.org

Taft keynotes groundwater conference

The Great Lakes, whose distinctive outline is easily recognized from space, are the world's most visible freshwater resource. But growing attention is being paid to the unseen waters beneath the ground that make up a large part of their volume.

The important but often neglected role that groundwater plays in Great Lakes water management was the focus of "The National Water Crisis: Beneath the Surface," a daylong conference conducted in November by the University of Toledo's Legal Institute of the Great Lakes.

Early groundwater laws emphasized the right of surface owners to take whatever they could capture on their property. It's now understood that groundwater pumping impacts ground and surface systems over vast distances. The implications of that fact provided the basis for an in-depth exploration of the legal and policy regimes that apply to groundwater, as presented by a broad range of water policy experts from



Gov. Taft

academia, government and private entities.

Ohio Gov. Bob Taft, chair of the Council of Great Lakes Governors, provided the opening address. The council is working toward implementation of Annex 2001, which will update and enhance the Great Lakes' regional water management system and ensure the resource's protection for future generations.

"Our lakes are in trouble," he said. "Our future depends on how well we take care of them."

The Council is working toward a scheduled date of June 2004 for release of the implementation plan, including a uniform, resource-based standard to help guide decisions regarding the water resource of the Great Lakes, including groundwater.

Great Lakes Commission Chair Sam Speck, director of the Ohio Department of Natural Resources, provided further insights into the Annex 2001 process. Speck chairs the Annex 2001 Working Group. The conference was the third of "The National Water Crisis" series of annual meetings the Legal Institute of the Great Lakes has sponsored on national water issues.

For a discussion of a related subject, see the Point-counterpoint on page 8 of this issue.

Great Lakes science vessel workshop

The Eighth Annual Great Lakes Science Vessel Coordination Workshop will be held Feb. 4, 2004 at the Great Lakes Maritime Academy in Traverse City, Mich.

Over the past seven years, these workshops have provided an opportunity for scientists, managers, and vessel operators from the United States and Canada to promote more efficient and cost-effective use of Great Lakes science vessels. See

www.canamglass.org or contact: Tom Crane, tcrane@glc.org

Great Lakes Calendar

2004 Great Lakes Marine Community Day Conference

January 28, 2004, Cleveland, Ohio
Contact: Lt. Matt Colmer, mcolmer@d9.uscg.mil

Water for a Sustainable and Secure Future: A National Conference on Science, Policy and the Environment

January 29-30, 2004, Washington, D.C.
Contact: Peter Saundry, 202-530-5810
info@NCSEonline.org

Eighth Annual Great Lakes Science Vessel Coordination Workshop

February 4, 2004, Traverse City, Mich.
Contact: Tom Crane
Phone: 734-971-9135
E-mail: tcrane@glc.org

Great Lakes Day in Washington

March 3, 2004, Washington, D.C.
Contact: Jon MacDonagh-Dumler, 734-971-9135,
jonmacd@glc.org

Great Lakes Research Consortium Annual Conference

March 12-13, 2004, Syracuse, N.Y.
Contact: Michael Connerton
Phone: 315-470-6564
E-mail: mjconner@mailbox.syr.edu

Society of Toxicology Annual Meeting

March 22-24, 2004, Baltimore, Md.
Contact: Lilly Richards, 703-438-3115
lilly@toxicology.org

2004 Semiannual Meeting of the Great Lakes Commission and Great Lakes Sustainability Conference

May 3-6, 2004, Cleveland, Ohio
Contact: Mike Donahue, 734-971-9135,
mdonahue@glc.org

IAGLR 2004 Conference

May 24-28, 2004, Waterloo, Ontario
Contact: Ralph Smith, 519-888-4567, ext. 2468
rsmith@uwaterloo.ca

Further details and a more extensive calendar are available online via the Great Lakes Information Network (www.great-lakes.net). If you have an event you'd like us to include, please contact Kirk Haverkamp at 734-971-9135 or kirkh@glc.org

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The Last Word

Prioritizing our Priorities



Sam Speck

The Great Lakes Basin Compact is a remarkable law, well ahead of its time when it established the Great Lakes Commission in 1955. By speaking to the integration of environmental and economic principles, it presaged the notion of sustainability. It is also a remarkably broad document, charging the Commission with a tremendous range of planning, analytical, coordination, communication and advocacy functions.

Critical to our future success will be our ability to “pick our battles” carefully; to identify those issue areas where we can offer the highest return on our investment. The Commission’s Board of Directors recently convened to address this topic, and to prepare for subsequent Commission-wide discussions as our Five Year Strategic Plan is reviewed and revised.

We recommitted ourselves to partnership with the region’s governors and premiers on matters such as Annex 2001 implementation and restoration planning. We agreed to work more closely with the Administration on agenda-setting. We agreed to step up Congressional advocacy efforts on matters of highest priority, such as passage of the National Aquatic Invasive Species Act.

Perhaps most significantly, we agreed to fully - and aggressively - exploit our unique role in moving the notion of “sustainability” from concept to application. This, indeed, is where we can “add value” to the collective management effort.

I welcome your thoughts as we “prioritize our priorities” and work toward a restored, healthy environment and a prosperous economy, i.e., toward strong, sustainable development.

Samuel W. Speck, chair, Great Lakes Commission

Where in the Great Lakes?



This vessel’s glory days may be behind it, but you could be in luck if you can identify just where in the Great Lakes it lies aground! E-mail your answer, along with your name, address and phone

number to kirkh@glc.org or mail it to the *Advisor* at the return address on the mailing panel below. All correct responses received by **March 1, 2004** will be entered into a drawing. The winner will receive his/her choice of a Great Lakes Commission beach towel or a \$10 credit toward the purchase of any Commission publication.

There were no correct entries identifying the location of our last photo. Of course, rather than being in the Great Lakes themselves,



these swimmers are taking a dip in their outlet, the St. Lawrence River, in front of Place Jacques-Cartier in Montreal. Thanks to Léonce Naud for the photo!

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