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Guest editorial

Total quality management in the Great Lakes region

By U.S. Senator Carl Levin, Michigan

Human nature is such that the public, and Congress as the public's representatives, tends to take the status quo for granted until a problem arises that challenges the normal flow of events. Then, we sometimes react with breakneck speed to the perceived problem and hope that the solution does not create imbalance elsewhere in the system. However, our understanding of the physical world and the interconnectedness of the global economy have now grown to a point that we cannot simply solve one problem at a time. We must look at the range of options and consider them carefully and sensibly before choosing our preferred alternatives.

Pressure to engage in this process has been building for some time, and the Great Lakes region has seen some successful examples. As it relates to manufacturing, the automotive sector might call this process "total quality management." As far as environmental protection is concerned, the Great Lakes Critical Programs Act was an effort to lay down some initial benchmarks that can be used to judge the efficacy of our air, water and land pollution prevention efforts as a whole. But there are many, many statutes, programs and problems that have yet to be woven into a well-funded, comprehensive and internally compatible approach to Great Lakes protection. For instance, I am concerned that the Superfund's resources have not been adequately used to tackle the problem of contaminated sediments, and existing programs to prevent additional deposition of toxics in sediment have not been sufficiently funded.

Science tells us that land-use issues have the greatest ecological impact, and most economists conclude that these impacts drive business and investment decisions. Sustainable development, or smart growth, are the current buzz words for intelligent land use. To me, this concept includes efficiently using our existing infrastructure, such as brownfields or inner city/downtown areas, before expanding into greenfields. Adoption of this comprehensive approach will require Congress to review the tax code; the relationship between local, state and federal governments; and environmental statutes, among many other elements. Making federal actions more likely to promote sustainable development will improve the quality of life in the Great Lakes region in many ways.

Reforming the federal regulatory process is one method to ensure that the government and Congress carefully consider the effects of federal actions on smart land use. Many regulations and statutes can benefit from review to measure effectiveness, or to see if there might be a less costly way to achieve the same goals. For instance, we must be confident that imposing rigorous combined sewer overflow, stormwater runoff and other requirements simultaneously will not simply encourage ex-urban growth and provide no net gain in public health protection. Federal actions also must be better coordinated between



Making federal actions more likely to promote sustainable development will improve the quality of life in the Great Lakes region in many ways.

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The Great Lakes Commission is an eight-state compact agency established in 1955

"to promote the orderly, integrated and comprehensive development, use and conservation of the water resources of the Great Lakes basin."

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Semiannual Meeting Highlights

Great Lakes Commission

The Great Lakes Commission, an eight-state compact agency founded in state and federal law and dedicated to the use, management and protection of the water resources of the Great Lakes basin, provides leadership in the implementation of principles of sustainable development throughout the basin. In partnership with the Great Lakes states, the Commission addresses issues of resource management, environmental protection, transportation and economic development by serving as an accurate and objective source of information; an effective forum for the development and coordination of public policy; and an active and committed advocate of basin interests.

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Lake Champlain's designation as a Great Lake should serve as a wake-up call

It took Mother Nature more than 10,000 years to sculpt the five Great Lakes and lend definition to what is now the Great Lakes basin. Sen. Patrick Leahy of Vermont, however, needed only seven words and a few short weeks to accomplish a similar feat. Deep within the

voluminous National Sea Grant Program Reauthorization bill, he buried a short phrase that redefined Lake Champlain as a "Great Lake," thereby

opening the door for National Sea Grant Program funds that had previously been unavailable to landlocked states such as Vermont. The measure went largely unnoticed and, with one stroke of the president's pen, the five Great Lakes suddenly had a new sister.

Thankfully, this new family arrangement was short-lived. The reaction was immediate, impassioned and visceral; it made the national news and catapulted the Great Lakes — albeit very briefly — into the congressional spotlight. A few weeks later, a classic compromise was reached: Lake Champlain lost its Great Lakes designation but retained its eligibility for National Sea Grant Program funds.

The regional uproar following the Lake Champlain designation was gratifying; it reaffirmed the strong affinity and sense of ownership that Great Lakes residents have for their lakes. The Great Lakes Congressional Delegation is to be con-

gratulated for its prompt action in securing repeal of the designation.

Such a designation, of course, is ill-advised for many reasons. Lake Champlain lies outside the Great Lakes basin and is not a part of the system of five interconnected Great Lakes. Champlain also

lacks most characteristics that the real Great Lakes share. Furthermore, a Lake Champlain designation would set a precedent that could open the

door for other large freshwater lakes that want to compete for limited Great Lakes funds. And, on a more fundamental level, the designation flies in the face of the ecosystem approach that we've been nurturing for decades. Congress can creatively redefine a lake, but Mother Nature will pay no heed.

Most disturbing of all, however, is the fact that Great Lakes interests were largely blind-sided by the Lake Champlain designation. Those who were aware of the Leahy provision at the outset either underestimated its implications or chose not to raise the issue for political reasons. There's a lesson to be learned here: continued vigilance is needed to ensure that the best interests of the Great Lakes and their residents are served. We need to keep our ears to the ground, and stay in the "anticipate and prevent mode," even if it means reading every phrase in every voluminous bill that comes before the Congress.

Commission News and Views

By Michael J. Donahue, Ph.D.
Executive Director



Guest editorial, continued from page 1
agencies having similar jurisdictions and authorities, such as in the case of wetlands or dredging sediment disposal.

There always will be urgent problems. From the proposed diversion of groundwater out of the Great Lakes basin to the constant threat of existing and new invasive species, Congress and all interested parties must be prepared to respond. In many ways, the spirit of cooperation and friendly competition, and the policy or-

ganizations in the Great Lakes, are the envy of other regions because we are in a position to respond effectively.

As the incoming Democratic chair of the Senate Great Lakes Task Force, I hope to carry on the effort of a visionary leader and a great human being, Sen. John Glenn. We will continue to need a cooperative, bipartisan effort to address the short- and long-term challenges ahead.

Semiannual Meeting Highlights

Federal appropriations, global climate change featured topics at Commission's Semiannual Meeting

More than 140 Great Lakes Commission delegates, Observers, staff and friends gathered in Ann Arbor, Mich., for a full agenda of business at the April 1-3 semiannual meeting.

Hosted by the Commission's Michigan Delegation, the event began with a welcome from A. Michael Leffler, an alternate commissioner speaking on behalf of Delegation Chair Frank Kelley, attorney general of Michigan.

Mayor Ingrid Sheldon followed with a warm greeting from the city of Ann Arbor, home of a number of Great Lakes research and policy institutions. Sheldon highlighted the local relevance of the Commission's work, noting that an investment in sustainable development practices and water quality improvements will benefit both the environment and the economy.

"Smart business can pay off not only in the bottom line on that balance sheet," Sheldon said, "but also for the bottom line of our environment."

In her keynote address, U.S. Rep. Lynn Rivers (D-Mich.) discussed the importance of keeping the beauty and integrity of the region intact.

"We have something phenomenal in terms of the Great Lakes," she said.

Rivers stressed that education is the key to winning support for policy issues concerning maritime commerce, ecosystem preservation and water quality control. She commended the Commission and its partners for their work in educating the public and legislators about Great Lakes issues.

"I'm not here to lecture you. I'm here to praise you. What you do matters," she said.

Federal legislative and appropriations priorities

Among many other key actions, Commissioners unanimously approved a Commission policy position on legislative and appropriations priorities for the 105th Congress, Second Session

(see insert in this ADVISOR). The detailed, multifaceted statement will serve as the organization's blueprint for advocacy efforts in the coming months.

Michigan Commissioner Tracy Mehan presented the draft statement and introduced guest speakers Sean Peppard and Rochelle Sturtevant.

Peppard, legislative assistant in the office of Rep. Steven LaTourette (R-Ohio), discussed anticipated congressional action on transportation and economic issues. LaTourette is co-chair of the Northeast-Midwest Congressional Coalition's Great Lakes Task Force.

"We need to have a dual approach," Peppard said. "The management of natural resources and economic interests must happen together in order to maintain the integrity of life in the Great Lakes region."

The appropriations priorities that will be pursued by the task force include an allocation of \$6 million to design a replacement vessel for the ice-breaker *Mackinaw*; increased funding for the Soo Locks; and creation of a Great Lakes infrastructure development bank for modernization of the St. Lawrence Seaway.

Sturtevant, coordinator of the Senate Great Lakes Task Force, discussed resource management and environmental quality issues. The task force plans to focus on the Supreme Court's Harbor Maintenance Tax decision; the Great Lakes Fish and Wildlife Restoration Act; federal funding for Great Lakes research and management agencies; and support for brownfields redevelopment and aquatic nuisance species funding, among others.



Rep. Rivers

Global issues: Climate change, transboundary information exchange

The semiannual meeting also offered an in-depth look at the topic of global climate change, emerging U.S. policy and implications for the Great Lakes states (see related stories on pages 4-5).

Ulf Ehlin, director of the Stockholm International Water Institute in Sweden, offered a "think globally, act locally" theme during keynote remarks at the Commission's April 2 dinner. He praised the Commission's efforts to raise awareness of water resource issues, noting in particular the success of the Great Lakes Information Network in distributing information throughout a transboundary region.

"A water information system like



Special guests Ulf Ehlin, director of the Stockholm International Water Institute in Sweden, and his wife Kristina.

GLIN is critical for educating politicians and the general public in a region about potential water problems and their solutions," he said.

Ehlin and his colleagues have developed the BALtic Sea Region On-Line Environmental Information Resources for INternet Access, or BALLERINA, an online information system modeled after GLIN.

"GLIN and BALLERINA could be the first cornerstones in global water information exchange," Ehlin said.

For detailed information on all meeting presentations and policy actions, contact Mike Donahue, mdonahue@glc.org.

Semiannual Meeting Highlights

Global climate change and the Great Lakes

The state of the science

The issue of global climate change was featured in a special symposium titled "Global Climate Change and U.S. Policy: Implications for the Great Lakes States" with prominent speakers from the government, industry and environmental sectors.

Dr. Frank Quinn, head of the Physical Sciences Division at the Great Lakes Environmental Research Laboratory (NOAA), discussed the science behind global climate change, citing current findings in the field.

Over the last 130 years, the global mean temperature has increased. Gases produced by human activity, like carbon dioxide, methane and nitrous oxide, trap heat from the sun in the atmosphere, causing temperatures to rise. Predictions for the future include more surface warming, an increase in precipitation, a reduction of sea ice and rises in sea levels.

In responding to climate change, Quinn was quick to point out that "all actions have to be done at a local level because that's where people are impacted." The question then becomes: What are we likely to experience in the Great Lakes?

Many studies have been undertaken within the Great Lakes basin, including the modeling of 121 watersheds. The models, which are scenarios (rather than predictors) of what could happen, indicate an increase in water evaporation from lake surfaces, which can lead to a pronounced lowering of Great Lakes water levels. Temperatures at night also are likely to become warmer, a trend that has already begun.

Though the models focus on future climate change and variability, Quinn feels it is as important to study and plan for the variability we find in today's climate. An example is the present high lake level regime on the Great Lakes.

The possible impacts of climate change on the Great Lakes were ad-



Linda Mortsch of Environment Canada, Dr. Frank Quinn of GLERL (NOAA) and Illinois Commissioner Norm Sims discuss the science of global climate change.

ressed by Linda Mortsch from the Environmental Adaptation Group, Environment Canada. Mortsch is the Canadian leader for the Great Lakes-St. Lawrence Basin Project, which focuses on adapting to the impacts of climate change and variability.

Mortsch asked the questions "What are the risks of doing nothing?" and "How well do we understand the potential impacts of global climate change?" Climate change, she explained, is a complex problem that plagues a complex world.

"We do expect to have surprises," Mortsch said.

Unlike the ozone problem, which can be addressed by specific actions (e.g., stopping the use of certain chemicals), climate change is inextricably tied to many factors like the economy, land use and fuel consumption. This complexity, coupled with often imperfect scientific information, makes any effort to influence climate change a very difficult one.

Like Quinn, Mortsch advocates an impact assessment procedure that uses possible scenarios as its basis. She stressed the health implications of a warmer climate that may facilitate the migration of disease and increased air pollution. Mortsch pointed out that the scenarios with warmer temperatures lead to increased mortality rates, along with other environmental impacts like uncertain water flows, poorer water quality, increased pressures for diversions to and from the Great Lakes, and escalating controver-

sies over competing uses of water.

In response to climate change, scientists, industry leaders and policymakers have several choices. They can do nothing and hope for the best, assume a high-risk position of anticipating the worst case scenario, or opt for a "no regrets" adaptation strategy.

Mortsch suggests that "no regrets" is the best way to go; the actions associated with this strategy make sense now, irrespective of the climate change scenarios that may eventually play out. Known environmental problems could be corrected, keeping in mind that future problems might be eased as a result. On the basis of watershed models within the Great Lakes basin, people can start asking questions, reassessing plans and considering climate change issues in their long-range thinking. Contact: Dr. Frank Quinn, 734-741-2254, quinn@glerl.noaa.gov; Linda Mortsch, 519-888-4567 ext. 5495, linda.mortsch@ec.gc.ca.

Opinions collide

The second panel of the climate change symposium focused on "The Kyoto Climate Change Summit: Outcomes, Emerging U.S. Policy and Regional Implications." The ensuing discussion and debate very quickly defined the divergent views of industry representatives and environmental advocates.

"There are ways to achieve solutions in a no regrets way," said Paul Risley from the White House Climate Change Task Force as he discussed the administration's attitude going into the Kyoto emissions talks.

The administration wants policies that won't harm U.S. standards of living, and that may improve U.S. productivity. Supporters of the protocol feel that no other approach delivers as much environmental benefit for a limited amount of funds.

Continued on next page

Semiannual Meeting Highlights

Global climate change, *continued*

Lana Pollack, president of the Michigan Environmental Council, spoke in favor of the Kyoto Summit outcomes and a strong administration position.

She pointed to a problem in the media coverage of global climate change: the popular press treats the issue as a political debate, with equal time given to each side. Average people who do not read scientific journals or attend scientific conferences do not get a sense of the consensus that the scientific community has reached on some of the basics of global warming.

"The science community is not divided that global warming is happening, although there are uncertainties as to climatic consequences of this warming," Pollack said. She recommends educating the public, bringing them to a basic understanding of common facts.

"The problem is compounded by a disinformation campaign being put out by interest groups who have an economic investment in protecting the status quo," Pollack said.

Pollack also believes we need to do a better job of looking at the economics. She and Risley agreed that it comes down to a choice between paying the cost of inaction and paying the cost of doing something positive for both the environment and industry.

"We stand to lose our industry if our industry remains in denial," Pollack

said, referring to companies that refuse to take positive actions toward helping the environment and making a deep commitment to change.

Countering Risley and Pollack's support of the Kyoto Protocol was Jene Robinson, manager of the Environmental Resources Department of the Illinois Power Company. He pointed out many flaws within the protocol, including the lack of participation by developing countries, the unrealistic reduction in emissions, and the inability of the protocol to be amended until it enters into force.

Robinson used examples centering on his home state of Illinois to illustrate the adverse effects the protocol would have on the local economy. In southern Illinois, the primary industry is coal mining. By reducing coal mining and consumption to adhere to Kyoto's emissions standards, more than 28,000 people would be out of jobs. Moving to alternative sources of energy would bring the employment toll to more than 100,000 jobs. He said that even if Illinois reduced its emissions by 30 percent, the levels still wouldn't be where the protocol wants them.

"The Kyoto Protocol could really harm the economy," Robinson said. "We don't know how to achieve reductions without great cost to the people of Illinois."



The panelists (l. to r.): George Kuper, Lana Pollack, Jene Robinson, Paul Risley and moderator Norm Sims.

George Kuper, president and CEO of the Council of Great Lakes Industries, supported Robinson's viewpoint.

"Industry is not in denial," Kuper said. "Industry is treating global climate change as an energy efficiency issue. It is a technological challenge to which we don't now have answers."

Kuper cited two basic stumbling blocks for the region with the issue of climate change: the need for cheap energy and insufficient scientific guidance.

"Political pressure builds up around these problems, and we end up politicizing to the point of inaction at best, or more likely, bad policy," Kuper said.

By focusing our national effort almost exclusively on the question "How can we reduce the levels of carbon dioxide and other greenhouse gases?" policymakers lose sight of issues that might be more treatable, such as "How can we deal with a doubling of carbon dioxide levels that will occur in the next 40-60 years no matter what we do?"

Dredging team addresses policy issues, tours CDF

Policy actions and a field trip to the Pointe Mouille Confined Disposal Facility and State Game Area were on the agenda when the Great Lakes Dredging Team met in Ann Arbor, Mich., March 31-April 1.

The 700-acre CDF in southeast Michigan is the largest such freshwater facility in the world and is designed to hold contaminated dredged material from the Rouge and Detroit rivers.

Several products are being developed by the Commission and the dredging team: a series of fact sheets, Great Lakes dredging brochure, web site and video. A list of local advocates also has been

created, representing a broad cross-section of stakeholders in the dredging process who will assist the team. These efforts support the federal/state team's mission to ensure that dredging is cost-effective and timely; meets environmental protection, restoration and enhancement goals; provides a mechanism for resolution of conflicts; and promotes inter-agency coordination.

The next dredging team meeting is in Toledo, Ohio, Sept. 16-17, and will be preceded by a Sept. 15-16 workshop on the beneficial use of dredged material. Contact: Steve Thorp, sthorp@glc.org.



Michigan Commissioner Tracy Mehan (left) and Roger Gauthier of the Corps of Engineers.



Michigan Commissioner Rep. William Callahan during his keynote address.

Semiannual Meeting Highlights

Hot topics: GIS, education, tourism

Ann Arbor hosts GLIN Advisory Board Meeting and Global Applications Symposium

The Great Lakes Information Network Advisory Board convened March 31-April 1 to discuss future directions of the region's preeminent Internet-based online network.

"GLIN is not just a network of computers, it's a network of people," commented Lynn Herche, a board member representing NOAA's Great Lakes Environmental Research Lab. With this in mind, the advisory board developed an exciting and ambitious work plan for GLIN.

Plans for the upcoming year include developing a multiserver search capability and spatial data library, as well as expanding GLIN's expertise to a global market. The advisory board recognized the need to reconfirm GLIN's vision and goals, but also allow for flexibility in future directions.

The board heard from experts who have garnered interest and financial support through their use of GLIN and its regional applications.

Joe VanderMeulen, executive director of the Michigan-based Land Information Access Association, described his work in community planning. LIAA has incorporated GIS (Geographic Information Systems) data, a knowledge of city planning and community feedback on public issues, to create one of the region's most useful information data libraries for public use (see www.liaa.org).

GIS-related projects are fast becoming a growth area for GLIN. Dr. Yichun Xie, of Eastern Michigan University, offered an introduction to GIS applications and

implementation areas where GLIN could play an active role. Xie currently is assisting with implementation of the Great Lakes GIS project, GLIN's first step toward providing quick and efficient access to Great Lakes spatial data.

Wayne Ruchgy, of the Wayne County Regional Educational Service Agency, offered the group an overview of the CyberCity Schools project, which will allow teachers at the secondary school level to incorporate GLIN into their curricula as a learning tool. This project proposal is under development and will be submitted to the U.S. Department of Education later this year.

Special guests provided international perspectives to the GLIN discussions as part of a Global Applications Symposium. Ulf Ehlin, director of the Stockholm International Water Institute in Sweden, gave an overview of the **BALTic** Sea Region On-Line Environmental Information Resources for Internet Access. **BALLERINA** used GLIN as a model for pulling together stakeholders from different jurisdictions to share information about a single watershed.

Vacys Saulys, of the U.S. Environ-



First recipient of Carol A. Ratza Memorial Scholarship

Jill Hallden, a graduate student in geography at Michigan State University, receives the Carol A. Ratza Memorial Scholarship from GLIN Advisory Board Chair Pranas Pranckevicius, of the U.S. EPA Great Lakes National Program Office. The \$500 award, supported by donations and a Commission contribution, will be awarded annually to a deserving student interested in information technology and the Great Lakes. Over her 11-year career with the Commission, Carol Ratza created and led numerous innovative communications projects, the most notable being GLIN and the

mental Protection Agency, and David Moody, of the Organization of American States, focused on other potential global applications for access to information on the world's lakes and freshwater resources.

In 1998-99, GLIN will be hosting a series of workshops on Great Lakes education; travel, tourism and recreation; and GIS applications.

Look for updates on GLIN-Announce or on the GLIN home page, great-lakes.net. Contact: Christine Manninen, manninen@glc.org.



Friendly rivalry

Daniel Mazmanian, dean of the University of Michigan School of Natural Resources and Environment (left), and Fred Poston, dean of the College of Agriculture and Natural Resources at Michigan State University, describe their school's programs.



Indiana Commissioner Larry Macklin (center) speaks with Mike Quigley of Indiana DNR and Indiana Alternate Commissioner Lori Kaplan.

Basin Program announces 20 new grant awards

Twenty projects have been selected for funding under this year's grant cycle for the Great Lakes Basin Program for Soil Erosion and Sediment Control. A total of 64 proposals were reviewed at the April 1 meeting of the Commission's Soil Erosion and Sedimentation Task Force.

Funding for the grants program is made available to the Great Lakes Commission via cooperative agreement with the USDA Natural Resources Conservation Service. Total FY1998 funding for the Basin Program is set at \$350,000, which is unchanged from the FY1997 funding level. With the addition of the current awards, the program has now awarded more than \$3.85 million (and leveraged an additional \$2 million in nonfederal funds) for 119 demonstrations and special projects, involving thousands of farmers, landowners, contractors and other parties in the Great Lakes states. Contact: Tom Crane, tcrane@glc.org.

Indiana

Apollo Erosion Control Project. North-east Indiana Solid Waste Management District and Wood-Land-Lakes Resource Conservation and Development, Inc. \$15,000.

Michigan

Agricultural Soil Erosion Reduction Project. Michigan Agricultural Stewardship Association. \$15,000.

Lakeshore Erosion Demonstration Project. City of Boyne City. \$7,871.

North Branch of the Bad River Adopt-A-Stream Education/Awareness Program. Gratiot Soil Conservation District. \$6,000.

Protecting the Integrity of Headwater Streams from Soil Erosion and Sedimentation Through Stormwater Management, Education, Cooperation and Innovative Policy. Livingston County Drain Commissioner. \$15,000.

Soil Erosion and Sediment Control Education in the Grand Traverse Bay Watershed. Grand Traverse Bay Watershed Initiative. \$7,105.

Use of the WWW for Watershed Management with a Focus on Erosion and Sediment Control. Michigan Technological University. \$14,341.

Minnesota

Baptism River Streambank Stabilization Demonstration Project. Minnesota Department of Natural Resources, Tettegouche State Park. \$14,500.

Lake Superior Shoreline Protection Project. Lake Superior Association of Soil and Water Conservation Districts. \$20,000.

Soil Testing and Phreatic Surface Investigation for Lake Superior Shoreline Stabilization. Minnesota Board of Water and Soil Resources. \$9,700.

New York

Critical Area Seeding - Road Banks. Cayuga County Soil and Water Conservation District. \$15,000.

Erosion and Sediment Control Ordinance Pilot Project. Wayne County Soil and Water Conservation District. \$5,000.

Honeoye Lake Watershed Public Awareness and Education Project. Ontario County Soil and Water Conservation District. \$12,000.

Monroe County Highway Water Quality Improvement Project. Monroe County Soil and Water Conservation District. \$24,600.

What's the Dirt? Aquarium of Niagara. \$15,000.

Ohio

Black River Stream Bioengineering Initiative for the Riparian Landowner. Lorain Soil and Water Conservation District. \$15,000.

Maumee River Storm Water Education. Henry Soil and Water Conservation District. \$2,450.

Pennsylvania

Innovative Erosion Control Involving the Beneficial Use of Dredged Material, Indigenous Vegetation and Landscaping Along the Lake Erie Shoreline. Pennsylvania Department of Conservation and Natural Resources, Bureau of State Parks, Presque Isle State Park. \$15,000.

NPDES/Erosion and Sedimentation Control Demonstration Project and Workshop. Erie County Conservation District. \$15,000.

Wisconsin

Water and Sediment Control Basin/Grassed Waterway. Fond du Lac County Land Conservation Department. \$5,759.70.

New Commissioners and Observers welcomed

The Commission welcomes three new Commissioners from New York, along with several new Observers.

New York Gov. George Pataki has appointed Sean Hanna, John O'Mara and Carl Tuohey to fill out his state's Commission delegation.

Hanna is a Monroe County legislator and chair of the county's Public Safety Committee and vice chair of the Ways and Means Committee.

O'Mara is chair of the New York Public Service Commission, and a member of the State of New York Commission on Judicial Nomination and U.S. Sen. Alfonse D'Amato's Judicial Screening Committee.

A professional engineer and consultant, Tuohey has an extensive background in politics and management. He has been actively involved in professional organizations



Tuohey

like the International Material Management Society and the National Society of Professional Engineers.

The New York Delegation will host the Commission's 1998 Annual Meeting, October 19-20 in Buffalo.

New Observers include Maggie Grant, executive director of the Council of Great Lakes Governors; Rear Adm. John McGowan, commander of the U.S. Coast Guard-Ninth District; Thomas Behlen, director of the International Joint Commission, Great Lakes Regional Office; and Ron Sundell, environmental scientist at Argonne National Laboratory.



New Observer Rear Adm. John McGowan of the U.S. Coast Guard (left) chats with Ohio Commissioner George Ryan.

Commission Briefs

Great Lakes Day in Washington

Legislative priorities: Seaway enhancement, sediment transport models

To launch their federal advocacy activities for the year, the Commission and the Northeast-Midwest Institute sponsored a congressional breakfast and issues briefing session on March 12 as part of Great Lakes Day in Washington, D.C.

The breakfast featured presentations on regional prospects in the 105th Congress-Second Session by Rep. James Oberstar (D-Minn.) and Rep. Marcy Kaptur (D-Ohio). Great Lakes Commission Vice Chair Irene Brooks and Frank Kudrna, chair of the Illinois Delegation, also were on hand to present the Commission's legislative and appropriations priorities (*see insert in this ADVISOR*).

Oberstar, the ranking minority member on the Committee on Transportation and Infrastructure, described the importance of the Binational Great Lakes-Seaway



Rep. Oberstar

Enhancement Act of 1998 (H.R. 3147), legislation he introduced on Feb. 3.

This bill would authorize the establishment of a single St. Lawrence Seaway operating organization, replacing existing agencies in the U.S. and Canada and reducing costs by streamlining administrative operations. Another provision of the Act establishes a Great Lakes Development Bank as a new way to raise funding for maritime system improvements. The Great Lakes Commission has endorsed this legislation.

Kaptur, a member of the Committee on Appropriations, discussed soil erosion and sedimentation problems in the Great Lakes basin, among other regional issues. She referred to a section of the Water Resources Development Act of 1996 that will provide for the development of sediment transport models for major Great Lakes tributaries, including the Maumee River in Ohio. These models will be used to identify effective soil conservation and preventive sediment man-

agement techniques.

"This research is vitally important to protecting the future of the Maumee River watershed and the ecology of the Great Lakes," Kaptur said. "Soil erosion and sedimentation are primary sources of nonpoint pollution for the lakes. This project will help us learn how to alleviate these problems."

The Great Lakes Issues Briefing provided an opportunity for environmental agencies from the U.S. and Canada to describe their current Great Lakes research agendas.

Alternate Commissioner Gerry Mikol, New York State Department of Environmental Conservation, moderated a panel discussion on environmental protection and research priorities. David Ullrich, U.S. EPA Region 5, discussed the United States obligation for Great Lakes protection, while John Mills from Environment Canada shared a Canadian perspective.

Great Lakes maritime priorities were discussed by Illinois Commissioner Frank Kudrna, Kudrna & Associates Ltd.; Michigan Commissioner Tracy Mehan, Michigan Department of Environmental Quality; and Steve Fisher, American Great Lakes Ports.

Soil erosion and sediment control, aquatic nuisance species and coastal management issues were covered in the briefing's final panel discussion, moderated by Wisconsin Commissioner Nathaniel E. Robinson, Wisconsin Department of Administration. Participants in the discussion were Ohio Commissioner Bill Moody and Gary Isbell, both from the Ohio Department of Natural Resources; and Tony MacDonald of the Coastal States Organization, a Commission Observer agency. Contact: Steve Thorp, sthorp@glc.org.



Rep. Kaptur

Executive Committee sets priorities for 1998

Program and advocacy priorities were the featured topics when the Commission's Executive Committee convened March 11 in Washington, D.C. Among other actions, members approved new state "return on investment" forms for transmittal to Great Lakes governors; approved plans for 1998 Commission meetings; agreed to organize a joint Commission meeting, Seaway Summit and Mayors' Conference in Montreal in 1999; supported Rep. Oberstar's Binational Great Lakes-Seaway Enhancement bill; and agreed to pursue a Great Lakes Basin Compact amendment to permit full provincial membership.

By formal resolution, the Executive Committee also opposed the recent designation of Lake Champlain as a Great Lake (*see related stories on pages 2 and 10*).

Col. James Houghnon, deputy commander of the U.S. Army Corps of Engineers' Great Lakes and Ohio River Division, was joined by Larry Hiipakka to discuss the Corps budget, WRDA 1996 implementation, WRDA 1998 development and related matters. Contact: Mike Donahue, mdonahue@glc.org.

Keeping it on the Land ...and Out of the Water

Soil Erosion and Sediment Control Techniques for the Great Lakes Basin

**Sept. 16-18, 1998
Radisson Hotel • Toledo, Ohio**

Featuring presentations on federal initiatives affecting resource conservation efforts in the Great Lakes basin and techniques for reducing nonpoint source pollution in both rural and urban environments.

For more information, contact Matt Doss, Great Lakes Commission, 734-665-9135, mdoss@glc.org.

John Glenn honored by Great Lakes community

The Great Lakes community honored Sen. John Glenn (D-Ohio) for his 24 years of dedicated service to the Great Lakes region at a March 11 reception sponsored by the Northeast-Midwest Institute.

Glenn serves as co-chair of the Senate Great Lakes Task Force and has advanced many initiatives, large and small, on behalf of the Great Lakes region. He has been instrumental in creating laws that prevent and control infestations of nonindigenous aquatic nuisance species in U.S. waters; clean up and reduce contaminated sediments; restore fish and wildlife; and monitor air toxics.

On February 20, 1962, Glenn became the first American to orbit the earth. In October of this year (at the age of 76), he will return to space for 10 days as a payload specialist on a NASA space shuttle, offering scientists a unique chance to study the science of aging.

"With John Glenn's retirement, we are losing a good friend and champion of the Great Lakes," said Sen. Carl Levin (D-Mich.), who hosted the reception.

Levin has been elected by his colleagues to be the new Democratic co-chair of the Senate Great Lakes Task Force. He will replace Glenn upon the Ohio senator's retirement at the end of 1998.



Sen. Glenn

Commission co-sponsors hazmat conference

The 14th Annual International Hazardous Material Spills Conference was held in Chicago, Ill., April 5-9. The conference, co-sponsored by the Great Lakes Commission, the National Response Team and several other organizations, attracted more than 600 attendees from around the country and 30 international guests.

The conference focused on risk management with breakout sessions offered on topics such as rural response and counter terrorism. Risk management planning was highlighted by sessions on EPA's implementation of Risk Management Program regulations and the unveiling of prototype software designed for RMP submission and review. Additional sessions reviewed case studies of response efforts and computer-based training.

Contact: Tom Crane, tcrane@glc.org.

Commission welcomes new program manager, research associates

The Commission is pleased to announce the hiring of Julie Wagemakers as new manager of the Communications and Information Management Program.

Wagemakers comes to the Commission from the International Institute for Sustainable Development in Winnipeg, Manitoba, where she currently serves as publisher and development manager.

Wagemakers has a bachelor's degree in microbiology from the University of Manitoba and previously held positions with Canada's Great Lakes Forestry Centre, the Bayfield Institute, and the Department of Fisheries and Oceans' Freshwater Institute. She will join the Commission in June.

Also joining the Communications and Information Management Pro-



Wagemakers

gram is Lara Slee, new editor of the *ADVISOR*. Slee has a bachelor's degree in English from the University of Michigan (U-M) and is currently a graduate student in written communication at Eastern Michigan University.

Christine Manninen has been promoted to project manager and now oversees development and management of the Great Lakes Information Network and Great Lakes Commission web sites, and serves as managing editor of the *ADVISOR*.

Derek Moy, a new program specialist, will work on the toxic air emissions and Great Lakes GIS Online projects, as well as assist with computer and network systems administration and maintenance responsibilities. Moy is working toward a master's in geography from Eastern Michigan University. He holds a bachelor's degree in resource ecology and man-

agement from the U-M.

Prapassara Nilagupta, a graduate student in the Department of Resource Development at Michigan State University, joins the Resource Management and Environmental Quality Program to work on the area contingency planning project. She holds a bachelor's degree in agro-industrial product development from Kasetsart University in Bangkok, Thailand, and a master's in packaging from MSU.

The Commission also is hosting Fulbright scholar Jennifer Read, a doctoral student in environmental history at the University of Western Ontario. Read's research focuses on Great Lakes water quality issues and, in particular, the roles that Michigan and Ontario governments played in formulating policy and negotiating the Great Lakes Water Quality Agreement of 1972.

Lake Champlain gains — and loses — Great Lakes designation

Under an amendment to the National Sea Grant Program Reauthorization Act of 1998 (S. 927) proposed by Sen. Patrick Leahy (D-Vt.), Lake Champlain enjoyed a short-lived designation as a Great Lake. The purpose of the measure was to extend funding eligibility to Vermont universities under the Sea Grant Program, which is run by the National Oceanic and Atmospheric Administration.

After legislative opposition led by U.S. Sen. Spencer Abraham (R-Mich.), a compromise was reached that revokes Lake Champlain's designation as a Great Lake, but retains its eligibility for Sea Grant funding. Similar legislative language introduced in the U.S. House by Rep. Fred Upton (R-Mich.) also was adopted.

Vermont universities will now be able to compete for the more than \$50 million in research money currently directed to the existing 26 Sea Grant colleges. Up to now, Vermont has been ineligible because the state does not possess any Great Lakes or ocean coastline.

"Practically speaking, when it comes to counting the Great Lakes, New Englanders will continue to count six and Midwesterners five," said Leahy about the controversy.

Leahy's treatment of the issue angered many Great Lakes lawmakers.

"Rather than asking for language that would specifically allow Vermont universities to apply for Sea Grant dollars, the definition of a Great Lake was changed to include Lake Champlain when, clearly, it is not," said Sen. Abraham as he introduced a bill to counter the amendment.

Sen. Leahy's amendment prompted a quick and decisive response from the Great Lakes Commission. Acting at its March 11 meeting in Washington D.C., the Executive Committee adopted a policy position that opposed the designation.

"Designation as such compromises our decades-old effort to study and manage the five Great Lakes as inter-related components of a single basin," the position stated. "Furthermore, it sets a scientifically untenable precedent that may open the door to designation of other large freshwater lakes that also are outside the Great Lakes basin."

The position was subsequently communicated to every member of the Great Lakes Congressional Delegation.

Contact: Mike Donahue, mdonahue@glc.org.

ANS conference hits the west coast

The impacts of invasive species on both marine and freshwater ecosystems along the Pacific coast and Hawaii were highlighted at the Eighth International Zebra Mussel and Aquatic Nuisance Species Conference in Sacramento, Calif., March 16-19.

California waters are far less vulnerable to zebra mussel infestation than much of the Midwest, according to a study conducted by Andrew Cohen and Anna Weinstein at the San Francisco Estuary Institute. Still, there is the potential for introductions through infested waters transported from other parts of the country or through attachment to aquatic plants or boat hulls and trailers.

Programs and institutional arrangements applied in the Great Lakes region were highlighted by Great Lakes Commission Project Manager Katherine Glassner-Shwayder, representing the Great Lakes Panel on Aquatic Nuisance Species. She voiced the need for an interjurisdictional approach to ANS prevention and control to instill a sense of ownership by participating agencies and serve as a single regional voice to elected leaders and policymakers.

Shwayder expressed the importance of building partnerships and conveying consistent messages between the various jurisdictions in the Great Lakes region.

Shwayder also participated in a national ANS Task Force meeting on March 19-20. Representing Dr. Michael Donahue, Commission executive director and ex-officio member of the Great Lakes Panel, Shwayder updated the task force on panel initiatives including inventories of ANS research and information/education materials; model comprehensive state management plans and model state legislation; and a regional ANS action plan. Contact: Katherine Glassner-Shwayder, shwayder@glc.org.

Tributary modeling initiative to advance sediment control efforts

State, federal and regional officials will meet April 29-30 in Ann Arbor, Mich., for a User's Workshop associated with the Great Lakes Sediment Transport Modeling Project.

Led by the U.S. Army Corps of Engineers, with technical support from the Great Lakes Commission, the workshop is an important step in implementing Section 516(e) of the Water Resources Development Act of 1996. The objective is to provide the data and information that managers need to reduce erosion and

sedimentation problems in tributaries and downstream areas.

A Modeler's Workshop, March 18-19 in Chicago, brought together more than two dozen modelers and yielded a descriptive listing of 25 models; a series of questions to evaluate their applicability; and criteria to be used in the User's Workshop to prioritize approximately 60 tributaries eligible for federal funding under Section 516(e).

Contact: Mike Donahue, mdonahue@glc.org.

Keeping an eye on storms in the Great Lakes region

Spring showers soon will be replaced with summer storms throughout the Great Lakes region, and lake levels are expected to rise. Most of these weather systems are merely wet and windy annoyances, but storm-generated waves can be threats to coastal property and safe navigation.

The Great Lakes Storm Damage Reporting System, started in 1993 by the Chicago District of the U.S. Army Corps of Engineers, monitors Great Lakes storm activity on a daily basis. GLSDRS operates a statistically reliable database with information of interest to scientists and property owners within the Great Lakes basin.

"The system is literally one-of-a-kind in providing near real-time storm data information," says Dr. David

Wallin, regional economist for the Chicago District. "Its primary purpose is to aid decision-making with regard to lake level issues."

The GLSDRS database will be used to create predictive models that illustrate the patterns of storm incidence, seasonality and levels of storm damage. The system identifies storm activity on the Great Lakes using the CoastWatch's Marine Observation Network, sponsored by NOAA. Each day, meteorological data is downloaded through CoastWatch and compared to storm criteria by the Chicago District's coastal engineers. This data, combined with damage information from telephone surveys of residential riparian property owners immediately

following storms, provides useful insights to aid lake level management and predict cumulative dollar damage for specific areas.

Computerized storm monitoring, rapid turn-around telephone surveying, and inhouse data processing and analysis combine to enable GLSDRS to report near real-time information for the entire U.S. shoreline of the Great Lakes basin. Executive summaries are created from the results of each storm, which are available upon request. Within the next few months, GLSDRS will be finalizing an online information resource.

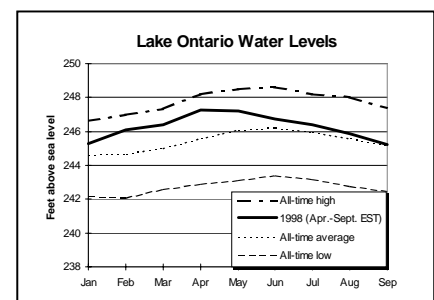
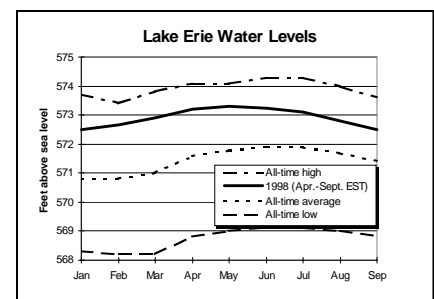
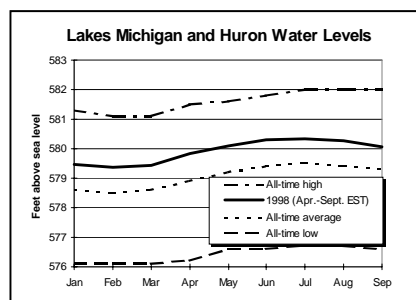
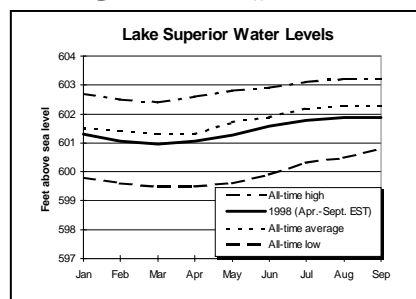
Contact: Dr. David Wallin, Chicago District, USACE, 312-353-6400 ext. 2015, David.E.Wallin@LRC01.usace.army.mil.

Lake levels remain high despite mild winter

El Nino, the warm Pacific water system that disrupts global weather patterns, has been tied to severe drought conditions in Australia, flooding and mud slides in California, powerful western hemisphere storms, and a very mild Great Lakes winter season.

Since January 1998, precipitation levels have been above average on all of the Great Lakes, while evaporation levels from lake surface water have not increased. The dominating jet stream flow has drawn mild, moist Pacific air across the Great Lakes. Since this air flow across the lakes is already carrying moisture and is close to the temperature of the lake surfaces, very little evaporation takes place.

"Despite the dry winter influenced by El Nino on the northern Great Lakes basins, above average precipitation on the lower Great Lakes have kept their levels above average during the winter and early spring," says John Love of the



Data: U.S. Army Corps of Engineers, Detroit District.

Great Lakes Hydraulics and Hydrology Branch of the U.S. Army Corps of Engineers, Detroit District. "Consequently, Lake Superior levels are expected to be near their long-term average but levels

on the other Great Lakes are expected to remain above average through the end of the summer."

Contact: John Love, 313-226-6443, John.B.Love@usace.army.mil.

Great Lakes Calendar

This calendar is a compilation of selected events of interest to the Commission. Further details and a more extensive calendar are available online via the Great Lakes Information Network (www.great-lakes.net).

We encourage your input to the calendar. If you know of an event you'd like us to include, please contact Lara Slee, ADVISOR editor, at 734-665-9135; lslee@glc.org.

Commission events

July

8-10 12th International Great Lakes-St. Lawrence Mayors' Conference. Windsor, Ontario. Contact: Steve Thorp, sthorp@glc.org.

September

15-16 Beneficial Use of Dredged Material Workshop. Toledo, OH. Contact: Steve Thorp, sthorp@glc.org.

16-17 Great Lakes Dredging Team Meeting. Toledo, OH. Contact: Steve Thorp, sthorp@glc.org.

16-18 Soil Erosion and Sediment Control Techniques for the Great Lakes Basin. Toledo, OH. Contact: Matt Doss, mdoss@glc.org.

October

19-20 Annual Meeting of the Great Lakes Commission. Buffalo, NY. Contact: Mike Donahue, mdonahue@glc.org.

Basin events

May

18-22 41st Annual Conference of the International Association for Great Lakes Research (IAGLR). McMaster University; Hamilton, Ontario. Contact: Dr. Patricia Chow-Fraser, 905-525-9140 ext. 27338, chowfras@mcmaster.ca.

21-22 Great Lakes' Law, Science and Policy Conference. Maumee Bay State Park; Oregon, OH (just east of Toledo). Contact: Roger Andersen, 419-530-4136, randers3@utoledo.edu; or 419-530-2876, ligl@utoledo.edu.

June

1-7 National Fishing Week

2-3 Great Lakes Fishery Commission Annual Meeting. Chicago, IL. Contact: Mark Gaden, 313-662-3209 ext. 14, mgaden@glfc.org

6-10 25th Annual Conference on Water Resources Planning and Management. Chicago, IL. Contact: American Society of Civil Engineers, 800-548-2723.

15 Exotic Species Day Camp. University of Minnesota-Duluth; Duluth, MN. Contact: Doug Jensen, djensen@mes.umn.edu.

18-19 U.P. Waterfest '98. Don H. Bortum University Center, Northern Michigan University; Marquette, MI. Contact: Paula Olson, 906-487-3341, paolson@mtu.edu.

24 Exotic Species Day Camp. Belle Isle Zoo and Aquarium. Detroit, MI. Contact: Mike Klepinger, klep@pilot.msu.edu.

July

20-21 Workshop on Great Lakes Natural Coastal Hazards to Development. Milwaukee, WI. Contact: Phil Keillor, 608-263-5133, jkeillor@seagrant.wisc.edu.

23-24 Workshop on Great Lakes Natural Coastal Hazards to Development. Superior, WI. Contact: Phil Keillor, 608-263-5133, jkeillor@seagrant.wisc.edu.

September

25-26 Areas of Concern Workshop: Transferring Successful Strategies and Techniques. Gary, IN. Contact: Bruce Kirschner, 313-226-2170 ext. 6710, kirschnerb@ijc.wincom.net.

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Great Lakes Commission's legislative and appropriations priorities for 105th U.S. Congress, Second Session

The Great Lakes Commission has a responsibility to ensure that a strong federal-state partnership exists to provide for the sustainable use and development of the natural resources of the Great Lakes basin. By formal action of its eight member states, the Commission has adopted a series of legislative and appropriations priorities for consideration by the 105th U.S. Congress, Second Session. These recommendations were developed with a sensitivity toward deficit reduction efforts, and many appropriations requests are well below authorized levels. The Commission urges the Great Lakes Congressional Delegation and the Administration to support the institutions and programs listed on the following pages, all of which are vital to the effective management and protection of the Great Lakes.

Research and Management Institutions

Great Lakes Commission

The Commission's enabling legislation, the Great Lakes Basin Compact, should be amended to provide for full voting membership for the governments of Ontario and Quebec. Every Great Lakes state has extant legislation that provides for full provincial membership; a simple amendment to the federal consent legislation is needed to provide for the same. **The Commission urges Congress to support an amendment to the Great Lakes Basin Compact (PL 90-419) that will permit the Commission to extend a membership invitation to the governments of Ontario and Quebec. The Water Resources Development Act of 1998 should be considered (among others) as a vehicle for introducing the Compact amendment.**

Great Lakes Environmental Research Laboratory (NOAA)

The Great Lakes Environmental Research Laboratory (GLERL) is the only Great Lakes research laboratory with the staff and equipment necessary to examine physical phenomena in concert with biogeochemical/ecosystem and water quality studies. **The Commission recommends base funding of \$6.8 million for GLERL in FY1999.** GLERL is being moved from Oceanic and Atmospheric Research to the National Ocean Service. In the process, \$825,000 in permanent adjustments to base normally received from OAR are being wrapped into the base budget in NOS. Thus, the president's request of \$6.025 million for FY1999 is actually a decrease from FY1998 levels. The Commission-recommended level will allow GLERL to more adequately fund existing programs and projects, strengthen its scientific staff and rebuild critical research infrastructure.

Great Lakes Science Center (U.S. Geological Survey)

The Great Lakes Science Center has provided sound assessments of fish populations critical to management for several decades; made the original collections of several introduced species; and provided seminal information for the control of aquatic nuisance species. **The Great Lakes Commission recommends FY1999 funding of no less than \$6.5 million, which is consistent with the president's request. The Commission further recommends that additional Great Lakes Science Center budgetary requirements be acknowledged and met to ensure adequate support for Great Lakes Fish and Wildlife Restoration Act implementation and other anticipated initiatives.**

U.S. Environmental Protection Agency

- Great Lakes National Program Office
- Environmental Research Laboratory at Duluth, MN
- Large Lakes Research Station at Grosse Ile, MI

The Great Lakes National Program Office (GLNPO) has an important federal/state coordination role, undertakes a range of research and monitoring activities, provides technical and financial assistance to Remedial Action Plan committees, and pursues a variety of special projects in partnership with state and federal agencies, tribal authorities and other interests. Furthermore, it plays a pivotal leadership role in overseeing fulfillment of U.S. commitments under the U.S.-Canada Great Lakes Water Quality Agreement. **The Great Lakes Commission recommends that GLNPO be funded at \$15.7 million in FY1999, a figure that reflects its total FY1998 budget.** Without such support, GLNPO's ability

to meet binational obligations, as well as pursue federal/state partnerships, will be compromised. The other U.S. EPA facilities listed are an integral part of the U.S. EPA presence in the Great Lakes basin. **The Great Lakes Commission recommends a total funding level of \$13.228 million in FY1999, which represents level funding**

Great Lakes Fishery Commission

The binational Great Lakes Fishery Commission formulates and implements a research program and a comprehensive sea lamprey control program. Maintaining strong support for the Great Lakes Fishery Commission through the Department of State budget is important in FY1999 to ensure the sustainability of the basin's multi-billion dollar fishery and to coordinate and conduct fisheries research and management activities. **The Great Lakes Commission urges Congress to appropriate no less than \$12.5 million in FY1999.** Coupled with Canadian funding obligations and a three-year, \$3 million commitment from the state of Michigan, such an appropriation will allow the Fishery Commission to address lamprey control goals and place a much-needed and enhanced focus on the St. Marys River. **The Great Lakes Commission also urges Congress to enact legislation authorizing the Secretary of the Army to work in conjunction with the Great Lakes Fishery Commission to control sea lamprey via structural and/or nonstructural measures. An annual appropriation of \$25 million is recommended.**

International Joint Commission

Also funded through the Department of State is the International Joint Commission (IJC), a binational agency responsible for addressing issues and concerns arising along the U.S./Canada boundary. The IJC plays a critical role, through the Great Lakes Water Quality Agreement, in shaping binational, basinwide air and water

quality program and environmental remediation efforts. ***To meet extant binational commitments and to prepare for emerging challenges, the Great Lakes Commission urges Congress to restore LC funding to its 1992 level of \$3.8 million.***

National Sea Grant College Program

The National Sea Grant College Program promotes and supports scientific research and outreach programs for marine and freshwater resources. The member states of the Great Lakes Commission benefit substantially from the six Sea Grant programs in the region and their research, education and advisory services. The president's budget request reflects a significant reduction over FY1998 appropriations. That request would adversely impact the Sea Grant programs in the Great Lakes states and also may affect ANS research, which was rolled into base Sea Grant funding last year. ***The Commission urges Congress to appropriate \$64.8 million to the National Sea Grant College Program in FY1999.*** The Commission applauds Congress for reauthorizing the National Sea Grant Program Act this year, but has expressed its opposition to the now-repealed provision that defined Lake Champlain as a Great Lake for purposes of the act. ***The Commission is opposed to any present or future legislative effort that offers a Great Lake designation to any body of water that is physically outside of the Great Lakes basin.***

Water Resources Research Institutes

The Department of the Interior's Water Resources Research Institute Program supports critical research at numerous Great Lakes universities. This research directly benefits Great Lakes Commission member state programs and has fostered partnerships to enhance the efficiency and effectiveness of policymaking and management activities. ***Congress is urged to maintain support for the WRRRI program at a level not less than last year's appropriation.***

Resource Management and Environmental Protection Programs

Great Lakes Basin Program for Soil Erosion and Sediment Control

The Great Lakes Basin Program is a federal/state partnership managed cooperatively by the Great Lakes Commission, U.S. EPA Region 5 and the Natural Resources Conservation Service (USDA).

The program targets funds to Great Lakes problem areas, offers competitive grants to the eight states and local jurisdictions, and maintains an information/education program to promote improved water quality and agricultural productivity through responsible urban and agricultural land-use practices. ***The Commission advocates inclusion of a \$750,000 appropriation in the Conservation Operations portion of the USDA budget for FY1999, as a means to safeguard past progress and maintain critical work. The Commission further advocates that the Great Lakes basin be designated a priority area under the Environmental Quality Incentives Program (EQIP), established in the federal Agriculture Improvement and Reform Act.***

Section 319 of the Clean Water Act

The Section 319 program, authorized in the Clean Water Act, is the U.S. EPA's primary tool for addressing nonpoint source pollution problems in the Great Lakes basin and nationally. Enhanced funding for the Section 319 program, an integral part of the president's Clean Water and Watershed Restoration initiatives, will assist the Great Lakes states in developing and implementing control plans for nonpoint pollution. ***The Commission supports the president's request of \$195 million for Section 319 funding in FY1999.***

Aquatic Nuisance Species Prevention and Control

The aquatic nuisance species problem in the Great Lakes is of tremendous and growing concern. In 1996, Congress enacted the National Invasive Species Act, which provides a multifaceted approach to the problem via intergovernmental coordination, research support, demonstration projects, ballast management measures, and related prevention and control strategies. Effective programs targeted at the Great Lakes basin can slow or prevent the spread of such species to other regions of North America. ***The Commission urges Congress to support NISA-authorized programs and, in particular, the following***

- ***Support the president's budget request of \$3.2 million for the U.S. Fish and Wildlife Service to implement NISA.***
- ***Support the president's budget request for \$750,000 for the U.S. Geological Survey (Biological Resources Division) to implement NISA.***
- ***Appropriate a minimum of \$55,000 for pass-through from the U.S. Fish and Wildlife Service to the Great Lakes***



Commission under Section 1203 of NISA. This will support continued staffing and operation of the NISA-mandated Great Lakes Panel on Aquatic Nuisance Species.

- ***Appropriate a minimum of \$450,000 to the U.S. Fish and Wildlife Service under Section 1204 of NISA for implementation of comprehensive state management plans.***
- ***Appropriate \$500,000 to the U.S. Army Corps of Engineers under Section 1202 of NISA for the design and construction of a dispersal barrier in the Chicago Shipping and Sanitary Canal to protect the Great Lakes and Mississippi River ecosystem from the spread of aquatic nuisance species.***
- ***Appropriate \$2 million to the U.S. Army Corps of Engineers for public facility research on zebra mussel control.***
- ***Appropriate \$2.5 million to the U.S. Coast Guard for the Ballast Water Guidelines and Prevention Program.***

Great Lakes Fish and Wildlife Restoration Act

The Great Lakes Fish and Wildlife Restoration Act of 1990 calls for the study assessment and response to fish and wildlife needs in the Great Lakes basin. A Fishery Resources Restoration Study was completed in 1995, and implementation of various ecosystem projects will be pursued in cooperation with states, tribes and other interested entities. ***The Commission urges Congress to reauthorize this Act and, to meet the above requirements, appropriate \$5 million in FY1999.***

Air Quality Improvements

The Commission urges Congress to support the Clean Air Act Great Waters Program in FY1999 at the previous year's level of \$3 million, and recommends that at least \$1.5 million of this amount be directed to the Great Lakes region. Through inventory efforts, research and monitoring of toxic deposition, this program addresses a regionwide priority. The Commission is presently managing, through a U.S. EPA/state partnership, a Great Lakes Regional Air Toxics Emissions Inventory Project as part of the Great Waters Program.

National Coastal Zone Management Program and Coastal Monitoring

The informed use, management and protection of coastal areas is of critical concern to the eight Great Lakes states, which collectively account for 5,000 miles of shoreline. NOAA's Coastal Zone Management Program provides much-needed state grants for coordination, planning and management programs. **The Commission urges Congress to support an increase in the president's overall budget request from \$66.5 million to \$75.5 million. This includes \$58.7 million for Section 306/309 grants to states to address needs of new states and CZM demands on state coastal resources; \$6 million in Section 309 enhancement grants; and \$5 million in Section 6217 funds to address the problem of coastal nonpoint pollution.**

U.S. Geological Survey's Water Quality Partnership Programs

The proposed FY1999 budget for the U.S. Geological Survey provides for a USGS/National Park Service partnership under the president's Clean Water Initiative/Action Plan. **The Commission urges Congress to appropriate \$2.5 million to a USGS/NPS partnerships benefiting NPS watersheds. The needs of impaired watersheds in the Great Lakes basin should be fully considered as allocation decisions are made.**

Great Lakes Mediation Concerning Illinois' Lake Michigan Diversion: Memorandum of Understanding, July 1996

Section 1142 of the Water Resources Development Act of 1986 made the U.S. Army Corps of Engineers responsible for the measurement and accounting of Lake Michigan diversion to assess Illinois' compliance with U.S. Supreme Court decrees. The Great Lakes MOU of July 1996 between the states and the United States specified a new lakefront measurement and accounting system to be tested concurrently with operation of the existing system. The new system was to be started in 1997, operated for three years and recommended to the U.S. Supreme Court in the form of a decree modification. The FY1998 Corps budget did not request funds, so the three-year dual accounting period has been delayed. **The Commission urges Congress to provide the Corps of Engineers with an appropriation of an additional \$500,000 for FY1999 and \$300,000 per year for two subsequent years to undertake the dual measurement, accounting and quality assurance/quality control work it agreed to do in the 1996 MOU.**

Great Lakes Water Conservation: Chicago Harbor Leakage Control

Section 320 of the Water Resources Development Act of 1996 authorized the U.S. Army Corps of Engineers to repair leakage through navigation structures at Chicago to reduce wasteful lake diversion. **The Commission urges Congress to provide the Corps of Engineers with an additional \$500,000 in FY1999 for engineering design, plans and construction of leakage repairs.**

Maritime Transportation and Other Infrastructure Needs

Water Resources Development Act of 1998

The Great Lakes Commission believes the introduction and passage of a Water Resources Development Act of 1998 (WRDA '98) during the 105th Congress is important. **The Commission urges Congress to consider the following for implementation and funding:**

- **Support introduction and passage of a Water Resources Development Act of 1998.**
- **Support a WRDA '98 provision that would require a U.S. Army Corps of Engineers study of the recreational navigation benefits that accrue from federal maintenance of harbors and navigation channels, which provide access to recreational boats, and incorporate findings in the Corps' Cost Savings Initiative process.**
- **Support a WRDA '98 provision that would waive the interest charges on the nonfederal cost share for a new lock at Sault Ste. Marie, Mich.**
- **Support a WRDA '98 provision that would authorize the Corps of Engineers to cooperate with states or local governments in providing assessment, planning and design assistance for remediation, environmental restoration, or redevelopment of brownfields where such action will contribute to the conservation and protection of the water and related resources of drainage basins, watersheds and ecosystems within the United States.**
- **Support a WRDA '98 provision that would authorize the U.S. Army Corps of Engineers, in partnership with the Great Lakes Fishery Commission, to assist with the construction of sea lamprey barriers.**

Funding For Water Resources Development Act of 1996 Provisions

The Water Resources Development Act of 1996 contains many important Great Lakes-applicable provisions. This law recognizes the need to consider the goal of navigation channel maintenance along with goals for environmental protection, restoration and sediment management. **The Commission urges Congress to consider the following as funding priorities for Energy and Water Appropriations for FY1999:**

Section 204, Restoration of Environmental Quality: This provision expanded previous authority allowing the Corps to conduct restoration work outside of a project area if the project had caused or contributes to the problem. **The Commission urges Congress to appropriate \$20 million.**

Section 205, Environmental Dredging: The Great Lakes states strongly support this provision which reauthorized Section 312 (WRDA 1990), recognizing that the dredging of contaminated sediments outside authorized navigation channels will be important in the Great Lakes. **The Commission urges Congress to appropriate funds not to exceed \$20 million to cover any related funding requirements from those Great Lakes areas identified for priority attention.**

Section 207, Beneficial Uses of Dredged Material: This provision allows for a disposal method other than the least costly if the additional costs are reasonable in relation to environmental benefits. **The Commission urges Congress to appropriate \$2 million for use at Great Lakes projects. This amount represents level funding from FY1998.**

Section 221, Planning Assistance to States: This provision allows the Corps of Engineers to support states in planning, development, utilization and conservation of water resources. Great Lakes states and tribal authorities use this program

Continued on next page



extensively and account for more than half of available funding for the past several years. ***The Commission recommends support for the president's budget request of \$5 million.***

Section 227, Shore Protection: The Great Lakes states support this provision, recognizing that protection, restoration and enhancement of sandy beaches is important for certain locations on the Great Lakes. ***The Commission supports the establishment of a national shoreline erosion control development and demonstration program as provided for in the legislation. The Commission further recommends appropriations of \$21 million nationally, or a level that ensures that no fewer than two Great Lakes sites are funded.***

Section 515, Great Lakes Remedial Action Plans and Sediment Remediation: ***The Commission urges Congress to appropriate \$5 million to fund Remedial Action Plan (RAP) development and implementation at identified priority sites on the Great Lakes.*** These monies could be available to local governments and nongovernment entities.

Section 516, Sediment Management: The Great Lakes states strongly support the intent of this provision, although the development of sediment transport models may not be necessary or appropriate in all circumstances. Adequate levels of funding and technical support should be targeted at applicable Great Lakes tributary rivers to support planning and implementation activities already underway, and to implement sediment reduction efforts within the watershed. ***The Commission urges Congress to appropriate \$1 million. This amount represents a \$500,000 increase from FY1998, which funded modeling for several tributaries. This modest increase will allow modeling to begin on several additional tributaries.***

St. Lawrence Seaway

Various proposals to restructure both Canadian and U.S. seaway operations have been advanced, as well as ideas to reduce or eliminate existing Canadian seaway tolls. ***The Commission urges Congress to support passage of the Binational Great Lakes Seaway Enhancement Act of 1998 (H.R. 3147) and support efforts for elimination of Canadian seaway tolls along with review of Canadian seaway initiatives.***

Harbor Maintenance Tax

In March 1998, the U.S. Supreme Court ruled the Harbor Maintenance Tax unconstitutional as it applies to exports. In 1990, Congress tripled the ad valorem Harbor Maintenance Tax from .04 percent to .125 percent on the value of cargo. At that new level, the tax takes more money from U.S. maritime trade than is spent on harbor maintenance; diverts cargo to competing land modes that are more polluting, congestive and energy-consuming than water transport; and encourages shipment of U.S. goods through nearby Canadian ports that do not pay the tax. As a result of the court ruling, changes in how harbor maintenance is funded at federally authorized harbors may be proposed. ***The Commission urges Congress to carefully review any proposed changes to the current Harbor Maintenance Tax. The Commission also advocates legislation to match Harbor Maintenance revenue to the revenue level needed to fund harbor maintenance nationally.***

The U.S. Coast Guard Cutter *Mackinaw*

The U.S. Coast Guard cutter *Mackinaw* is the only Great Lakes-stationed vessel capable of breaking heavy ice, which otherwise would block carriage of cargoes needed for major U.S. Great Lakes industries early and late in the shipping season. The Coast Guard currently is considering options for either retrofitting the *Mackinaw* or building a new heavy ice breaker for Great Lakes operations. ***The Commission urges Congress to ensure funding and operation of the Mackinaw, until a long-term plan for providing heavy ice breaking is in place.***



Navigational Assistance and Ice Breaking User Fees

The administration's budget for FY1999 proposes a new navigational assistance user fee to cover the cost of various forms of navigational assistance related to placement and maintenance of buoys and other aids-to-navigation, radio navigation and vessel traffic services. The Coast Guard portion of the navigational assistance user fee is targeted at \$35 million for FY1999 and \$165 million annually thereafter. These fees and, in particular, any ice-breaking fees would unduly burden the Great Lakes steel industry and electric utilities that depend on Great Lakes shipping for the safe, efficient and low-cost movement of raw materials and fuel. ***The Commission urges Congress to oppose the proposed navigational assistance user fees and Coast Guard ice breaking user fees (taxes) for the Great Lakes. The Coast Guard budget should***

be increased to account for the elimination of revenue from the proposed fees.

Soo Lock

A new large lock is needed at Sault Ste. Marie, Mich., to replace two old, obsolete locks. The proposed lock requires a large, nonfederal cost share. The Great Lakes Commission applauds Congress for passing legislation in 1996 that will reduce the nonfederal cost share amount and extend the payback period. The Commission and the Great Lakes states are now working diligently to secure the nonfederal cost share. ***The Commission recommends that Congress support appropriations for construction of a new Soo lock when agreement on funding the nonfederal cost share is secured. The Commission also urges Congress to appropriate \$500,000 to continue current preconstruction, engineering and design work for the proposed lock.***

Border Fees

The Great Lakes-Canada connection is the center of a huge flow of goods and people. The Great Lakes states account for more than half of U.S.-Canada trade, which is the largest such bilateral arrangement in the world. ***The Commission urges Congress to carefully review and oppose any current or proposed revenue measure that could adversely affect people and goods movement across the Canadian border and thereby discriminate against the Great Lakes region.***

Illegal Immigration Reform and Immigrant Responsibility Act of 1996

Section 110 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 requires the U.S. Attorney General to develop by September 30, 1998, an automated entry-exit control system to register all aliens entering and departing the United States. This entry-exit control system could result in significant congestion and major delays at land crossings. In the Great Lakes region these delays will, among other problems, disrupt just-in-time delivery schedules for manufacturing industries and unduly complicate personal travel. ***The Commission urges Congress to eliminate the requirement of the planned automated entry-exit control at the Canadian border. Also, the Commission urges Congress to require a comprehensive study of such border control measures before considering any new measures.***