

Program Areas

Communications and Internet Technology

The Communications and Internet Technology Program oversees the writing, design and marketing of all Commission products, including both online and print publications. Among these are the Commission's annual report, quarterly *Advisor* newsletter, media advisories and web sites, including the Great Lakes Information Network (GLIN), the region's premier source for Great Lakes news and information. Program staff have training and experience in journalism, print/web design and data management. Program manager: Christine Manninen, manninen@glc.org

Data and Information Management

The Data and Information Management Program promotes the development and application of decision support systems and procedures, including databases, regional networks, information inventories, geographic information systems (GIS) and related tools. The program facilitates regional GIS coordination to benefit Great Lakes coastal wetlands studies, biological and hydrological monitoring programs, multimedia pollution studies, emergency response planning, and regional water quantity and quality management. Program manager: Roger Gauthier, gauthier@glc.org

Environmental Quality

The Environmental Quality Program supports efforts to restore beneficial uses in Great Lakes Areas of Concern (AOCs) and other degraded areas; strengthen environmental monitoring programs; improve management of coastal wetlands; and protect high-quality areas. Program staff employ cutting-edge information technologies to advance project goals, and leverage and coordinate the resources and expertise of public agencies and other stakeholders to achieve a healthy and sustainable Great Lakes ecosystem. Program manager: Matt Doss, mdoss@glc.org

Regional Coordination

The Regional Coordination Program carries out the Commission's mandate for regional advocacy as embodied in its enabling legislation, the Great Lakes Basin Compact. This includes building consensus among members; forming coalitions with regional, national and international partners; and presenting recommendations to regional and national leadership. Program staff have considerable experience in shaping legislation, analyzing policy and bringing critical regional issues to the attention of elected officials and other decisionmakers. Program manager: Jon MacDonagh-Dumler, jonmacd@glc.org

Resource Management

The Resource Management Program promotes the sustainable use, management and protection of the natural resources of the Great Lakes-St. Lawrence system through a variety of projects and regional services. Major focus areas include invasive species, water resources management and soil erosion and sedimentation. Program efforts are aimed at identifying regional priorities, developing policy, conducting and coordinating research, and sharing information on a broad range of initiatives, in collaboration with scores of project partners throughout the public and private sectors. Program manager: Tom Crane, tcrane@glc.org

Transportation and Sustainable Development

The Transportation and Sustainable Development Program focuses on economic activity in the Great Lakes region and its relationship to the environment. Primary areas of interest are maritime transportation, recreational boating, and land use and conservation, all pursued under the guiding principles of sustainable development. Program staff have extensive experience in Great Lakes policy development and maritime issues, and wide-ranging contacts with the region's maritime, policy and natural resource communities. Program manager: Dave Knight, dknight@glc.org; associate program manager: Victoria Pebbles, vpebbles@glc.org

Major Endeavors

The Great Lakes Commission undertakes a wide range of activities in pursuing its vision of a prosperous economy, healthy environment and a high quality of life for residents of the Great Lakes-St. Lawrence region. Though many of these may seem unrelated at first glance, all focus on promoting the health and sustainable use of the region's water and natural resources. Some of the Commission's major areas of endeavor are described below as a broad overview of its work; a more detailed list of projects follows on pages 14-15.

Advocacy

Among the Commission's principal roles is to serve as an advocate for the region, identifying and recommending policies, laws and regulations related to the use and conservation of the water resources of the Great Lakes basin. One of the Commission's most visible activities in this area is co-sponsoring, along with the Northeast-Midwest Institute, the annual Great Lakes Day in Washington, which brings together members of Congress, regional leaders, stakeholders and others to address matters of Great Lakes policy. The Commission also produces, on behalf of its member states, an annual compilation of regional legislative and appropriations priorities for presentation to Congress; regularly communicates with members of Congress through letters, congressional briefings and submitting testimony to committees; and participates in conferences, strategy sessions, briefings and similar events with other Great Lakes interests to discuss and build consensus on policy issues.

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Aquatic Invasive Species

The Great Lakes Commission provides operational support for the Great Lakes Panel on Aquatic Nuisance Species, established by Congress to advance regional coordination on aquatic invasive species (AIS) prevention and control. Commission staff worked closely with the Panel in developing an outreach strategy document; a full-color educational brochure for release in 2006; a priority list of invasive species for further research; and a set of draft guidelines to formalize Panel operations. In addition, Commission staff are collaborating with state Sea Grant programs to assist Great Lakes states in developing and implementing AIS management plans through a series of workshops.

www.glc.org / ans
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GLIN and Regional Data Exchange (RDX)

The Commission provides broad-based information services to the region through the online Great Lakes Information Network (GLIN), which continued to expand and serve new audiences in 2005. GLIN served as a key regional data exchange portal for the Great Lakes Regional Collaboration, connecting thousands of stakeholders on a daily basis. Via GLIN, the Commission continues to lead regional efforts to design and maintain Internet-based GIS applications, bringing together data and information from various sources into a cohesive, easily accessible format for use by researchers, policymakers and stakeholders. The Commission has also organized biennial conferences and periodic workshops to promote regional data exchange across the Great Lakes - St. Lawrence River basin.

www.great-lakes.net
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Great Lakes Observing System

The Great Lakes Observing System (GLOS) is being developed to integrate and provide critical real-time and historical data for multiple users, including resource managers, researchers, homeland security interests, the commercial shipping industry and the recreational boating community. GLOS is a regional node of NOAA's national Integrated Ocean Observing System (IOOS) initiative. Establishment of the GLOS Regional Association is being led by a steering committee in collaboration with more than 300 potential users of the system. GLOS will be established as a nonprofit organization in 2006, with the election of an inaugural board of directors. Outreach and education planning is also underway in collaboration with a newly funded Center for Ocean Sciences Education Excellence (COSEE Great Lakes).

www.glos.us
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Land Use

The loss of greenfields and open spaces to sprawl while older urban areas decay and are abandoned is not only wasteful, but also has negative economic, social and environmental consequences. With an underlying theme of linking urban revitalization and open space protection, the Commission's Land Use Policy Roundtable Series was established to support state efforts to develop sustainable land use strategies and encourage a regional approach to land use. Three roundtables, tailored to meet individual state needs, were held in 2005 in Ohio, Wisconsin and Pennsylvania, with others to follow. The U.S. EPA-funded series grew out of a 2001 Commission report, which outlined a suite of 32 regional strategies to promote sustainable land use.

Maritime

Support of an economically viable and environmentally responsible marine transportation system has been a priority for the Great Lakes Commission since its creation in 1955. In 2005, the Commission continued its work to identify and promote the environmental advantages of the marine transportation mode through modal shift research. Other efforts focused on the safety and reliability of the Great Lakes-St. Lawrence Seaway system through infrastructure maintenance and improvement, such as the Soo Lock replacement project and the Great Lakes Dredging Team; enhanced navigation aids, such as the Great Lakes Observing System; and assessing the technical needs of ports and harbors through a new partnership with the NOAA Coastal Services Center. The Commission also neared completion of a first-ever study identifying the economic benefits of recreational boating, and initiated efforts to work with a number of partners in "branding" and marketing Great Lakes coastal tourism.

Monitoring

The Great Lakes Commission engages in a variety of activities to coordinate monitoring efforts and consolidate environmental data collected across the Great Lakes basin. Major activities in 2005 included the Great Lakes Monitoring Inventory and Gap Analysis, a comprehensive report on more than 600 monitoring programs; undertaking management of the Michigan Clean Water Corps, a state program utilizing the efforts of volunteer water quality monitoring groups; and managing the Great Lakes Air Deposition (GLAD) program, which sponsors research on atmospheric sources of toxic substances. The Commission also compiles the Great Lakes Air Toxic Emissions Inventory and provides staff support for the Great Lakes Coastal Wetlands Consortium, which is coordinating the binational development of a long-term monitoring program for Great Lakes coastal wetlands, and the Lake Michigan Monitoring Coordination Council.

Soil Erosion and Sediment Control

The Great Lakes Basin Program for Soil Erosion and Sediment Control works to benefit water quality by reducing soil erosion and sedimentation through grants, information and education efforts, and providing professional assistance to state and local partners. Now in its 16th year, the program awarded a total of 39 new grants in 2005, totaling almost \$2.2 million, for local sediment and erosion control projects and education programs. Funding is provided by the U.S. Department of Agriculture Natural Resources Conservation Service. Other activities included publication of the *Keeping It On the Land* newsletter and initiating the "Building Awareness" campaign using a variety of media tools to raise public awareness of the damages caused by erosion and sedimentation.

www.glc.org/landuse

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2005 Projects

The following is a summary of projects the Great Lakes Commission took part in during 2005, either in a leading or a supporting role. Nearly all Commission projects are conducted in collaboration with other partners and funders, but space limitations prevent them all from being listed here. The abbreviations below are used to indicate the range of participation in each project; a full list of funders is on page 19.

Partners and funders:

F = Federal

S = State

L = Local

P = Provincial

C = Canadian federal

N/p = Nongovernmental/private

U = University

“ANS Update:” Produce newsletter covering the activities of the Great Lakes Panel on Aquatic Nuisance Species (ANS), state and federal programmatic updates, and emerging regional ANS issues. www.glc.org/ans/ansupdate (F, S, P, C)

Areas of Concern (AOCs): Assist federal, state and local authorities in coordinating a regional approach to Great Lakes AOC restoration, including convening technical workshops and maintaining web-based information resources. www.glc.org/rap/resources (F, S, L)

GLIN Daily News: Produce online roundup of Great Lakes news items from regional media, distributed each weekday to an email subscriber list. Dozens of Great Lakes organizations are involved through a sponsorship campaign and regional press room. www.glin.net/news (F, S, L, P, C, N/p, U)

GLIN Hydrology Partnership: Posting current lake conditions data on GLIN, including water levels, beach monitoring updates, boating safety and security advisories, and more. www.glin.net/conditions (F, S, P, C, U)

Great Lakes Air Deposition Program: Support state efforts to identify and reduce atmospheric sources of toxic substances to the waters of the Great Lakes region through grant-funded research projects. www.glc.org/glad (F, S, P, U)

“Great Lakes Aquatic Invasions” Brochure: Update the 1998 *Biological Invasions* brochure, with guidance from the Great Lakes Panel on Aquatic Nuisance Species, for distribution throughout the basin and nationally. (F, S, P, C, N/p, U)

Great Lakes Basin Program for Soil Erosion and Sediment Control: Administer federally funded program to benefit water quality by reducing soil erosion and sedimentation through grants, information and education, and professional assistance to state and local partners. www.glc.org/basin (F, S, L, N/p)

Great Lakes Coastal Tourism: Develop a “branding” strategy for Great Lakes coastal tourism, including promotion of the Great Lakes Circle Tour, among other efforts. www.glin.net/tourism/circletour (F, S, N/p)

Great Lakes Coastal Wetlands Consortium: Coordinate the work of two dozen U.S. and Canadian science and policy experts developing a long-term monitoring program for Great Lakes coastal wetlands. www.glc.org/wetlands (F, S, P, C, N/p, U)

Great Lakes Dredging Team: Provide staff support for a partnership of federal and state agencies created to assure that Great Lakes dredging operations are conducted in a timely, cost-effective and environmentally sound manner. www.glc.org/dredging (F, S, L, N/p)

Great Lakes Information Network (GLIN): Operate web-based information service providing a broad range of Great Lakes news and information related to the environment, economy, maps and GIS, tourism, education, and more. www.glin.net (F, S, L, P, C, N/p, U)

Great Lakes Monitoring Inventory: Collect a detailed geographic database of binational monitoring programs and develop a gap analysis report. www.glc.org/monitoring/greatlakes (F, S, P, C, N/p)

Great Lakes Observing System: Manage the development of the Great Lakes portion of the Integrated Ocean Observing System (IOOS), which provides critical real-time and historical data on lake conditions for multiple users. www.glos.us (F, S, P, C, U)

Great Lakes Panel on Aquatic Nuisance Species: Provide organizational and logistical support for panel of experts established by Congress to advance regional efforts to prevent and control aquatic invasive species. www.glc.org/ans/panel.html (F, S, L, P, C, N/p, U)

“Great Lakes Program to Ensure Environmental and Economic Prosperity:” Produce annual summary of federal legislative and appropriations priorities to address Great Lakes needs, which is submitted to Congress on behalf of the Commission’s member states. www.glc.org/restore (F, S, N/p)

Great Lakes Regional Collaboration (GLRC): Provide communications support for the GLRC, including web site design and maintenance, database development, and hosting of discussion forums and email lists. www.glrc.us (F, S)

Great Lakes Tributary Modeling Program: Support the U.S. Army Corps of Engineers’ efforts to develop science-based predictive tools and sediment transport models designed to enable state and local resource agencies to quantify the effects of land use and development activities upon soil erosion and sedimentation. www.glc.org/tributary (F, S, L, N/p, U)

Inland Sensitivity Atlas: Produce digital maps detailing major pipelines and other transportation features, potential spill sources, water intakes and sensitive natural areas for use in responding to and preparing for hazardous spills and other emergencies. www.glc.org/spills (F)

Lake Erie Habitat Map Project: Collaborate with binational partners to classify and map Lake Erie basin habitat boundaries through a pilot initiative. (F, S, P, C, N/p)

Lake Michigan Monitoring Coordination Council (LMMCC): Work with monitoring agencies and organizations in the Lake Michigan basin to develop coordinated monitoring protocols and collaborative efforts. (F, S, L, N/p, U)

Lake Michigan Tributary Monitoring: Coordinate state and federal agencies in monitoring pollutants in Lake Michigan tributaries in order to update loading estimates from the LMMCC's Lake Michigan Mass Balance Project. www.glc.org/monitoring/lakemich (F, S, U)

Lake Ontario St. Lawrence River Study: Produce information management tools for use in large-scale study of Lake Ontario and the St. Lawrence River and adjacent ecosystems. <http://mds.glc.org/loslrs> (F, S, L, P, C)

Land Use Roundtable Series: Support ongoing series of state roundtables designed to encourage sustainable land use policies in the region. www.glc.org/landuse (F, S, L, N/p, U)

Marsh Monitoring in Areas of Concern: Coordinate and enhance marsh monitoring in U.S. Areas of Concern and helping establish indicators to measure progress of fish and wildlife restoration efforts. (F, N/p)

Michigan Clean Water Corps (MiCorps): Serve as ongoing coordinator of volunteer stream and lake monitoring programs for the state of Michigan, along with several state, university and nongovernmental partners. www.micorps.net (S, N/p, U)

Michigan Statewide Public Advisory Council (SPAC): Provide technical guidance, communications and staff support to a statewide coalition of community-based advisory councils that advance the restoration of beneficial uses in the AOCs. www.glc.org/spac (S, N/p)

Modal Shift Study: Update 1993 Commission report on the safety, energy and environmental implications of shifting from land-based to maritime modes of transportation. (N/p)

Recreational Boating Study: Conduct a comprehensive analysis of the total economic impact of recreational boating to the eight Great Lakes states. (F, U)



Regional Data Exchange: Organize workshop series and biennial conference to promote data exchange standards and collaboration in the Great Lakes region. www.rdx.glc.org (F, S, P, C, U)

Regional Needs Assessment: Examine regional needs in the areas of ports and navigation, coastal community development, and the integration and distribution of related data. (F, S, L, P, N/p, U)

Regional Toxic Air Emissions Inventory: Assemble periodic inventories of releases of toxic substances to the region's air, using data supplied by the Great Lakes states and Ontario. www.glc.org/air (F, S, P)

“Restructuring Marine Transportation: A Global Overview of Sustainable Development:” Produce English translation of recent report sponsored by the Québec Transport Ministry. (P)

Soo Lock Replacement Project: Serve as nonfederal sponsor and agent for the eight Great Lakes states in apportioning and managing the nonfederal cost share for a second large lock on the St. Marys River. www.glc.org/soo (F, S)

State AIS Management Plan Workshops: Collaborate with state Sea Grant programs to assist the states in advancing the development and implementation of state AIS management plans. (F, S, L, U)

Submerged Lands Management: Compile survey results on state policies and programs for submerged lands management and application of the public trust doctrine. (S)

The Education And Curriculum Homesite (TEACH): Redesign educational web site to include new fishery education resources, a Teachers' Corner, reviews of teaching materials, sample lesson plans and a discussion forum. www.teach.glin.net (F, S, U)