

Great Lakes Program to Ensure Environmental and Economic Prosperity

Presented to the 109th Congress, first session: March 2005

Restore the Greatness.... of North America's freshwater seas!



Our priorities for the 109th Congress:

- Restore to environmental health the Areas of Concern identified by the International Joint Commission as needing remediation
- Stop the introduction and spread of non-native aquatic invasive species
- Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem
- Control pollution from diffuse sources into water, land and air
- Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands
- Continue to reduce the introduction of persistent bioaccumulative toxics (PBTs) into the Great Lakes ecosystem
- Ensure the sustainable use of our water resources while confirming that the states retain authority over water use and diversions of Great Lakes waters
- Standardize and enhance the methods by which information is collected, recorded and shared within the region
- Adopt sustainable use practices that can protect environmental resources and may enhance the recreational and commercial value of our Great Lakes

ven into the very fabric of our society, and have a pervasive impact on our lives.

Past generations, sadly, have neither fully understood nor respected these treasures. A legacy of misuse and abuse has compromised their "greatness." Today, chemical and biological contaminants limit our ability to eat the fish we catch, prevent us from swimming at our public beaches, and threaten the health and diversity of our fish and wildlife. The state of the resource, coupled with aging infrastructure, also limits our ability to derive social, cultural and economic benefits from water-based recreation, commercial navigation and many other water-dependent activities that collectively shape the character of our great region.

To be sure, progress has been made. No longer do we see rivers "catching on fire" or lakes declared "dead or dying." Thanks to congressional leadership and a strong partnership with the Great Lakes states, success stories can be told. Still, problems remain and new threats confront us. Progress has been slow, sporadic and piecemeal, lacking the comprehensive focus needed for the largest system of fresh surface water on the face of the Earth.

The Issue

The Great Lakes, otherwise known as North America's freshwater seas, are regional, national and international treasures linked to the environmental health, economic well-being and quality of life of tens of millions of residents. They are wo-



The Opportunity

Our freshwater seas are finally beginning to receive the recognition and attention they deserve. Consider, for example, the following developments in just the last two years: U.S. Government Accountability Office reports documented unmet needs in intergovernmental coordination and monitoring; large-scale ecosystem restoration legislation introduced in Congress; harmonization of restoration

The Great Lakes Regional Collaboration of “national significance” will produce a strategy for Great Lakes restoration, protection and sustainable use.

goals among our governors, mayors and other regional leaders; and two presidential executive orders – one establishing a national Committee on Ocean Policy (to include our freshwater seas)

and another establishing a Great Lakes Regional Collaboration of “national significance” that will produce a strategy for Great Lakes restoration, protection and sustainable use.

In brief, Great Lakes policymakers and opinion leaders are working collaboratively around a shared set of goals. They are crafting a common vision, identifying unmet needs, and developing the institutional arrangements needed to implement a comprehensive and coordinated strategy for the protection, restoration and sustainable use of this great resource.

Congress now has an unprecedented opportunity to build on this momentum and invest in priority actions that will lead to a cleaner environment and prosperous economy for the Great Lakes.

The Action

The Great Lakes Commission, acting on behalf of its eight member states, urges Congress to embrace the nine goals presented within as a blueprint for legislative and appropriations action in the 109th Congress. These goals, accompanied by “high priority near-term actions,” were coordinated with the Council of Great Lakes Governors and subsequently endorsed by our membership. They are accompanied by additional, critically important actions supported by the Great Lakes Commission. These include federal programs that have been authorized, yet inadequately (or never) funded, as well as important “new start” initiatives.

The time to act is now! Emerging consensus on regional priorities, coupled with a wealth of existing plans and the work of the ongoing Great Lakes Regional Collaboration, suggests a solid foundation for bold legislative and appropriations initiatives in the first session of the 109th Congress. The greatest system of fresh water on the face of the Earth deserves no less!

About the Great Lakes Commission ...and the Great Lakes Program

Celebrating its 50th anniversary in 2005, the Great Lakes Commission is a public agency dedicated to promoting sound policy on matters of resource management, environmental protection, transportation and sustainable development. Founded in state and federal law, its members include delegations from the eight Great Lakes states, with associate membership status (non-voting) for Ontario and Québec. The Commission addresses its mission through information-sharing, policy research and development, and advocacy activities. *The Great Lakes Program to Ensure Environmental and Economic Prosperity* is an annual compilation of the Commission’s legislative and appropriations priorities. These are consistent with and build upon the many federal authorities, regional agreements and strategic plans associated with the Great Lakes-St. Lawrence community. They also recognize the binational status of the resource and the need to honor U.S. commitments under the Canada - United States Great Lakes Water Quality Agreement and associated binational programs. As such, these priorities offer a solid foundation on which to build!



Our Priorities...

A summary of near-term actions

Our nine priorities for Congress, each accompanied by recommended near-term actions, are presented below. See the following pages for more detail, including benefits statements and additional actions recommended by the Great Lakes Commission.

Restore to environmental health the Areas of Concern identified by the International Joint Commission as needing remediation

- Appropriate \$5.7 million to distribute to the Great Lakes states via program grants for Remedial Action Plans (RAPs) and Lakewide Management Plans (LaMPs) and appropriate \$15.9 million for other Great Lakes-and Areas of Concern (AOCs)-related activities, consistent with the President's request.

Stop the introduction and spread of non-native aquatic invasive species

- Appropriate \$5.5 million to upgrade the existing Chicago Sanitary and Ship Canal Asian carp demonstration barrier, and \$1.0 million annually to operate and maintain both the existing permanent barrier and the demonstration barrier at full federal cost.
- Reauthorize and fully fund the National Aquatic Invasive Species Act.

Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem

- Reauthorize and appropriate \$1.35 billion annually for the Clean Water State Revolving Loan Fund to update sewerage systems nationally, including combined sewer overflows, with an appropriate amount for the Great Lakes states.

Control pollution from diffuse sources into water, land and air

- Restore to previous years' funding levels of approximately \$60 million for the Great Lakes states under the Clean Water Act Section 319 program to address nonpoint source pollution.

Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands

- Reauthorize the Coastal Zone Management Act and appropriate \$90.0 million nationally for the Coastal Zone Management Program, with \$15.0 million for the Great Lakes region.

Continue to reduce the introduction of persistent bioaccumulative toxics (PBTs) into the Great Lakes ecosystem

- Appropriate \$50.0 million under the Great Lakes Legacy Act to address remediation, consistent with the President's request. In addition, appropriate \$4.0 million under the Great Lakes Legacy Act to address technology, research and public involvement.

Ensure the sustainable use of our water resources while confirming that the states retain authority over water use and diversions of Great Lakes waters

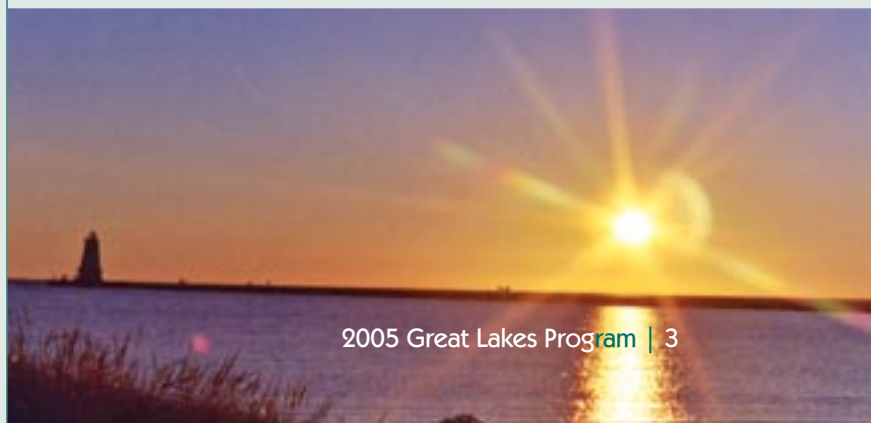
- Appropriate \$2.6 million annually for the U.S. Geological Survey National Assessment of Water Availability and Use-Great Lakes Pilot Project, to collect and apply surface and ground water information for Great Lakes Charter Annex 2001 decision making.
- Appropriate \$2.0 million annually for the U.S. Geological Survey to produce three-dimensional geologic models of glacial materials needed for the National Assessment of Water Availability and Use-Great Lakes Pilot Project to support Great Lakes Charter Annex 2001 decision making.

Standardize and enhance the methods by which information is collected, recorded and shared within the region

- Authorize the Coastal and Ocean Observation Systems Act – consistent with the President's Executive Order of Dec. 17, 2004, and the recommendations of the U.S. Commission on Ocean Policy – which includes development, implementation and maintenance of an integrated observing system for the Great Lakes, its coastal regions and interconnecting waterways.

Adopt sustainable use practices that can protect environmental resources and may enhance the recreational and commercial value of our Great Lakes

- Reauthorize the Beaches Environmental Assessment and Coastal Beach Health Act and appropriate \$30.0 million nationally, with an appropriate amount for the Great Lakes states. Allow state grant administration costs to be used in determining match requirements.



Our Priorities...

The details and additional recommended actions

As described below, addressing our priorities will yield environmental health, economic prosperity and quality of life benefits for the Great Lakes region and its residents. Also presented are additional priority actions complementing those on page 3.

Restore to environmental health the Areas of Concern identified by the International Joint Commission as needing remediation

Restore and maintain beneficial uses in each of the 31 U.S. and binational Areas of Concern by cleaning up these toxic hot spots identified by the International Joint Commission, with a special emphasis on remediation of contaminated sediment.

Remediation of contaminated sediment through environmental dredging and other technologies is a key step toward restoration.

Contaminated sediments in the Great Lakes and are at least partially responsible for 11 of the 14 beneficial use impairments

Benefits

Contaminated sediments are a persistent source of

identified in the Canada-U.S. Great Lakes Water Quality Agreement. The Agreement directs Canada and the United States, working with state and provincial governments, to develop Remedial Action Plans to restore the Great Lakes ecosystem. Remediation of contaminated sediment through environmental dredging and other technologies is a key step toward restoration.

Additional **priority actions** are as follows:

Environmental dredging: Provide for AOC cleanup:

- Authorize acceptance (under Section 312 of the Water Resources Development Act [WRDA] of 1990) of in-kind services and funds from nonfederal entities, if the state supports 35 percent cost share, as satisfying the polluter-pay principle
- \$5.0 million in FY2006 to the U.S. Army Corps of Engineers (USACE), increasing to \$10.0 million in FY 2007

Dredging operations and environmental research:

Support Great Lakes Dredging Team operations addressing coordination of dredging windows and upland beneficial use of sediments:

- \$6.5 million to the USACE, with no less than \$1.5 million for Great Lakes programs

Remedial Action Plan support: Develop and demonstrate promising sediment remediation technologies, with a focus on beneficial reuse of dredged materials to provide for AOC cleanup and delisting:

- Amend Section 401 of WRDA 1990 to authorize provision of technical assistance to states for delisting AOCs, including planning and design of sediment cleanup, monitoring, total maximum daily load evaluations, and watershed studies through 2010
- \$4.0 million in FY2006 and 2007 to the USACE

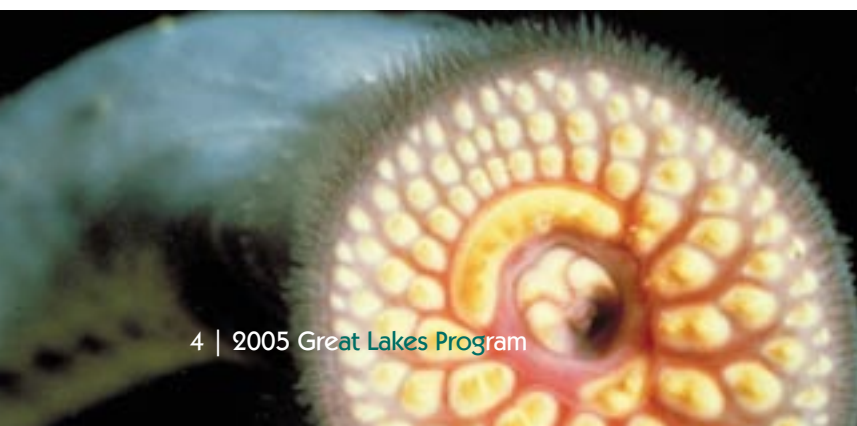
Natural resource damage assessments: Ensure that polluters responsible for sediment contamination pay their fair share:

- \$5.0 million annually to the U.S. Fish and Wildlife Service (USFWS) for Great Lakes projects

Waterfront restoration and remediation:

Authorize the USACE to provide for redevelopment and rehabilitation of waterfront brownfields and "portfields:"

- Amend WRDA legislation



Stop the introduction and spread of non-native aquatic invasive species

Restore and protect the ecological and economic health of the Great Lakes by shutting the door on invasive species and stopping the spread of established ones.

Benefits

Invasive species are a growing and potentially devastating threat to the economy and environment of the Great Lakes region. They are insidious forms of biological pollution that prey upon and displace native animals and plants, reduce biodiversity, limit water use activities, and damage infrastructure. Preventing new infestations and limiting the spread of established ones will help restore and protect the environment and associated water-dependent economic activity.

Additional **priority actions** are as follows:

National Aquatic Nuisance Species Program research and education:

- \$2.8 million to the National Sea Grant Program (under section 205 of the National Sea Grant College Program Act), with an equitable share for the Great Lakes state Sea Grant programs

NOAA National Center for Research on Aquatic Invasive Species:

- \$3.0 million annually to the Great Lakes Environmental Research Laboratory (GLERL)-National Oceanic and Atmospheric Administration (NOAA)

Best available technology on commercial vessels:

Retrofit commercial vessels to eliminate/reduce infestations and spread of invasive species with particular emphasis on vessels with “no ballast on board:”

- Authorize a commercial vessel technology program
- Appropriate \$25.0 million annually to the U.S. Coast Guard (USCG)

Sea lamprey control program under the Convention on Great Lakes Fisheries between the U.S. and Canada, 1954:

- \$17.4 million in FY2006 to the Great Lakes Fishery Commission to protect a multibillion-dollar binational sport fishery by controlling the sea lamprey and other invasive species, and managing a sustainable, economically productive fishery

Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem

Prevent adverse effects on human health by identifying and controlling sources of pollutants in the Great Lakes.

Benefits

Despite extensive efforts in all Great Lakes states and municipalities to improve sewage treatment, beach closings remain a vexing problem. Monitoring and early detection is essential to ensure that our citizens' health is adequately protected. Addressing the combined sewer overflow problem will also protect human health and eliminate a major source of pollution associated with many of our older cities. These and related measures will advance the health of our most precious resource: our citizens!

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Additional **priority actions** are as follows:

Center of Excellence for Great Lakes and Human Health (CEGLHH/NOAA):

Under the Oceans and Human Health Initiative, this center is developing ecological forecasting tools through interdisciplinary research on the Great Lakes climate, weather, circulation patterns, hydrology, land use and biology, thereby helping to minimize risks to human health primarily from poor water quality, beach closures and harmful algal blooms:

- \$60.0 million in FY2006 to the Oceans and Human Health Initiative, with half of the funds to support the three NOAA Centers of Excellence, including the CEGLHH at GLERL, and the balance to support competitive external grants, distinguished scholars and



traineeship programs, internal research and education, and outreach for public and user communities

Science of Freshwater Inland Seas (SOFIS): Conduct basic research on the Great Lakes including circulation dynamics, regional climatology, near shore processes, sediment transport, nutrient loadings and carbon balance:

- \$10.0 million annually to the National Science Foundation (NSF) for a competitive grants program

Control pollution from diffuse sources into water, land and air

Improve Great Lakes water quality and economic productivity by controlling diffuse (nonpoint) sources of pollution from water, land and air pathways.

Benefits

Responsible use of our water, land and air resources is vitally important to the environmental quality and economic productivity of the Great Lakes region. Yet, non-

Irresponsible resource-use practices are particularly damaging because they simultaneously degrade the environment and compromise the economic use and value of the resource.

point sources are the leading pollution pathway to the Great Lakes, and include urban and agricultural runoff and air deposition. Hundreds of millions of tons of topsoil erode into the lakes each year and millions of tons of airborne contaminants are deposited as well. Irresponsible resource-use

practices are particularly damaging because they simultaneously degrade the environment and compromise the economic use and value of the resource.

Additional **priority actions** are as follows:

Great Lakes Basin Program for Soil Erosion and Sediment Control: Improve water quality and land use through competitive grants to the Great Lakes states for local demonstration and technical assistance projects:

- \$5.0 million annually to the U.S. Department of Agriculture (USDA)-Natural Resources Conservation Service (NRCS) for distribution by the Great Lakes Commission

Land treatment watersheds: Provide federal technical expertise and cost-share assistance for partnerships between NRCS and a local government sponsor for planning, design and implementation of nonpoint source pollution reduction practices on a watershed basis:

- \$10.0 million annually to the NRCS for new project starts in the Great Lakes basin

Great Lakes Sediment Management Program:

Reduce nonpoint source pollution through assistance to state and local agencies in the planning and prioritization of conservation measures in Great Lakes tributaries, and by developing sediment transport models through 2010:

- Amend Section 516(e) of WRDA 1996 to authorize extending this program
- \$2.0 million in FY2006 and 2007 to the USACE

National Streamflow Information Program:

Support sediment-transport modeling through research into new methods to measure sediment discharge from tributaries into the Great Lakes and by reactivating sediment monitoring stations, which will continue long-term sediment records at critical sites:

- \$14.4 million in FY2006 nationally with \$0.50 million to the Great Lakes Program of the U.S. Geological Survey (USGS)

Conservation Reserve Program and Conservation Reserve Enhancement Program:

Take highly erodible land out of agricultural production, apply Best Management Practices, and assist states in targeting priority areas for conservation:

- Enhanced funding to the USDA, with an equitable share for the Great Lakes region

Farm and Ranch Lands Protection Program: Provide funding for conservation easements whereby farmers voluntarily convey development rights to local authorities or land trusts:

- \$100.0 million in FY2006 to USDA, with an equitable share for the Great Lakes region

Protect Great Lakes waters from road runoff: Improve Great Lakes water quality by allowing federal transportation funds to be used for stormwater management and related nonpoint pollution control activities:

- Amend Section 1108 of Transportation Equity Act for the 21st Century to authorize use of federal funds for this purpose



Enhance fish and wildlife by restoring and protecting habitats and coastal wetlands

Restore and conserve 100,000 acres of wetlands and critical coastal habitat while protecting existing, high-quality fish and wildlife habitat in the Great Lakes basin.

Benefits

Wetlands and coastal marshes help store and cycle nutrients, prevent erosion, and provide an economically important recreational value to the region. Because they are so important to the economy and ecology of the region, programs have been initiated to prevent further habitat losses. For example, the Great Lakes Coastal Restoration Program has focused largely on habitat protection and restoration. In addition, the U.S. Fish and Wildlife Service's Upper and Lower Great Lakes field stations provide critical research, monitoring and restoration of lake trout and endangered species, such as the lake sturgeon and piping plover. These efforts help maintain what has become a world class sport fishery, yielding significant economic benefits throughout the Great Lakes region.

Additional **priority actions** are as follows:

Great Lakes Fish and Wildlife Restoration Act:

Enhance cost-shared grants to states and tribes for fish and wildlife restoration through operational support of USFWS and acceptance of both in-kind services and funds from nonfederal entities:

- \$8.0 million annually to USFWS

Restoration of Great Lakes coastal resources: Provide cost-shared grants and technical assistance for locally led coastal projects that benefit fish and wildlife species and associated habitats:

- \$20.0 million annually to USFWS nationwide, with no less than \$5.0 million for Great Lakes programs

Great Lakes Fishery and Ecosystem Restoration Program: Restore critical aquatic habitat through projects under Section 506 of WRDA 2000:

- \$3.0 million in FY2006 and 2007 to the USACE in consultation with the Great Lakes Fishery Commission
- Amend subsection 506(f) to allow in-kind contributions for the nonfederal share for planning and construction, and eliminate the cost-share requirement for post-construction monitoring

Coastal Remote Sensing Program: Conduct repetitive surveys of coastal habitat change including high resolution topography/bathymetry and other remote imaging based upon Great Lakes Coastal Wetlands Consortium protocols:

- \$5.0 million annually to the U.S. Environmental Protection Agency (USEPA) Office of Research and De-

velopment, in cooperation with the USFWS, NOAA and USACE

Technical Assistance to States and Tribes: Provide cost-shared support to promote comprehensive planning for natural resource and water management projects:

- \$10.0 million nationally to the USACE under Section 22 (Planning Assistance to States) WRDA 1974, with no less than \$2.0 million for Great Lakes states
- \$6.0 million nationally to the USACE under Section 203 (Tribal Partnership Program) WRDA 2000, with no less than \$1.0 million for Great Lakes Tribes

Wetlands Reserve Program: Purchase long-term easements that return agricultural lands to wetlands essential for Great Lakes hydrology and critical habitat:

- Increase acreage to 250,000 acres per year nationally under USDA-NRCS

North American Wetlands Conservation Act:

Stimulate public/private partnerships to protect, restore and manage wetland habitat:

- \$45.0 million annually to USFWS nationally, with an equitable share for the Great Lakes region

Continue to reduce the introduction of persistent bioaccumulative toxics (PBTs) into the Great Lakes ecosystem

Minimize or eliminate the continued introduction of PBTs, in the interest of improving ecosystem quality and human health.

Benefits

Resource managers are adapting their programs and plans to the special problems created by PBTs, a special class of toxic substances

Unacceptable concentrations of these chemicals in water and fish tissue pose risks for humans.



that are chemically persistent in the environment and also bioaccumulate in the tissue of various biota, such as fish and the birds that eat them. Some of these programs aim

to further reduce PBTs entering the Great Lakes from various sources, such as air deposition, industrial and municipal discharges, contaminated sediments, and runoff from farms, urban areas and waste sites. Since the passage of federal legislation, such as the Clean Water Act

and Clean Air Act, the levels of most toxic substances have trended down, but problems remain. Unacceptable concentrations of these chemicals in water and fish tissue pose risks for humans. Adequate funding and aggressive implementation of programs are needed to achieve full beneficial uses of the Great Lakes.

Additional **priority actions** are as follows:

Great Waters Program: Support the Great Lakes Air Deposition (GLAD) Program for research on air toxic emissions, transport, deposition and fate, and mercury mass balance modeling:

- Increase funding nationally to the USEPA under Section 103 of the 1990 Clean Air Act, and ensure that no less than \$4.0 million is made available annually to the GLAD Program

Integrated Atmospheric Deposition Network:

Expand temporal and spatial monitoring of persistent bioaccumulative toxics in support of Annex 15 of the Great Lakes Water Quality Agreement:

- \$1.5 million annually to the USEPA

Ensure the sustainable use of our water resources while confirming that the states retain authority over water use and diversions of Great Lakes waters

Ensure the sustainable use and management of Great Lakes water resources to protect environmental quality and provide for water-based economic activity while retaining state authority over water use and diversions in the Great Lakes states.

Benefits

Continued reductions in federally funded monitoring, data gathering and analysis programs have severely compromised our ability to assess the status of our water resources, track trends in usage, and develop regionwide programs to manage the use and withdrawal of water on a sustainable basis. The federal government, in partnership with the Great Lakes states, must ensure regional prosperity through programs that strengthen our ability to manage water resources for environmentally sound, sustainable use. Enhanced federal support will complement and improve state and provincial efforts to collect and apply scientific information regarding surface and ground water under Annex 2001 of the Great Lakes Charter of 1985.

Additional **priority actions** are as follows:

Water use database: Authorize a federal/state partnership and state grants program for forecasting, monitoring, mapping and trend analysis of water withdrawals and use consistent with Annex 2001 of the 1985 Great Lakes Charter:

- \$1.5 million annually to the USGS, with funding provided to the states and regional organizations to develop necessary program infrastructure

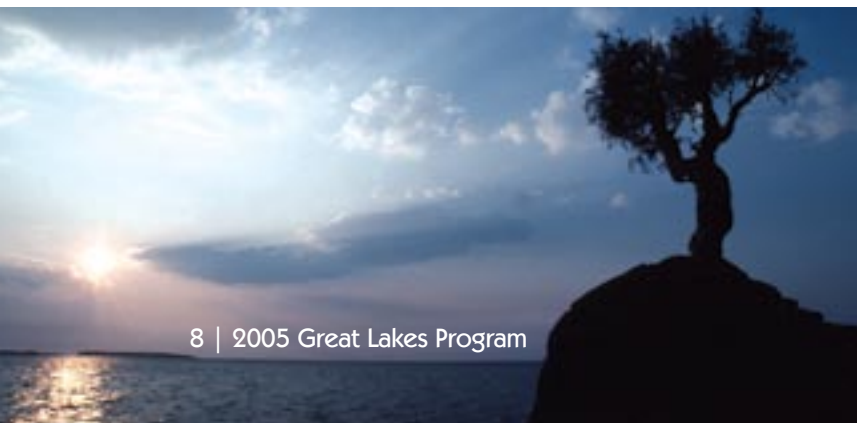
Regional land use: Provide for high resolution land-use mapping and future trend assessments over the Great Lakes drainage basin to support water demand forecasting:

- \$1.5 million annually to the USGS to coordinate the production of uniform products by the eight Great Lakes states

Cumulative impact analysis: Conduct investigations on the effects of cumulative water withdrawals on system-wide hydrologic budgets and on habitats and organisms:

- \$5.0 million annually to the USGS to expand work of the Great Lakes Science Center
- \$4.0 million annually to the USACE under the Surveillance of Northern Boundary Waters appropriation

Continued reductions in monitoring, data gathering and analysis programs have severely compromised our ability to assess the status of our water resources...



Northern boundary waters: Provide critical flow measurements of connecting channels, storm damage reporting, and other data needed by the International Joint Commission (IJC) Boards of Control to make informed decisions impacting lake levels and flows:

- \$5.5 million annually to the USACE

International water studies: Maintain state-of-the-art models of hydrological conditions in the Great Lakes to support water management decisions:

- \$0.6 million annually to the USACE

Decision support tools: Generate an Internet-based information system incorporating all monitoring and historic data on the hydrology, hydraulics and biology of the region to support water withdrawal decisions:

- \$2.0 million annually to the USACE

Upper Great Lakes Study: Initiate Phase I of the 2002 Upper Great Lakes Plan of Study to investigate a review of Lake Superior outflow regulations with emphasis on regulation impacts on current system users and their relationships with water management under the Great Lakes Charter:

- \$10.0 million to the IJC

Tributary and groundwater monitoring programs:

- USEPA Clean Water Program: Improve federal/state coordination of surface water monitoring programs under Section 106 of the Clean Water Act and generate compatible tributary data across lake basins:
 - \$195.0 million in FY2006 nationally to the USEPA, with no less than \$44.0 million for the Great Lakes states
- Enhance understanding of groundwater flow to the Great Lakes and estimate influence of flow on Lake Erie coastal marshes:
 - \$0.25 million annually to the USGS

Standardize and enhance the methods by which information is collected, recorded and shared within the region

Meet domestic and international Great Lakes commitments by standardizing and enhancing data management within the region, and strengthening our decision support capabilities through adequate funding for, and the efficient and targeted operation of, federally funded management and research agencies.

Benefits

Indicators of water quality and related environmental factors in the Great Lakes must be developed, and a network established to monitor them regularly. This information is critical to agreements and plans formulated to safeguard the sustainable use of our natural resources. Strengthening our decision support capability will ensure that federal laws, policies and programs, as well as international commitments, are carried out efficiently and effectively. Benefits will accrue to the environment and economy, including numerous multibillion-dollar-a-year industries in the region such as sport fishing, recreational boating and water-based tourism. The Great Lakes Commission recognizes that the federally funded Great Lakes research community must be fully responsive to the resource management and related public policy priorities of its member states.

Strengthening our decision support capability will ensure that federal laws, policies and programs, as well as international commitments, are carried out efficiently and effectively.

Additional **priority actions** are as follows:

GLOS implementation: Implement the Great Lakes Observing System (GLOS), without cost-sharing provisions:

- \$2.5 million to the Coastal Assessment Program of the National Ocean Service (NOS)-NOAA

Great Lakes water quality indicators and monitoring: Authorize and fully appropriate the Great Lakes Water Quality Indicators and Monitoring Act which directs the Great Lakes National Program Office (USEPA) to develop, implement, monitor, and report on a series of indicators of water quality and related environmental factors in the Great Lakes.

Great Lakes Water Level Observation Network:

Maintain and upgrade Great Lakes water level gauges that



serve commercial vessel operators, research managers and scientists with real-time data:

- \$2.0 million annually to the NOS

Great Lakes PORTS: Maintain, upgrade and expand coastal and interconnecting waterway observations to improve maritime safety and economic efficiency under the Physical Oceanographic Real-Time System (PORTS) of NOAA:

- \$3.0 million annually to the Center for Operational Oceanographic Products and Services-NOAA

Great Lakes research buoys: Provide for the design, installation and operation of prototype scientific buoys on each of the Great Lakes to collect key measurements on meteorology, water chemistry and biological activity:

- \$3.0 million annually to the NOAA-GLERL

Great Lakes waterborne transportation is the foundation upon which the U.S. and Canadian regional and national manufacturing economies were built...

Co-location of public Great Lakes research and policy institutions: Provide for planning, design and site development, followed by a construction request, of a facility to house multiple institutions presently

located in separate facilities in Ann Arbor, Mich., which would enhance collaboration and efficiency, and significantly reduce operating costs:

- \$3.0 million through NOAA or another relevant agency

Federally funded research, planning and management agencies:

- National Oceanic and Atmospheric Administration -Great Lakes Environmental Research Laboratory: Provide scientific research and forecasts on hydrologic components and coastal processes to improve management decisions on important Great Lakes issues:
 - \$15.0 million annually
- U.S. Geological Survey-Great Lakes Science Center: Provide critical information and scientific research support to Great Lakes natural resource managers on

fishes, fisheries, invasive species, restoration ecology, invertebrates, plants and factors that significantly influence aquatic and terrestrial ecosystem structure, function, and condition:

- \$15.0 million annually

- U.S. Environmental Protection Agency-Great Lakes National Program Office and research facilities: Improve the environmental health and economic vitality of the resource through RAP and LaMP initiatives, among others:

- \$1.0 million for required maintenance and upgrades to the *Lake Guardian*, GLNPO's primary research and monitoring vessel, to extend the vessel's service life by up to 25 years

- \$18.0 million annually to USEPA research facilities in Duluth, Minn., and Grosse Ile, Mich

- International Joint Commission: Fulfill treaty and reference obligations with Canada with an emphasis on support to the Great Lakes Regional Office to assist in implementing the Great Lakes Water Quality Agreement:

- \$10.0 million annually

National Sea Grant College Program: Promote and support scientific research and outreach programs on topics ranging from aquatic nuisance species to sustainable coastal development:

- \$100.0 million annually, with an equitable share for Great Lakes state programs

Adopt sustainable use practices that can protect environmental resources and may enhance the recreational and commercial value of our Great Lakes

Maximize the recreational and commercial value of Great Lakes waterways and other coastal areas by implementing programs and practices for sustainable use, protecting environmental resources, and maintaining and constructing critical infrastructure.

Benefits

Our waterways and other coastal areas offer tremendous recreational opportunities and associated economic benefits. Recreational boating is a multibillion-dollar-a-year industry, and the Great Lakes states are home to one of every three registered boats in the United States. The viability of these and other water-based recreational activities and facilities is highly dependent on federal/state partnerships.



Great Lakes waterborne transportation is the foundation upon which the U.S. and Canadian regional and national manufacturing economies were built, with annual commerce averaging about 180 million tons in recent years. Studies show that waterborne transportation on the Great Lakes is preferable to rail and over-the-road options from pollutant emissions, fuel efficiency and safety standpoints. However, the bulk of Great Lakes navigation infrastructure was constructed 50-100 years ago and needs serious commitment by the U.S. and Canadian governments to a maintenance strategy for the next 50 years.

Additional **priority actions** are as follows:

John Glenn Great Lakes Basin Program: Update the USACE strategic plan developed under Section 455(a) of WRDA 1999 to direct the Corps to provide technical assistance to the Great Lakes Regional Collaboration, including the development of detailed estimates of costs and impacts for recommended measures:

- \$0.20 million in FY2006 to the USACE

Great Lakes Center for Ocean Science Education Excellence (GL-COSEE): Implement a Great Lakes regional center under the national COSEE program to foster collaborations and communication between researchers and educators:

- \$0.50 million annually to the NSF

Replacement lock at Sault Ste. Marie, Michigan:

Initiate construction to ensure the safety and reliability of waterborne transportation:

- \$14.0 million to the USACE

Maintenance and repairs to Great Lakes harbors and channels: Reverse the trend of diminishing resources for Great Lakes ports to restore channels, harbors and navigation infrastructure:

- \$150.0 million annually to the USACE, with an equitable share to the Great Lakes states

Recreational navigation projects:

- Ensure maintenance of Great Lakes shallow-draft harbors and channels, without endangering resources for dredging commercial deep draft harbors:
 - Amend WRDA legislation
- Study the condition of channels and navigation infrastructure at Great Lakes harbors used primarily for recreation to determine impacts of their abandonment by the federal government:
 - \$0.5 million in FY 2006 and \$1.0 million in FY 2007 to the USACE

Great Lakes-St. Lawrence System Review Study:

Continue a binational study (under Section 456 of WRDA 1999) of navigation system potential, focusing on baseline environmental and economic conditions, and engineering features:

- \$3.3 million in FY2006 to the USACE

Waterfront restoration and remediation: Provide a new authority to the USACE that supports state and local governments with redevelopment and rehabilitation of waterfront area brownfields:

- Amend WRDA legislation

Dredged material management: Expand authorities (beyond aquatic habitat) to the USACE to allow the types of beneficial uses of dredged material to include: transportation, brownfield restoration, landfill cover, shoreline restoration projects and other public works projects, and provide for the development and implementation of regional sediment management plans:

- Amend Section 204(a) of WRDA 1992

Maritime homeland security: Enhance security capability at Great Lakes small boat stations and marine safety offices while sustaining search and rescue and marine safety capabilities:

- \$34.0 million annually to the USCG nationwide, with an equitable share for Great Lakes states

Port and facility security: Upgrade security at Great Lakes ports and marine terminals through equitable allotment of port security grant funding provided by the Transportation Security Administration.

Thank you!

Since the first iteration of the Great Lakes Program was released in 2001, many of its recommendations have been embraced by the Congress. We thank the Great Lakes Congressional Delegation, along with Commission partners, for advancing our Program goals and priority actions.



Great Lakes Commission

Our Vision

Our vision is a Great Lakes-St. Lawrence system that offers a prosperous economy, a healthy environment and a high quality of life for its citizens by applying sustainable development principles in the use, management and protection of water, land and other natural resources.

Our Mission

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



For additional information, contact:

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Great Lakes Commission

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The *2005 Great Lakes Program to Ensure Environmental and Economic Prosperity* is also online at www.glc.org/restore



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