GLOS

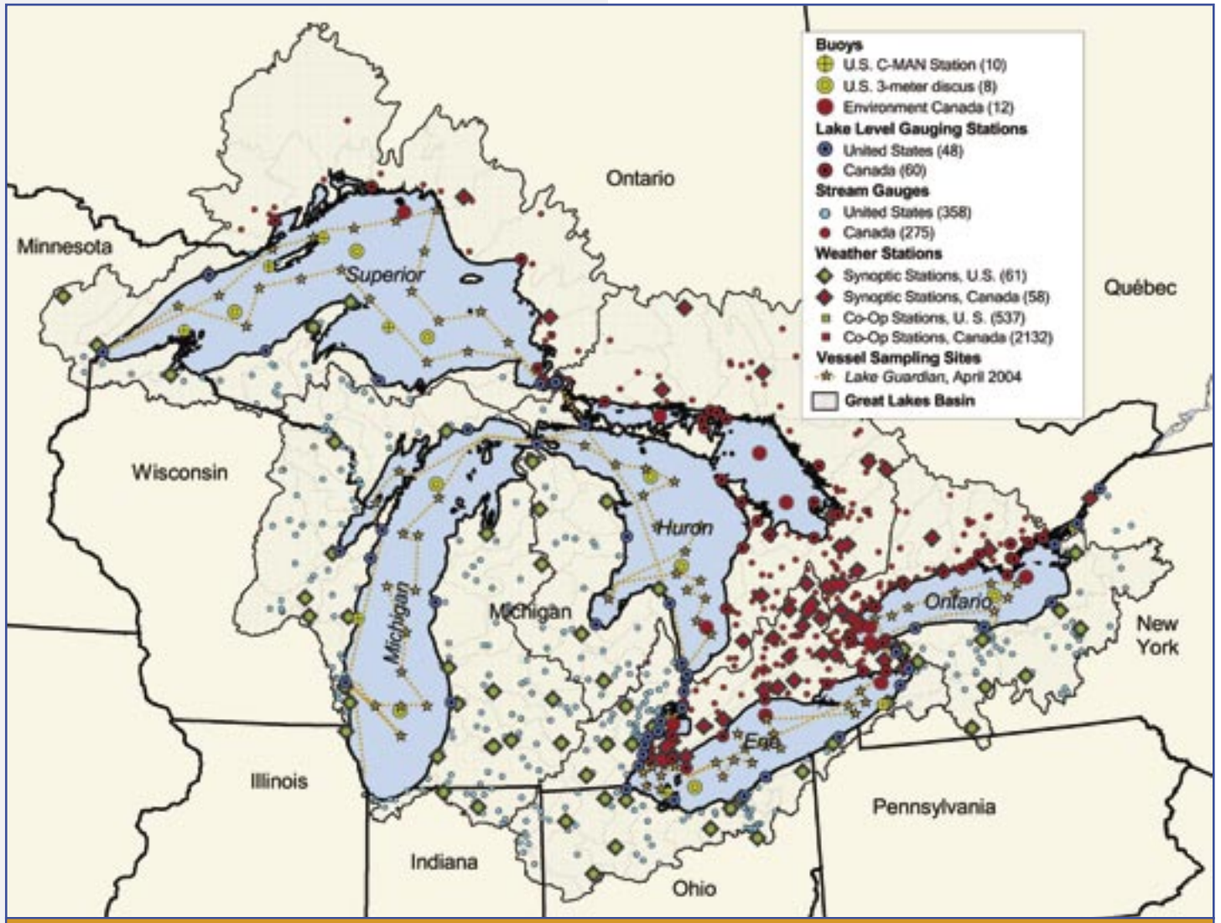
Great Lakes Observing System

About GLOS – the Great Lakes node of the national Integrated Ocean Observing System

The Great Lakes Observing System (GLOS) will provide access to information on the climate, meteorology, chemistry, geology, biology and human activities that affect the Great Lakes, their interconnecting waterways and the St. Lawrence River. Data, information and knowledge about the system will be drawn from numerous sources, consolidated, and then made available to meet the needs of many communities, including resource managers, researchers, educators, commercial shippers, recreational boaters, beach users and homeland security interests.

GLOS is a cooperative activity of many U.S. federal and state agencies as well as academic institutions, non-governmental organizations and commercial interests across the region. The development of GLOS will continue to engage Canadian federal agencies and provincial ministries.

GLOS is a regional node of the U.S. national Integrated Ocean Observing System (IOOS) initiative. The Great Lakes Commission is coordinating initial development of GLOS, with funding provided by the Coastal Services Center of the National Oceanic and Atmospheric Administration (NOAA).



Lake Monitoring Resources

History

The binational Great Lakes – St. Lawrence System has a long history of programs for the collection, analysis, storage and archiving of physical, chemical, biological and cultural data. However, these programs are managed by a variety of agencies, organizations and academic institutions with limited coordination.

In many cases, monitoring of detailed observations — including water chemistry, biologic activity, hydrologic parameters and changes caused by human activities — has lagged behind the needs of the more than 34 million people living in the region. Targeted expansion and improved coordination of monitoring programs will allow for more integrated ecological forecasting on a regional scale, greatly benefiting this valuable freshwater resource and the people who live, work and play here.

Recent advancements in environmental data gathering, Internet technologies, computer networks and distributed database tools can allow extensive integration to occur. GLOS partners will use these tools to enhance efforts specific to individual agencies, to the regional observing system and to the Integrated Ocean Observing System as a whole.

GLOS Components

- Buoy systems
- Coastal and riverine sensors
- Satellite observations
- Field measurements
- Ship observations
- Airborne observations
- Computer models
- Ecological forecasts
- Education
- Atmospheric measurements
- Information integration

Timeline

A Steering Committee and Regional Interest Group have been formed to provide input for a business plan for GLOS. This business plan will outline current user needs, available information resources, the operational characteristics of an integrated regional system, funding mechanisms to sustain data collection, and the governance structure of a regional association to lead the program into the future. The business plan will be released for comment in fall 2004. It is anticipated that the regional association will be chartered in 2005 along with adoption of partnership agreements between agencies, organizations and institutions.

If interested in obtaining further information on the GLOS initiative, send an email to: *owner-glos-rig@great-lakes.net*

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