
The Integrated Ocean Observing System (IOOS) and the Great Lakes

**RDX 2004 Conference
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Global Earth Observing System of Systems

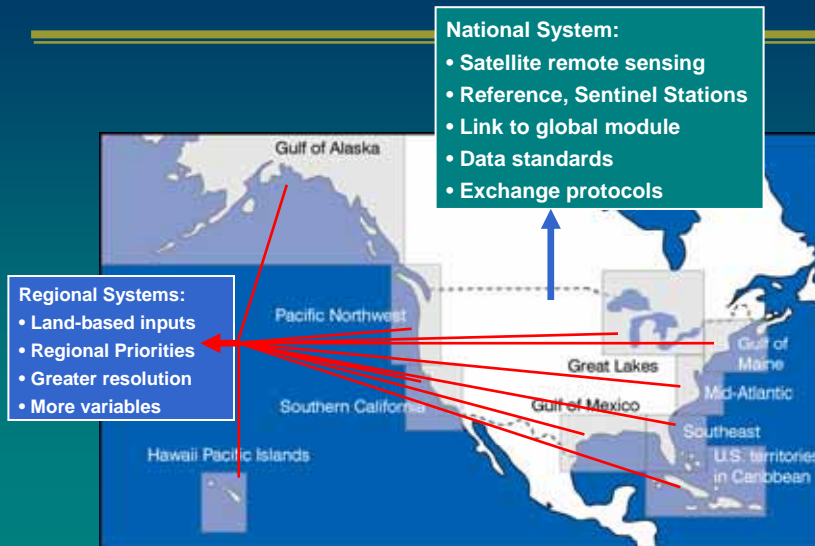
- **United Nations Environment Programme**
- **International Council for Science**
- **World Meteorologic Organization**
- **Commission on Oceans Policy**
- **Integrated Oceans Observing System (IOOS)**

Integrated Ocean Observing System

Seven objectives of IOOS:

- Facilitate safe and efficient marine operations
- Mitigate effects of natural hazards
- Improve prediction of climate variability
- Reduce public health risks
- Improve national security
- Sustain and restore living resources
- Preserve and restore healthy ecosystems

Integrated Oceans Observing Systems



Great Lakes Observing System

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- Convene
- Define Use
- Determine d costs
- Draft GLO
- Initiate R
- Integrate with national data management strategy
- Initiate strategic integration pilot projects

GLOS



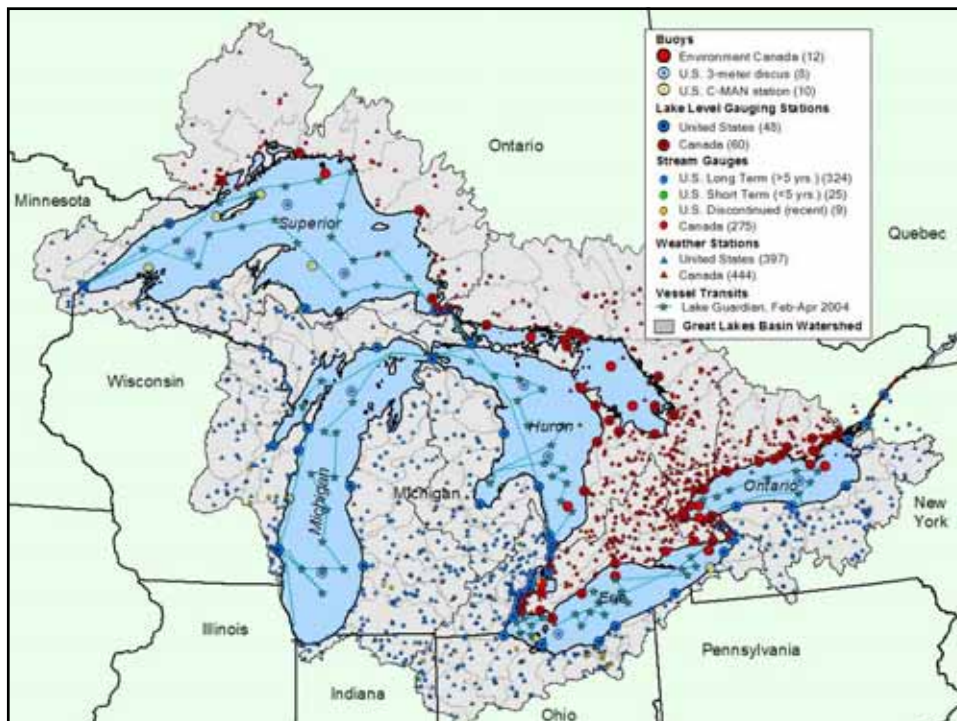
Great Lakes Observing System

Needs Assessment:

- Water Supply and Outflow Control
- Hydropower Production
- Water Supply and Water Treatment
- Municipal and Industrial Use
- Shoreline Protection and Use
- Commercial Navigation
- Commercial and Sports Fishing
- Recreational Boaters
- Fisheries Research
- Emergency Responders
- Air Deposition Research
- National Security
- Restoration Management



Meteorologic, Hydrologic, Hydraulic, Chemical and Biological Data



Great Lakes Observing System

Subsystems:

- Open Lakes Observations
- Science Vessels
- Interconnecting Waterway Observations
- Nearshore Observations
- Atmospheric Monitoring
- Remote Sensing
- Hydrodynamic Modeling
- Ecological Forecasting
- Mass Balance Modeling
- Information Integration
- Education
- Governance



Great Lakes Observing System

Data Management and Communications:

- Inception Phase
- Operational Phase
- Staff
- Data Collection
- Metadata Compliancy
- Data Integration
- Data Storage
- Data Certification
- Data Dissemination



Business Plan Development

Focused on:

- Governance for the regional association
- Coordination of binational programs
- Coordination of large, distributed data holdings
- Development of integrated archives
- Promotion of data discovery, evaluation and access
- Definition of value-added products
- Development of interfaces to national data strategy
- Improvements for public access to information

