

**MINUTES OF 41ST MEETING  
COUNCIL OF GREAT LAKES RESEARCH MANAGERS**

**IJC GREAT LAKES REGIONAL OFFICE  
WINDSOR, ONTARIO  
MARCH 30-31, 2005**

<b>Canadian Members Present</b>	
Dr. Harvey Shear (Canadian Co-chair)	Environment Canada, Downsview, ON
Dr. William Meades	Forest Ecology, Natural Resources Canada, Canadian Forest Service
Dr. Dale Henry	Drinking Water, Wastewater and Watershed Standards, Ontario Ministry of Environment, Toronto
Mr. Al Sippel (representing Cheryl Lewis)	Ontario Ministry of Natural Resources
<b>U.S. Members Present</b>	
Dr. Stephen Brandt (U.S. Co-chair)	Great Lakes Environmental Research Lab, NOAA, Ann Arbor, MI
Mr. Paul Horvatin	U.S. EPA-GLNPO, Chicago, IL
Dr. Joseph DePinto	Limno-Tech, Inc., Ann Arbor, MI
Mr. James Nicholas	USGS Water Resources Division
<b>Binational Members Present</b>	
Dr. Patricia Chow-Fraser	International Association for Great Lakes Research
<b>Secretary</b>	
Mr. Mark Burrows	IJC Great Lakes Regional Office, Windsor, ON.
<b>IJC Section Liaisons</b>	
Mr. John Nevin	IJC Section Office, Washington, DC

**Global Earth Observing System of Systems (GEOSS)**

Environment Canada assembled a proposal for Canada's participation in the Global Earth Observation System of Systems (GEOSS) in anticipation of funding in the 2005 budget. The proposal encompassed the Great Lakes, St. Lawrence River and the Gulf of St. Lawrence with funding for 5 or 6 federal departments in the amount of \$75M over 3 years. The memorandum to cabinet went forward and was approved in principle; however no funding was included in the 2005 budget. This could mean that any activities undertaken to implement recommendations in the proposal would need to be funded by reprogramming existing resources. The Great Lakes program did receive \$40M (\$8M/yr 5 yrs), the same amount it received in the prior budget. Members thought that IJC participation in GEO might be helpful and that, because participants were usually the heads of agencies, the IJC Co-chairs would be the appropriate level of representation for IJC delegates.

The Integrated Ocean Observing System (IOOS) IOOS/ and Great Lakes Observing System (GLOS), actions of the Great Lakes Commission (GLC) and NOAA Coastal Services Division were briefly reviewed. Activity on the business plan development had progressed to the implementation phase where agency buy-in and establishment of a Regional Association (RA) were the primary goals. The GLC received funding at a reduced level for the purpose of starting up the RA as a nonprofit organization. Some major challenges were noted, including governance issues and the need

to generate long term funding to sustain the RA. There are varying proposals for long term funding intended to sustain a RA once it is established. Initially major users would include groups such as beach managers, charter boat operators and commercial shipping. Coordination of data flow from existing sources is definitely a user driven process at this point.

The Council Secretary's April 12<sup>th</sup> briefing of the Water Quality Board regarding observing systems was discussed and it was recommended that the presentation focus on the links between proposed systems. A great deal of confusion exists due to the large number of proposed systems/sub-systems and it was thought that efforts to explain all the acronyms and how everything fits together would be very worthwhile. A "road map" to reduce the confusion factor was recommended. It was noted that the ocean/coastal system proposals also have terrestrial counterparts, a fact that compounds the confusion. The National Ocean Partnership Program (NOPP) was recommended as a good source of information.

Attention was drawn to a December 17, 2004 Executive Order issued to institute recommendations of the U.S. Commission on Ocean Policy redefining how ocean and coastal agencies collaborate, beginning at the cabinet level. Note: The complete EO can be found at: <http://www.whitehouse.gov/news/releases/2004/12/print/20041217-5.html>

The EO states that it shall be the policy of the United States to:

- a. coordinate the activities of executive departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental, economic, and security interests of present and future generations of Americans; and
- b. facilitate, as appropriate, coordination and consultation regarding ocean-related matters among Federal, State, tribal, local governments, the private sector, foreign governments, and international organizations.

Attention was directed to the activities of the International Lake Ontario - St. Lawrence River Study board (See: <http://www.losl.org/twg/environment-e.html>) and the research done on wetlands flora and fauna. The impact of water level regulation on natural processes on Lake Ontario and in the St. Lawrence River was found to be a concern and led to the development of more sensitive computer models showing habitat quality and sustainability year-to -year and on a long-term basis. The impacts of alternate plans can be modeled to evaluate how changes affect species and species at risk. The concept of a shared vision modeling framework was discussed. A final study board report is anticipated around April 22-23 and should contain a very useful collection of wetlands research references. The study looked at reconstructing the last 100 years of basin supply data and also looked at much longer time periods. An "Adaptive Management" model with ecosystem indicators was also considered. Technical reports should be made available at [www.losl.org](http://www.losl.org). Modeling efforts/parameters to be considered in wetlands modeling were discussed. The length of time that a wetland elevation has been flooded or dry seems to be a big factor in the evolution of the ecosystem.

Where all of the data collected in support of the Lake Ontario - St. Lawrence River study would be housed was unknown at the time of the meeting and the need to make such data readily available was discussed. The most vocal segment of users are the riparian land owners. The need for relative weighting of user interests and the interpretation of results by the study board was discussed.

### **Great Lakes Regional Collaboration**

A brief presentation on the May 18, 2004 President's Executive Order (EO) establishing a Great Lakes Interagency Task Force and Promotion of a Regional Collaboration of National Significance for the Great Lakes was given by Dr. Brandt. (ref: <http://www.whitehouse.gov/news/releases/2004/05/20040518-3.html>). The Executive Order defines the Great Lakes as:

- (a) "Great Lakes" means Lake Ontario, Lake Erie, Lake Huron (including Lake Saint Clair), Lake Michigan, and Lake Superior, and the connecting channels (Saint Marys River, Saint Clair River, Detroit River, Niagara River, and Saint Lawrence River to the Canadian Border).
- (b) "Great Lakes system" means all the streams, rivers, lakes, and other bodies of water within the drainage basin of the Great Lakes.

Two sections of the EO of particular interest to the Council of Great Lakes Research Managers are:

- "(vii) Ensure coordinated Federal scientific and other research associated with the Great Lakes system.
- (viii) Ensure coordinated government development and implementation of the Great Lakes portion of the Global Earth Observation System of Systems."

A PowerPoint presentation regarding the Presidents Executive Order for the Great Lakes is linked to these minutes.

The following schematic diagram of the collaborative effort was discussed:



The Great Lakes Regional Collaboration process may be extended to Ocean and Coastal efforts in the future. The effort has resulted in a very specific protocol for decision-making. The priorities of the Council of Great Lakes Governors have been adopted by the regional collaboration. Research needs are to be addressed by each strategy team. The team that will address observing systems is the "Indicators and Information Strategy Team", co-chaired by Roger Gauthier (GLC) and Steve Brandt (NOAA-GLERL/CGLRM Co-Chair). The strategy team activity directly overlaps with the research coordination work of the Council, since a key element to the CGLRM's strategy will be how agencies work together. Harvey Shear (EC/CGLRM Co-Chair) is involved in the effort as an official Canadian observer.

The work product of each strategy team is a 4 to 5 page summary document with supporting material. Work schedule:

May 2005 - Progress Report to President  
July 7-8, 2005 - Draft completed  
Fall 2005 - Public comment period  
December 12, 2005 - Final report to Executive Committee

Each team is designating action responsibilities and a good example of how this effort has already paid off was the rapid response made by an array of agencies to the discovery of a northern snakehead fish in Lake Michigan. One primary goal is an organizations structure for the Great Lakes and a summit will be held to put the organization "on the table." This structure will facilitate the coordinated expenditure of resources from Congress earmarked for Great Lakes restoration. After the report is delivered to the Executive Committee on December 12, 2005 the strategy teams may be retained for the purpose of assisting with implementation activities.

Strong leadership provided by the EPA Administrator is central to the success of the regional collaboration.

### **Environment Canada Reorganization**

A briefing on the reorganization of Environment Canada was presented by Dr. Harvey Shear. The new Minister of the Environment has a vision of the environment as a factor that provides a competitive edge for Canada and something that will not be "marginalized". The agency is reorganizing in a manner that will enable it to deliver on national ecosystem priorities. Agency staff will be reassigned to national project teams affecting the regional structure currently in place; however for the time being, the same people will remain involved in Great Lakes regional issues.

Weather and environmental services will be addressed as one of the national projects and that project will incorporate activities carried out in support of the State of the Lakes Ecosystem Conference (SOLEC). The regional project will integrate monitoring activities and address Canada's participation in a Global Earth Observing System of Systems (GEOSS). One should expect to see some redistribution of resources from different regions of Canada and some actions falling into place by April 2006.

### **Research Strategy - revisions to draft plan**

The Council members discussed past activities on this priority work and the potential impact on the review and possible revision of the Great Lakes Water Quality Agreement. The general consensus was that the draft strategy document reflected most of the discussion from the April 2004 workshop.

Ideas and features of the research strategy targeted at informed decision making were discussed in detail. It was decided that possible roles for the Council would be to provide a forum and facilitate the transfer of information on potential research grants and requests for proposals. Goals would include providing prompt/early notification of opportunities for research grants and informed decision making.

#### **Research Strategy Features:**

- ❖ Recommends role for coordinating body such as the Council of Great Lakes Research Managers
- ❖ Clearinghouse for large scale research Requests For Proposals (RFPs)
- ❖ Provides forum for informing managers about research questions that need to be addressed by RFPs
- ❖ Provides forum for scientists to learn about upcoming agency RFPs
- ❖ Provides "Roadmap" for binational input to large scale projects

#### **Future Plans for the Research Strategy would include:**

- ❖ Explore collaboration with Great Lakes Fisheries Commission
- ❖ Consolidate CGLRM input & revise by May 1st
- ❖ Address Process in 2003-2005 Priorities Report
- ❖ Host workshop to address coordination of International Field Year of Lake Erie 2007 field season and discuss strategy
- ❖ Make Plans to host topical and regional workshops to inform research funding process

Sharing with those involved with the Great Lakes Regional Collaboration

The Council Secretary was directed to send out applicable sections of the report to each workshop presenter to verify the accuracy and to set a firm deadline for gathering comments and completing the document. Specific comments noted on the draft report will be routed to all members along with the next revision for their use in reviewing the final draft.

### Plans for the Research Prioritization Workshop

The Council briefly discussed the April 2004 proposal to host a research prioritization workshop to that would tie in with the research strategy work. The members decided to pursue the idea of hosting workshops to provide a forum for informing managers about research questions that need to be addressed by RFPs (a "thematic" workshop), and to provide a forum for scientists to learn about upcoming agency RFPs. Possibilities discussed included:

- Sharing a joint planning meeting with representatives of the Great Lakes Fisheries Commission,
- Sharing a "topical" workshop to refine and test the research strategy perhaps on botulism or some other topic jointly decided with the GLFC (possibly co-sponsored by IAGLR);
- Sharing a research coordination meeting focusing on Lake Erie in Jan/Feb 2006 prior to the 2007 field season.

It was decided that the Council should request funding to support these workshops in budget requests to the IJC.

### International Field Year of Lake Erie (IFYLE)

Dr. Brandt provided a briefing on the IFYLE research program - Key goals of the Lake Erie research program:

- Be integrative
- Be multidisciplinary (biological, chemical, & physical coupling)
- Result in a **product** (e.g., maps, scientific understanding, and/or forecasting tools/ability to benefit management agencies)
- Use scientific plans developed by 2004 Lake Erie Workshop and Lake Erie Millennium Workshops.

Major support will be provided by:

- NOAA
  - About \$3M (ship support, buoy systems, personnel, cash)
    - >15 Principal Investigators
- R/V Laurentian and R/V Cyclops to Lake Erie
- EPA
  - \$450K Cost Match for Ship Time (R/V Lake Guardian)
- National, NT, and Ohio Sea Grant
  - \$300K for university projects
  - Announcements of grants were made during the week of March 28-31<sup>st</sup>
    - University of Wisconsin-Milwaukee
    - University of Michigan
    - Michigan State
    - U. Akron
    - York University
    - Clarkson

- Stony Brook, NY
- Kent State, OH
- SUNY -

- Bowling Green
- Stanford

Environment Canada (NWRI)

- Met stations, Thermister Strings, Velocity Profilers, Transmissometers, CTDs
- R/V LIMNOS Deployment

Outside support for the project is being provided by:

Ohio Sea Grant

- \$30K to use their vessels (e.g., Explorer)

Lake Erie Committee agencies

Access to historical databases & some vessel support has been indicated from:

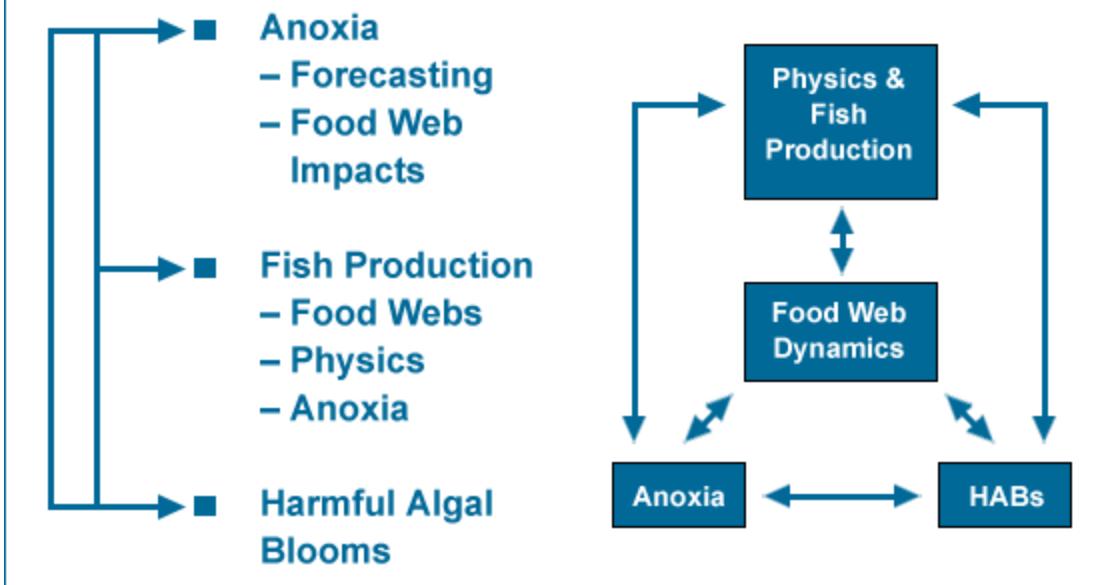
- Ohio Dept. of Natural Resources
- Pennsylvania Boat & Fish Commission
- Ontario Ministry of Natural Resources
- New York State Dept. of Environmental Conservation
- Michigan Dept. of Natural Resources

Lake Erie LAMP

USGS

- Access to vessels (Musky II, Bowfin) in exchange for collaboration
- Research assistance

## Primary Research Foci



End Products

Scientific understanding

- Derived from integration of field collections and modeling
  - e.g. Spatially-explicit bioenergetics modeling of walleye growth
  - Food web modeling
  - Network analysis

Valuable predictive tools

- 3-D hydrodynamic model to predict temp., sediments, DO & nutrients
- Refinement of remote sensing algorithms and hydrodynamics to predict harmful algal

blooms

Value to fisheries management

- 3-D hydrodynamics model to predict temperature, oxygen, & nutrient fields (identified as critical in 2004 Lake Erie Science workshop)
- Assessment of how hypoxia might influence fisheries production
- Better understanding of fish distributions, growth production

Timetable

February:	Continue to Develop Collaborations
March 15:	Identify Major University Partners & Fundings
April 11-12:	All P.I. Meeting to Finalize Plans
April - May:	Detailed Cruise Preparations
May - October:	Field Season
November:	All P.I. Meeting & Initial Plan for 2006- 2007

The Council members discussed how the development of the research strategy could be linked to and refined by this large scale project and how the initiative could be extended to other Lakes. The benefits of providing a sound communications plan to ensure that everyone is afforded an opportunity to take part in a new project were discussed and it was agreed to address that need in the research strategy. The use of agreed upon communications protocols and existing organizational structures such as the regional working group and the Millennium Network were seen as critical factors in the process. It was again stressed that the CGLRM could assist by becoming a widely recognized source of information about impending grants and providing a regular forum for this exchange of information.

**Findings & Follow-up Actions from Open Water Observation Technology Workshop**

The draft proceedings report from the November 30 to December 3, 2004 workshop held in Ann Arbor was discussed. The Secretary was directed to send out applicable sections of the report to each workshop presenter to verify the accuracy and to set a firm deadline for gathering comments and completing the document. In addition it was recommended that an "expanded" (4-5 page) summary document be written, a separate CGLRM work plan for future efforts and a final section added to the report with conclusions and recommendations.

It was decided that the Council needed to become more actively involved in the effort to gain buy-in from agencies and to resolve issues concerning governance and management of the GLOS regional association. A meeting with the GLC Program manager and staff was recommended and the Secretary was directed to contact Roger Gauthier to identify a workable time. Activities are to be coordinated with work being done on the Great Lakes Regional Collaboration, and the collaboration meeting April 27-29, in Traverse City was seen as a good opportunity to discuss future activities, and the possible involvement of representatives from the Great Lakes Fisheries Commission.

**Briefing on CGLRM Admin - Budget, Membership, Research Inventory and Science Vessel Coordination**

Canadian fiscal year 2004 expenditures were briefly reviewed and it was decided that the Council budget would require a substantial increase over the current levels to accommodate the annual workshops and increased administrative effort associated with a more active coordination role. Large scale workshops would require significant funding (approx \$30,000), although costs could be reduced by partnering with another event and getting matching funds from agencies. In addition, it was agreed that the Council should pursue additional membership from agencies such as the U.S. Fish and Wildlife Service, Michigan, EPA labs, Illinois Natural History Survey, and perhaps non-traditional agencies such as the Department of Agriculture. The need to improve representation of the upper lakes was noted. Members who were at or near the end of their terms of appointment all expressed a desire to remain on the Council and the Secretary was directed to process nominations to update the roster. In addition it was recommended that members who are having a problem participating be contacted to either identify alternate representatives or arrange participation by means of video-teleconferencing. Members were asked to suggest new members by providing contact information to

the Council Secretary.

### Next Teleconference/Meeting(s)

A teleconference or meeting will be scheduled with GLC Program Manager, Mr. Roger Gauthier some time during the following month after contacting him to see when he is available. A meeting will also be scheduled with the Great Lakes Fishery Commission representatives after contacting Chuck Kruger and Chris Goddard to check schedules. The next CGLRM meeting will be held at the Great Lakes National Program Office in Chicago October 4-5, 2005.

### Attachments

#### 1. Council Meeting Agenda

Attachment 1 to CGLRM Minutes of March 30-31<sup>st</sup>, 2005  
Rev. 3/30/2005

#### Agenda

#### The Council of Great Lakes Research Managers' 41<sup>st</sup> Meeting IJC GLRO - Windsor, ON March 30-31, 2005

- 1. GEOSS
- 2. Great Lakes Regional Collaboration
- 3. Environment Canada Reorganization
- 4. Research Strategy - revisions to draft plan
- 5. Plans for the Research Prioritization Workshop
- 6. New Business - future plans/priorities for the CGLRM
- 7. International Field Year of Lake Erie
  - 8. Status of report and views on how the research strategy should assist with the project organization
- 8. Findings & Follow-up Actions from Open Water Observation Technology Workshop
- 9. Briefing on CGLRM Admin - Budget, Membership, Research Inventory and Science Vessel Coordination

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