

**MINUTES OF 38TH MEETING  
COUNCIL OF GREAT LAKES  
RESEARCH MANAGERS**

**ANN ARBOR, MICHIGAN  
MARCH 4-5, 2003**

**Canadian Members Present**

Dr. Harvey Shear (Canadian Co-chair)	Environment Canada, Downsview, ON
Dr. Robert C. Andrews	University of Toronto, Toronto, ON
Dr. Alex Bielak	National Water Research Institute, Environment Canada, Burlington, ON
Dr. Jan J.H. Ciborowski	Great Lakes Institute for Environmental Research, University of Windsor, Windsor, ON
Dr. William Meades	Forest Ecology, Natural Resources Canada, Canadian Forest Service
Mr. Dale Henry	Drinking Water, Wastewater and Watershed Standards, Ontario Ministry of Environment
Mr. Dan Bondy	Natural Wildlife Research Center, Canadian Wildlife Service
Ms. Jacinthe Leclerc	Environment Conservation Branch, Environment Canada, Centre Saint-Laurent

**U.S. Members Present**

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
Dr. Tom Johnson	Large Lakes Observatory, University of Minnesota, Duluth, MI
Dr. Heraline Hicks (for C. DeRosa)	CDC/Agency for Toxic Substances & Disease Reg., Atlanta, GA
Dr. Leon Carl	U.S. Geological Survey, Great Lakes Science Center, Ann Arbor, MI
Mr. Jan Miller	U.S. Army Corps of Engineers, Great Lakes & Ohio River Division, Chicago, IL

**Observers and Invitees Present**

Mr. John Nevin	International Joint Commission, Washington, D.C.
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**Secretary**

Mr. Mark Burrows	IJC Great Lakes Regional Office, Windsor, ON.
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**Membership**

A discussion took place regarding nomination for CGLRM member representing the Great Lakes Research Consortium and other upcoming vacancies.

**Priorities Report**

Discussed report organization - The Priorities Report will be organized by priority rather than simply by board/council and will also provide room to report on other work by the boards and council.

Chapter 1, Mercury will be completed by the SAB and Air Board.

Chapter 2 Annex 2- Remedial Action Plans and Lakewide Management Plans, are being completed by the SAB and WQB with input from Council member Jan Miller who participated on the task force.

Chapter 3 will address urbanization and land use and includes input from Harvey Shear and Science Horizons contractor Cheryl Martin.

Chapter 4 will address climate change work and will include input from the WQB and Council. Copies of the draft white paper have been made available to the Council and WQB members and all were encouraged to comment. It was suggested that a reference be made to the recent Journal of Great Lakes Research issue on climate change. Cheryl Martin's work on ground water and climate change will be included with input from Jim Nicholas, who worked on the recommendations.

Chapter 5 will cover emerging issues and includes input from Joe DePinto on behalf of the Council. Research needs from the February Emerging Issues Conf. at Wingspread will be published as a separate manuscript and will be submitted for publication in the Journal of Great Lakes Research.

The Council Section of report (Chapter 8) will contain the scoping paper on microbial pollution along with reports on the research inventory and science vessel coordination.

### **Emerging Issues**

Discussed impressions from the emerging issues workshop - Steve Brandt provided a brief on what transpired at the workshop.

### **Microbial Pollution Scoping Paper**

Discussed draft papers provided by Will Robertson, Sheridan Haack and Jim Haynes. Members recommended combining the papers and suggested edits and additional material for report.

### **Future Priority Work Recommendations for the IJC**

#### **Research Strategy**

Discussed creation of a research strategy as a priority for the 2003-2005 cycle and suggested elements that could be included.

- ➊ The Council's strategy should address where they want to be in research for the Great Lakes at various terms, 3-5-7-10 years out - this approach has seen some success at SOLEC.  
Discussed how a 10 year plan could be developed and whether it could be framed in a "forecasting context. (i.e. Improve our abilities to forecast)
- ➋ Use the Ecosystem Approach as framework to build on to get a comprehensive strategy to integrate research throughout the Great Lakes basin.
- ➌ Recommend a research strategy as a priority to the Commissioners and the formulation of a long term research strategy as an IJC funded priority related to Annex 17 of the GLWQA.
- ➍ Discussed a work plan as an element of the strategy
- ➎ The Research Inventory should support the formulation of a Great Lakes research strategy.
- ➏ Strategy details need to be flushed out in workshops or in a study, but must be flexible to accommodate change
- ➐ Discussed role of the Council to provide leadership for coordination of a long term research plan for the Great Lakes.

Also discussed the Great Lakes Strategy, potential funding conflicts and sources of funding, willingness to allocate resources, and "zero sum gain" without coordination.

It was pointed out that the Lake Erie trophic study is a good model of what the strategy should try to accomplish.

Joe DePinto, Steve Brandt, Tom Johnson, Jan Miller & Harvey Shear all volunteered to work on subcommittee. (After this meeting, Jeff Reutter joined the subcommittee as well)

### **Advice on Review of GLWQA**

Discussed prospects of advice to Parties on review and rewriting GLWQA - Agreed that outside support to the parties regarding rewriting the GLWQA would help it move further than last time.

### **Science of Freshwater Inland Seas (SOFIS)**

Tom Johnson gave a presentation on the (SOFIS) Science of Freshwater Inland Seas Conference held in Duluth, Minnesota on July 14-16, 2002. He described how the academic side is moving ahead with a strategy on Large Lakes of the world.

Need Addressed: Large - systematic study of basic processes in large lakes.

Focus on NSF "needs of community".

Academic needs - Time series platforms

Need umbrella of a single program under NSF

NSF is driven by "furthering the frontiers of basic science" and not by fixing environment problems.

Discussed 3 legs of the "research stool"

- 🔥 Theory, Simulation and Experimentation and that simulation and observation were very important aspects to consider.
- 🔥 Example of carbon observation in Lake Superior and the basic research mandate of the NSF.
- 🔥 Recommendations and budget items in slide presentations and how to express the support of the CGLRM.

### **Great Lakes Observing System and IFYGL-2**

Steve Brandt gave a presentation on his vision of a Great Lakes observation system and a proposed Second International Field Year of the Great Lakes (IFYGL-2)

Ecosystem Framework

Suggested that the CGLRM take the lead on:

- 🔥 The Development an Integrated Great Lakes Observing System
- 🔥 The Coordination of a Grand-Scale, multi-agency ecosystem-level research effort on the Great Lakes IFYGL-2

Goals:

- 🔥 Collect long-term data sets for physical, biological, chemical, and meteorological parameters in the Great Lakes.
- 🔥 Develop versatile, portable Observatories
- 🔥 Deploy the Observatories in each of the Great Lakes
- 🔥 Develop partnerships with Universities/States to operate and maintain the Observatories
- 🔥 Common, core database
- 🔥 Real-Time Data Display for users

Universities could operate and maintain observation system in cooperation with the States.

Discussed an example where we are already experiencing lake temperatures that are far more than predicted, and the need to make ecological forecasts (i.e. algae blooms etc.) not just physical forecasts.

Discussion of possible locations, resources and times for workshops also occurred.

Jeff Ruetter, Steve Brandt, Paul Horvatin and Val Klump volunteered to be a steering committee for a 2003 workshop.

### **IFYGL - International Field Year for the Great Lakes**

The first IFYGL was in 1972-73 on Lake Ontario and approximately 500 scientific publications resulted from the effort. It was suggested that the CGLRM could spearhead an "IFYGL-2".

Members discussed time required for planning, required resources, involvement of the IJC and a potential location. Members noted that it took from 1966-72 to plan the first IFYGL and also required large-scale federal funding, seven ships and a multi-agency, binational effort.

Members discussed similar studies that were done on a regional scale: Green Bay Mass Balance Study, Lake Michigan Mass Balance Study and the Lake Erie Trophic Study.

Discussed how the Council could work with IAGLR and others as part of a steering committee, the possible need for a reference, and the need to do some historical research to see how IFYGL was carried out 30 years ago.

Discussed the scope of a proposed study centered on Lake Erie and whether it would include the entire basin ecosystem or just the lake and how the concept of IFYGL-2 fit in with the development of a research strategy.

### **IAGLR 2003 Conference**

Discussed proposal to fund student recorders to attend and summarize research needs at breakout sessions at IAGLR 2003 as was done in 2001.

IAGLR 2003 conference has 60 concurrent sessions for 2003. (60 sessions over two and a half days)

Discussed logistical problems, the task of pulling together and condensing/editing reports into a single document and option of hiring a contractor to pull the report together.

Discussed past efforts to document research needs.

Decided to get budget figures for further discussion (Note: project had to be cancelled in April 2003 due to lack of funds)

### **2003 Lake Erie Millennium Network - Third Biennial Conference**

The conference will address the land-water interface and changes in the near shore environment - discussed whether the CGLRM would want to sponsor a workshop session like we did in 2001.

The group noted that several Council members were already involved: Jeff Reutter, Joe DePinto, Steve Brandt, Harvey Shear, Paul Horvatin. The conference is to be held May 6-7, 2003 at the University of Windsor. Council decided not to sponsor a particular session and suggested that Jan Ciborowski approach the SAB and the WQB to see if they want to get involved.

### **Reinventing the CGLRM**

Jan Miller presented a summary of his discussion paper on reinventing the Council.

Points discussed:

- ❖ Terms of Reference
- ❖ Great Lakes limit
- ❖ Overlap with SAB
- ❖ Advocacy role through the IJC Commissioners
- ❖ Effective communications with resource managers
- ❖ Public's expectation's on science and research studies
- ❖ Level and declining funding
- ❖ Retirement and attrition
- ❖ Need to address full range of regional issues not limited by the Water Quality Agreement.
- ❖ Ability to work independently in advocacy planning and funding

The group discussed roles and responsibilities of the Council. Long-term research development was seen as a path that will provide a distinct role for the CGLRM. The group also discussed the "personal, professional capacity" role of members versus actually representing agencies and redirecting agency funds. The group also discussed the need to effectively communicate with resource managers and the public about the value of a research strategy and the need to pull BEC, policy makers, and NGO's, etc. to "the table" to get action.

Decisions/comments -

- ❖ Current CGLRM terms of reference are satisfactory
- ❖ Move forward to develop research agenda
  - ❖ There is a need for the IJC to support the plan in principle
  - ❖ Workshops should produce proposals that could be followed up for funding
  - ❖ Need to look at it from GLWQA perspective and not strictly from agency standpoint
  - ❖ Presentation should be made to the Binational Executive Committee
- ❖ Scoping and emerging issues should be the responsibility of the SAB
- ❖ Maintain the current reporting structure but do a better job of marketing and moving forward.
- ❖ IFYGL-2 is a good idea to move forward on.

### **Sept 19-20 Public Forum in Ann Arbor - CGLRM Sponsored Invasive Species Workshop**

Discussed actions taken to date to organize the Alien Invasive Species workshop at the biennial meeting on September 19th, 2003. Discussed how the panel discussion could be organized.

Members recommended that additional remarks be added to address impacts of shipboard invaders on the terrestrial side to give the discussion more of an ecosystem emphasis, other minor modifications to the proposed schedule were discussed as well as potential speakers. Steve Brandt agreed to provide an overview of the issue and Harvey Shear agreed to facilitate the panel discussion and keep things on track.

It was recommended that we ask each of the speakers to recommend solutions or tactics for prevention.

### **Scientist Award**

Members discussed award criteria and other federal agencies that present cash awards to scientists (EC, NOAA, and others have done it); also recommended that the IJC rename the award.

Points discussed:

- ❖ Agreed that peer reviewed research is a good requirement

- ◆ Team award might be an option to consider
- ◆ Award could be a sponsorship at a university made in the winners name, where both the scientist and student can make presentations (students get the scholarships)

The Group noted that IAGLR has had a similar award - Mott Fellowship award and agreed to provide nominations to the Commissioners before the June executive meeting and comments to Harvey & Steve by end of March. A finalized package with criteria will be provided to the Co-Chairs for discussion. The individual receiving the award will need to be available in September 2003 for a presentation.

The members discussed plans for April Semi-Annual IJC Meeting in Washington D.C. and suggested other possible priority work for the IJC:

- ◆ Groundwater issue - continuing concern
- ◆ Reference study on invasives, perhaps including microbial and some terrestrial
- ◆ Food web dynamics
- ◆ Light change and effect on ecosystem
- ◆ GMO's (genetically modified organisms) - fish escaping that behave as an invasive species. (This has also been discussed as a potential control mechanism however laws may present a barrier to that approach.)
- ◆ Pharmaceuticals - (may want to focus IJC's attention on this issue and see more work done on it). NWRI has reorganized a project to address issue
- ◆ New substances - European's have "sunsetted" some of these (at lower concentrations than found in North America)
  - ◆ IJC could take on an advocacy role to get people together to make a statement about these emerging contaminants.
  - ◆ Discussed presenting issue of new chemicals to Commissioners as a new priority, however the issue was presented at the Emerging Issues Workshop and may already be addressed by SAB
  - ◆ WQB is a logical board to address policy implications of new substances
  - ◆ Educating the Parties/public on issue PBDE's toxicology - accumulating in Native American breast milk - may be a primary motivator.

Decided to develop research agenda priority and pull everything into a research strategy that would be holistic, but arrive at focused recommendations.

Discussed whether to show what research is done where and use in the context of directing efforts - decided an analysis of the Research Inventory will be part of the development of a strategy.

Next Council Meeting: Hold at GLERL - September 18th

Hold Teleconference - April 2nd

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