

**MINUTES OF 40TH MEETING  
COUNCIL OF GREAT LAKES RESEARCH MANAGERS**

**NATIONAL WATER RESEARCH INSTITUTE  
BURLINGTON, ONTARIO  
MARCH 30-31, 2004**

<b>Canadian Members Present</b>	
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
Dr. Dale Henry	Drinking Water, Wastewater and Watershed Standards, Ontario Ministry of Environment, Toronto
Ms. Jacinthe Leclerc	Environment Conservation Branch, Environment Canada, Centre Saint-Laurent
<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
Dr. Tom Johnson	Large Lakes Observatory, University of Minnesota, Duluth, MI
Dr. Edward L. Mills	Cornell Biological Field Station, Department of Natural Resources, Bridgeport, NY (Participated via teleconference)
Dr. Christopher T. DeRosa	Division of Toxicology, CDC/ ATSDR, Atlanta, GA
<b>Binational Members Present</b>	
Dr. Patricia Chow-Fraser	International Association for Great Lakes Research
<b>Science Advisory Board Designates</b>	
Dr. Deborah Swackhamer	Environment and Occupational Health, School of Public Health, University of Minnesota
<b>Secretary</b>	
Mr. Mark Burrows	IJC Great Lakes Regional Office, Windsor, ON.
<b>IJC Section Liaisons</b>	
Ms. Ann MacKenzie	IJC Section Office, Ottawa, ON.

**Welcome**

CGLRM meeting participants were welcomed by Dr. John Carey, Director General of the National Water Research Institute, Environment Canada. Dr. Carey briefly described the history and mission of

the NWRI and expressed his support for Council initiatives. He expressed support for the formation of a research strategy and also the idea of orchestrating a large scale bi-national research initiative similar to the International Field year of the Great Lakes project carried out in 1972. A briefing package was provided to each attendee describing current research initiatives in each branch of NWRI as well as the United Nations Global Environment Monitoring System, Water Programme (GEMS/Water) that is hosted at NWRI.

### **Introductions & Approval of Agenda**

The agenda was rearranged to better accommodate a tour of the NWRI at 3pm on March 30th. The agenda and minutes from the September 18, 2003 meeting were then approved without discussion. A copy of the agenda is attached. Membership of the CGLRM was discussed and it was suggested that the Council seek more representation from Canadian Wildlife Services, the University of Wisconsin Milwaukee Water Institute, the Annis Water Resources Institute at Grand Valley State University, and MNR. It was also suggested that a representative from Queens University be considered for the Council. The use of alternates to cover meetings in the event that a member cannot attend was suggested. It was also recommended that a social event be scheduled to coincide with meetings so that new members could get better acquainted.

### **Research Strategy Subcommittee Report**

Plans for the April 28-30 workshop in Chicago and proposed SOLEC workshops were discussed. The entire approach and structure of the workshop was reexamined, presenters and topics were proposed and approved and it was requested that the Council secretary incorporate all of the changes in a revised draft for review and approval on the following day. A copy of the final workshop description and agenda is attached. The potential to further develop the research strategy during a SOLEC workshop was discussed. It is anticipated that the outcome of the research strategy workshop(s) will inform the CGLRM's recommendations regarding all agreements, not just the Great Lakes Water Quality Agreement, and would take a long term, broader approach. It was agreed that a proposed strategy should be vetted through other advisory boards and that other agreement boards should be involved in a second workshop focused on the process of identifying research priorities. To reduce confusion, it was agreed that the Council would refer to the overall strategy as a "Research Coordination Strategy".

### **Presentation on Recent findings on Organic Contaminant Levels in Lake Erie**

Dr. Chris Marvin, NWRI made a presentation about his work studying organic contamination in Lake Erie sediment. Comments noted during presentation were:

- ❖ Concentration and loads of organic contaminants have dropped at least 60% since 1986
- ❖ Polystyrene compounds are a newly emerging contaminant of interest
- ❖ We do not have adequate toxicological data on emerging chemicals of concern, but we can use the data we do have to make inferences about the possible effects of new chemicals.
- ❖ Need to mine existing toxicological data, use inference and extrapolation to study the threat of new contaminants.
- ❖ The frequency and extent of lake-wide surveys must be adjusted to meet the decision support needs of government managers and regulators.

Dr. Joe DePinto noted that Chris Marvin's data was used to help calibrate a model of Lake Ontario along with more recent near shore data, and that it was found to have good correlation.

### **Tour of NWRI**

Council members toured the NWRI laboratory complex and were briefed on the current activities and the capabilities of the facilities.

### Advice to IJC regarding the Parties review of Annex 11 & 17 of the GLWQA

Dr. Harvey Shear and Dr. Deborah Swackhamer briefed the Council on the discussion of Annexes 11 and 17 of the Great Lakes Water Quality Agreement that occurred at the Science Advisory Board (SAB) workshop in February. Findings and recommendations of the SAB sponsored workshop were discussed. The Council members present agreed that the agreement and annexes in their present form are not sufficient to address the needs of the Great Lakes. They concurred with the preliminary summary of key points from the SAB session regarding Annexes 11 and 17 and in addition, remarked that any revision of the agreement should:

- Mention the roles and responsibilities of all the advisory boards including the Council of Great Lakes Research Managers
- Support an ecosystem approach to Great Lakes research
- Incorporate research needs in each annex and avoid "stove pipes"
- Consider a link between Annexes 17 & 11 to support the concept of a Great Lakes environmental research network.

It was agreed that the above discussion covered meeting agenda item number 3 for March 31st regarding Council recommendations to the IJC regarding the Parties review of the GLWQA and Issues to cover at the April Semi-Annual Meeting. It was agreed to replace that agenda item with further discussion of the research coordination strategy workshop.

### Great Lakes Observing System, proposed Council activities and Collaboration with Great Lakes Commission

The CGLRM meeting was reconvened on the morning of March 31, 2004 and began with a briefing by Roger Gauthier from the Great Lakes Commission about the status of the Great Lakes Observing System (GLOS) Business Plan development project. He addressed the participation of the U.S. and Canada in the global ocean observing system initiative and potential funding that is being proposed for an integrated ocean observing system in the U.S. The process of formulating a business plan was described, including thematic workshops and user surveys. The formation of a regional association and board of directors for the observing system was described as well as potential funding options for sustained operations. For further information on the GLOS initiative, Council members were referred to the [www.glc.org/glos](http://www.glc.org/glos) and [www.ocean.us](http://www.ocean.us) web sites. Following the presentation the group discussed the unilateral nature of the GLOS initiative and how the initiative related to activities in Canada. The group discussed the needs of a research driven system in comparison with a more inclusive user driven system. It was agreed that the Council would hold an open water technology workshop, address sensor technology, the design of systems and the questions that should be addressed by an observing system. It was agreed to solicit participation and form a workshop subcommittee. April 16th was selected as a tentative date for the first workshop steering committee teleconference.

### Review of Revised Agenda for Research Coordination Strategy Workshop

The revised agenda for the Research Coordination Strategy Workshop was reviewed, edited and approved.

### Report on 8th Annual Science Vessel Coordination Workshop, Research Inventory improvements and project statistics (moved to 3/31/04 from 3/30 due to time constraints)

The CGLRM secretary briefly described the outcome of the 8th annual Great Lakes Science Vessel Coordination Workshop held in Traverse City Michigan at the Great Lakes Maritime Academy February 3-5, 2004, improvements made to the research inventory and science vessel databases and the level of participation. Members recommended more direct solicitation of participation with the research inventory and supported efforts to utilize student interns as part of the effort.

## Schedule Next Teleconference/Meeting

It was decided to postpone setting another formal CGLRM meeting date until after the IJC Semi-Annual meeting and the research coordination strategy workshop in April. Arrangements for further meetings and or teleconferences would be made via e-mail notification.

### Attachments

1. [Council Meeting Agenda](#)
2. [Final Workshop Description and Agenda for April 28-30th, 2004](#)

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Attachment 1 to CGLRM Minutes of March 30-31st, 2004

Rev. 3/26/2004

### Agenda

**The Council of Great Lakes Research Managers' 40<sup>th</sup> Meeting**  
**CCIW/NWRI – Burlington, ON**  
**March 30-31, 2004**

Time	Item	Topic	Responsibility
13:00 pm	1	Welcome to CGLRM Meeting Participants from Dr. John Carey, Director General National Water Research Institute Canada Centre for Inland Waters	Brandt/ Shear
13:05	2	Introductions & Approval of Agenda (a) Logistics – tour of CCIW	Brandt/Shear Bielak
13:15	3	Approval of minutes from September 18, 2003 Meeting	Burrows
13:20	4	Research Strategy Subcommittee Report, plans for April 28-30 workshop and proposed SOLEC workshops	Brandt/Horvatin/Shear
14:00	5	Presentation on Recent findings on Organic Contaminant Levels in Lake Erie by Chris Marvin, NWRI	Bielak (Introduce)
14:30	6	Report on 8th Annual Science Vessel Coordination Workshop	Burrows
14:45	7	Research Inventory improvements and project statistics	Burrows
15:00	8	Break	
15:15	9	Advice to IJC regarding the Parties review of Annex 11 & 17 of the GLWQA.	Shear/Swackhamer
15:45	10	Discussion	Shear/Brandt
16:00	11	Adjourn to tour of CCIW/NWRI	Bielak
<b>March 31, 2004</b>			
08:30	1	Reconvene Meeting	Shear/Brandt
08:35	2	Great Lakes Observing System, proposed Council activities and Collaboration with Great Lakes Commission	Brandt/Johnson /DePinto/Gauthier

10:00	3	Council recommendations to IJC regarding the Parties review of the GLWQA and Issues to cover at the April Semi-Annual Meeting –Group Discussion	Shear/Brandt
11:30	4	Schedule Next Teleconference/Meeting	Burrows
	5	Other items	
Noon	6	Adjourn	

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Attachment 2 to CGLRM Minutes of March 30-31st, 2004

**Revised: April 22, 2004**

## GREAT LAKES RESEARCH COORDINATION STRATEGY WORKSHOP

**International Joint Commission  
Council of Great Lakes Research Managers**

**APRIL 28-30, 2004**

**Sponsors:** International Joint Commission Council of Great Lakes Research Managers, NOAA Great Lakes Environmental Research Laboratory, USEPA Great Lakes National Program Office

**Location:** U.S. Environmental Protection Agency, Great Lakes National Program Office, 77 West Jackson Street, Chicago, Illinois

### **Background**

The Council of Great Lakes Research Managers (Council) was created by the International Joint Commission (IJC) to serve as a principal advisor on research programs and needs. Originating in 1984 as part of the Science Advisory Board, the Council was placed directly under the IJC in 1991. The Council's purpose is to enhance the ability of the IJC to provide effective leadership, guidance, support and evaluation of Great Lakes research as it applies to the provisions of the Great Lakes Water Quality Agreement. The Council's responsibilities include:

- ➊ promoting effective communication and collaboration between researchers and agencies in Canada and the United States;
- ➋ encouraging researchers to share their findings;
- ➌ compiling a summary of current and planned research programs related to the Great Lakes Water Quality Agreement, particularly those called for by Annex 17 - Research and Development;
- ➍ identifying and prioritizing research needs to identify gaps and encourage the U.S. and Canadian governments, the Parties to the Agreement, to shift funding toward studies directly relevant to the Agreement's purpose; and reviewing the impact of research recommendations made by itself, the Great Lakes Science Advisory Board, the Great Lakes Water Quality Board and the IJC.

Article VII of the Great Lakes Water Quality Agreement specifically charged the IJC to render assistance and advice to the Federal, State and Provincial governments in the U.S. and Canada on matters related to research in the Great Lakes ecosystem. In turn, in Article V of the Agreement, the Parties agreed to use their best efforts to ensure that their principle research funding agencies would orient programs in response to research priorities recommended by the IJC. The governments also

agreed to develop mechanisms for appropriate cost-effective international cooperation; and to ensure that research priorities are undertaken in accordance with the list provided in Annex 17 of the Agreement. The governments of Canada and the United States are required to conduct a comprehensive review of the operation and effectiveness of the GLWQA on a periodic basis to ensure that it continues to be effective. The next review is due following the release of the Commission=s 12th biennial report in 2004. Accordingly, the IJC has requested that the Council provide advice on the review of the GLWQA as it relates to research. In addition, several recent, large scale funding proposals for Great Lakes restoration and protection have been introduced in Congress, prompting discussion about how such basin-wide or lake-wide projects can be better coordinated between multiple jurisdictions. The Council sees the development of a research coordination strategy as a key step towards effective management of such projects.

### **Workshop Purpose**

The purpose of the workshop is to address the need for a binational Great Lakes research coordination strategy. This strategy will be defined as an overarching framework for Great Lakes research management; a mechanism for international cooperation that describes how the region will pull together to organize and coordinate large scale research projects. The workshop discussion and report will inform the Council and provide a basis for advice and recommendations to the International Joint Commission.

### **Problem Statement**

Great Lakes research is carried out on all aspects of the Great Lakes ecosystem by more than 130 public and private organizations within the 2 countries, 8 states and 2 provinces around the basin. (CGLRM Research Inventory) The complex needs of the future demand that these organizations nurture a strong collaborative spirit and create mechanisms for cost-effective national and international cooperation. Additionally, the Great Lakes region as a whole needs a coordinated approach in order to successfully obtain federal support for large scale restoration efforts. In the past, the greatest advances in science have been achieved in the Great Lakes when the entire region pulled together all of the resources of the Great Lakes community to address a given problem and these successful collaborative efforts can help guide the future. The benefits of anticipating needs and carrying out advance planning have been highlighted by several recent successful collaborative efforts in different parts of the basin. The need for well coordinated basin-wide research efforts has also been underscored by General Accounting Office and Auditor General reports released during the past 2 years. It is widely recognized that early and effective response to new threats to the Great Lakes ecosystem can help the region avoid expensive, long term control measures. Smaller scale plans exist at the local, state/provincial and national levels; however there is currently no plan that harmonizes these efforts. Accordingly, there is a clear need for a well defined coordination mechanism that stands ready to engage individual agencies in the U.S. and Canada and bring resources in across the board to quickly react to, and address Great Lakes research needs.

### **Workshop Structure**

This is the first of two workshops envisioned by the Council to address this issue. The first workshop is intended to identify a structure for research implementation and coordination. The second workshop will address a process for identifying research issues and setting priorities on a regional scale.

The April workshop will:

- ➊ Review the challenges faced by research managers and the expectations of the governments regarding research management.
- ➋ Discuss how these challenges have been addressed in other large projects and hear recommendations from model organizations.
- ➌ Identify the key features of a binational Great Lakes research coordination strategy.

The April 28-30<sup>th</sup> workshop is organized in two sessions, an open session with a series of presentations and panel discussions followed by a closed working session for Council members. The working session will identify common features of successful coordination efforts, discuss what should

be incorporated into a binational strategy, and help decide on findings and recommendations. An agenda is attached.

The second workshop (date TBD) will provide recommendations as to how the Great Lakes region identifies/prioritizes significant issues that multiple agencies hold in common, forms a consensus and joins together to express common concerns and funding needs.

In addition to these two workshops, the Council will be studying the feasibility of conducting a large scale research project similar to the International Field Year of the Great Lakes that would test the research coordination strategy.

### Expected Outcome

The April 28-30<sup>th</sup> workshop will provide the Council with the information they need to recommend the design and constraints of a binational Great Lakes research coordination strategy. It will inform the Council's advice to the IJC regarding factors to consider when addressing the adequacy of the Great Lakes Water Quality Agreement and other legislation to accommodate present and future research needs.

### Focus Questions

Since this workshop is all about management and coordination, the Council has requested that each of the speakers address a set of focus questions to help keep the discussion on track and to make it easier to organize the results. Speakers were asked to address the following questions as they apply to their particular situation:

- ❖ What initially prompted the effort? (e.g. nature of the problem – human health danger, urgent environmental crisis, endangered resources, some other crisis, etc.)
- ❖ What/who was the primary driver that brought people together, got the project organization started and kept it going?
- ❖ How was it coordinated?
- ❖ What worked, what didn't (doesn't) work? – Why?
- ❖ Based on your experience, what do you recommend incorporating in a Great Lakes research coordination strategy?

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## GREAT LAKES RESEARCH COORDINATION STRATEGY WORKSHOP APRIL 28-30, 2004

International Joint Commission  
Council of Great Lakes Research Managers

### AGENDA

April 28, 2004		
08:30	Goals, Objectives & Workshop logistics	Stephen Brandt & Harvey Shear
08:40	Coordination Needs - U.S. Congressional Perspective	Amy Carroll
09:00	The Need for Regional Coordination- Canadian Perspective	James Lynch
09:20	Questions & Answers	

<b>Regional/Problem Driven Coordination Efforts</b>		
09:30	Large Scale Ecosystem Restoration: Preliminary Lessons and Guidance for the Great Lakes	Karen Vigmostad
10:00	Break	
10:15	Coordination of Large Scale Assessment of Hypoxia in the Gulf of Mexico	Don Scavia
10:40	Coordination of the Green Bay and Lake Michigan Mass Balance Studies	Glenn Warren
11:05	International Coordination of Coral Reef Research	Peter Sale
11:30	Panel Discussion	Stephen Brandt
12:00	Lunch	
13:00	Introduce Afternoon Session	Paul Horvatin
<b>Lake-Wide Coordination Efforts</b>		
13:10	International Field Year of the Great Lakes	Jim Bruce
13:35	Great Lakes Fisheries Commission –Fisheries Research Coordination	Charles Krueger
14:00	Lake Erie Millennium Network	Jan Ciborowski
14:25	EEGLE Project	Brian Eadie
14:50	Break	
15:05	Panel Discussion	Harvey Shear (Moderator)
16:00	Summary of Day 1 and Wrap Up	Stephen Brandt & Harvey Shear
16:30	Adjourn	
<b>April 29, 2004</b>		
8:30	Goals & Objectives for Day 2	Brandt & Shear
<b>Collaborative Approaches/Partnerships</b>		
8:30	Canada-Ontario Water Use and Supply Project	Wendy Leger
8:50	Upper Lakes Environmental Research Network	Amber Lahti
9:10	Pollution from Land Use Activities Reference Group(PLUARG) Study	Harvey Shear
9:30	Panel discussion	
10:00	Break	
10:15	National Oceanographic Partnership Program & The National Ocean Research Leadership Council	Reginald Beach

10:40	Council of Great Lakes Governors	Peter Johnson
11:05	Sea Grant	Jeff Reutter
11:30	Panel Discussion	Paul Horvatin
12:00	Conclude Public Session - Lunch	

### IJC Council & Board Representatives Sessions

13:00	Identify Common Themes & Review Recommendations - ULERN Report Out – Amber Lahti, Angie Wagner	Moderator Paul Horvatin, Facilitator Angie Wagner
14:00	Board/Council Discussion	SAB, HPTF, Air Board Reps
14:30	Discussion – Brainstorming session Recommendations for Research Strategy	Stephen Brandt
15:30	Discussion - Recommendations for Research Strategy – Outline	Harvey Shear
16:30	Adjourn	

**Friday, April 30, 2004**

8:30	Goals & Objectives for Day 3	Brandt & Shear
8:45	Review Strategy Outline – Reach Consensus & Develop Council Recommendations - Facilitated Session with Council Members & board liaisons	Amber Lahti & Angie Wagner
10:00	Break	
10:15	Observations & Workshop Summary, Plan for Moving Forward & Concluding Remarks	Brandt & Shear
12:00	Adjourn	

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