

**153rd Meeting of the International Joint Commission
Science Advisory Board held jointly with the
Great Lakes Water Quality Board
Niagara Falls, NY
June 10-11, 2009**

Meeting Record

Members Present

John Carey (Canadian Co-chair).....NWRI, Burlington, ON
Milton Clark.....United States Environmental Protection Agency, Chicago, IL
David Carpenter.....University at Albany, Rensselaer, NY
Michael J. Donahue (U.S. Co-chair).....URS Corporation, Farmington Hills, MI
Miriam Diamond.....University of Toronto, ON
C. Scott Findlay.....University of Ottawa, ON
Gary Klecka.....Dow Chemical Co., Midland, MI
Joseph Koonce.....Case Western Reserve University, OH
Hugh MacIsaac.....University of Windsor, ON
Susan Schantz.....University of Illinois at Urbana Champaign, IL
William Taylor.....University of Waterloo, ON
Marcia Valiante.....University of Windsor, ON

Members Absent

William Bowerman.....Clemson University, Pendleton, SC
David Carpenter.....University at Albany, Rensselaer, NY
Pierre Fillion.....University of Waterloo, ON
Donna Mergler.....University of Quebec, Montreal, PQ
Jeffrey Ridal.....St. Lawrence River Institute, Cornwall, ON
Deborah Swackhamer.....University of Minnesota, Minneapolis, MN
Richard Whitman.....USGS, Porter, IN

Liaisons, Scientific Presenters, and IJC Staff

Peter Boyer (Secretariat).....International Joint Commission, GLRO
Douglas Alley.....International Joint Commission, GLRO
Samantha Dundas.....International Joint Commission, GLRO
Bruce Kirschner.....International Joint Commission, GLRO
Karen Vigmostad.....International Joint Commission, GLRO

1. **Call to Order:** CoChairs Gulezian, Vollmershausen, Carey, and Donahue called the meeting to order, indicating that the primary purpose of the meeting is to review the WG reports on 2007 – 2009 IJC Priorities. Brief self introductions of the members followed.

2. WG Presentations and Discussion:

Comments are as follows:

Eutrophication

- additional work will be done over the summer to add to the report (finishing literature review, completing consensual map, and technical report)
- need to complete analysis of linkages for WOE report (hopefully by the end of the summer)
- may not change no regrets management
- the completed technical report will have much more detail
- in the next 2-3 months substantial work will be done
- has there been an increase in P or a change in the soluble reaction P ratio? - need a summary in front to help people understand (challenge to explain to the public)
- the point of the entire report is to understand eutrophication and there is still a large amount to learn
- this is a pilot project for WOE for commissioners (not sure if this report is the right vehicle to report on that)
- there is a need for people to reconnect to the lakes
- current load reduction targets may be too high, and may need to be reduced further in a revised Agreement
- need to communicate understanding of what is going on in the lakes
- eutrophication may need to be approached in a different way
- if we never have high WOE we will never have management intervention

Nearshore Framework

- mechanisms, coordination, knowledge and research – Question: Do we have the institutional arrangements necessary to address the nearshore?
- need better monitoring framework (nearshore part of the LaMP's)
- need to establish a biomonitoring program
- develop a database for reference areas

- a monitoring index could help identify areas in good condition (need to be protected) or bad areas
- index could help convey diagnostic info about the problem
- need to respond to different problems on small and large scales (flexible institutional arrangements)
- prevention is worth more than a cure
- it is not just about curing but also protecting those areas in good condition
- need extensive set of reference systems (which may be difficult because each of the Great Lakes is extremely unique)

Beaches and Recreational Water Quality

- when beaches are overrun with algae the beach may not be closed but people still avoid swimming there
- add issue of predictive models
- add prevention of human pathogens from being there in the first place
- birds and wildlife contamination issue not in the paper (cannot attribute what percentage each contribute for the commissioners)
- suggest using weather forecasting to predict overflows and use that as a preventative method
- should lean towards real time management rather than retrospective measurements
- WHO has used the Annapolis Protocol
- need to get more specific with indicators or use beach specific tools (need to pinpoint that)
- need to look farther into algae and human pathogen relationship
- discuss how we really define a beach (Detroit river has no classified beaches)
- be careful not to dismiss non –human pathogens
- broader need for forecasting (inability to understand hydrodynamic structures)

Chemicals of Emerging of Concern

- recommend that the U.S. be part of the International Conventions for addressing CEC's
- concerned that the public will see the list of chemicals and not realize that some are only in trace amounts (need help communicating this)
- issue of adequacy of screening criteria – PFOS/PFOA could be an example
- need to emphasize prevention rather than a cure
- regulation by mode of action needs better explanation, perhaps with an example
- need to research the amount of these chemicals are going through the human system before disposal
- look into controlling release in the body to prevent waste

- need to do a better job in treating waste water
- the report may be too general it may need an executive summary and the reference appendices
- what is the nearshore context for CEC's? e.g. what are the concentrations near water intakes?

Great Lakes Fish Consumption – Risks and Benefits

- fish consumption is never compared to poultry or beef (N.B. comparative risk assessment is not used to compare different risks)
- need more funding for research
- report focuses on PCB's and methyl mercury which has been researched but we may need more research on others
- error, saying Great Lakes fish do not harm human health
- there is no data on Omega-3 fatty acids in Great Lakes fish
- need to bridge information gaps
- look into the use of fish lower on the food chain
- there will be more pressure to increase Great Lakes farmed fish stocks as ocean stocks reseed

Aquatic Invasive Species Binational Rapid Response Policy Framework

- surveillance piece is a very important part
- need to know response options
- in many cases there is no opportunity for rapid response
- need to do risk assessment if “nuclear” option were to be used
- the fisheries act may make it illegal to use anything toxic

RECOMMENDATIONS FOR EDITING

- any recommendations should go directly to the secretaries
- need to remember that the commissioners are the ones we are writing for
- possible meeting in September to bring recommendations together
- nearshore framework group should put something together
- all reports need to be labeled the same
- July 31st hand in template reports
- a final schedule review would be circulated following the meeting under cover to allow for additional review time by the Boards
- need to get it out to the public weeks before the biennial

3. Other Business:

GLRO Human Resources – The issue of additional human resources to support Board activities was raised and concern was expressed that the capacity of the GLRO was unsatisfactory with known and impending retirements.

Acknowledgement – The soon to be retiring Secretary of the SAB was recognized and thanked for his service to the Board and the IJC.

4. **Adjournment:** There being no further business the meeting adjourned at 5 PM.