

**MEETING RECORD FOR THE**  
**147<sup>th</sup> MEETING OF THE IJC SCIENCE ADVISORY BOARD**  
**December 11 - 12, 2007**  
**International Joint Commission**  
**Great Lakes Regional Office, Windsor, Ontario**

**MEMBERS PRESENT**

John Carey (Canadian Co-chair).....NWRI, Burlington, ON  
Michael J. Donahue (United States Co-chair) ..... URS Corporation, Farmington Hills, MI  
William Bowerman..... Clemson University, Pendleton, SC  
David Carpenter..... University at Albany, Rensselaer, NY  
Miriam Diamond.....University of Toronto, ON  
Pierre Filion ..... University of Waterloo, Waterloo, ON  
C. Scott Findlay ..... University of Ottawa, ON  
Gary Klecka ..... Dow Chemical Co., Midland, MI  
Joseph Koonce ..... Case Western Reserve University, OH  
Hugh MacIsaac ..... (via conference phone) University of Windsor, ON  
Deborah Swackhamer ..... University of Minnesota, Minneapolis, MN  
William Taylor.....University of Waterloo, ON  
Marcia Valiante..... University of Windsor, ON

**MEMBERS ABSENT**

Milton Clark..... United States Environmental Protection Agency, Chicago, IL  
David Lean..... University of Ottawa, ON  
Donna Mergler ..... University of Quebec, Montreal, PQ  
Joan Rose .....Michigan State University, East Lansing, MI  
Jay Unwin ..... National Council for Air and Stream Improvement, Inc., Kalamazoo, MI

**LIAISONS, INVITED GUEST & IJC STAFF**

Douglas Alley ..... International Joint Commission, GLRO  
Kay Austin ..... International Joint Commission, US Section  
Peter Boyer..... International Joint Commission, GLRO  
Ray Tomalty.....(via conference phone)  
Karen Vigmostad ..... International Joint Commission, GLRO  
Joel Weiner .....(via conference phone) International Joint Commission, CDN Section  
Richard Whitman ..... USGS, Porter IN

## **Minutes for the 147<sup>th</sup> Meeting of the Science Advisory Board**

### **1.0 Welcome and Introductions**

Dr. Donahue welcomed everyone to the 147<sup>th</sup> Meeting and self introductions followed. Drs. Tomalty, MacIssac, and Mr. Weiner participated by telephone.

### **2.0 Approval of the Agenda**

The agenda was accepted as presented.

### **3.0 Impact of Urban Areas on Great Lakes Water Quality – Presentation of the interim/final report by Dr. Ray Tomalty. Dr. Tomalty presented an outline of his report.**

Mr. Weiner presented WQB comments in relation to three issues – avoid discussion of tax related matters as outside of the purview of the IJC and the GLWQA, focus the analysis in terms of environmental impacts and not planning considerations, and include public education in the policy solutions aimed at encouraging behavioural change.

A member responded that recent revelations of political contributions from developers in sprawling areas of the golden horseshoe support the relevance of economic factors in sprawl. Several members said that they did not agree with excluding economic issues from the analysis of urban sprawl.

A brief discussion ensued on the nature of recommendations, and the board was reminded that IJC expectations are high for the report, and that the recommendations need to include specific, actionable direction to governments at all levels.

In terms of his timeline to complete the report, Dr. Tomalty said that he anticipated its completion by the end of next week (December 21). It was suggested that the report recommendations be reviewed by the writing team before circulating the report to the Boards. The secretary was directed to facilitate the review of the Board to the degree required to finalize it for submission to the IJC February Executive Meeting, February 5 – 7. The secretary indicated that the report will have to be ready for submission to the briefing book by January 22 to adhere to this time line.

#### **4.0 Science Advisory Board Organization and Structure under the GLWQA**

The secretary provided a brief overview of this matter to date, and Dr. Findlay presented his email comments of November 19.

Several members expressed concern with any proposal to reduce the size of the Board. The intent of reducing membership was further explained, that the core group of members would only be reduced, if the overall scope of scientific advice could be enhanced by including more scientists from outside the Board, using a National Academy/USEPA model. A discussion ensued on the diminished scientific capacity of the GLRO. Concern was expressed that if the GLRO was created to support the Boards, its current reduced capacity limited the role of the SAB as well. It was suggested that the Board Co Chairs need to take a more active role in IJC decisions affecting the management of the GLRO.

Dr. Findlay commented that the SAB's scientific process needs greater rigour to be effective, such as explicit criteria for deciding what the SAB will work on. He decried SAB "ad hocary". Dr. Findlay recommended that one person be identified and dedicated to producing a product for the Board. The role of the Board would be to advise that one person about how they would accomplish the task. He added that under the current unstructured approach, the secretary depends on individual members to contribute scientific input, which is then compiled and considered by the Board for adoption as its own advice. Dr. Findlay said that Board members are far too busy to undertake work themselves, directly.

Several other comments followed:

- The SAB needs to focus on the bigger issues, and needs to be independent from the IJC
- The Parties took over after the 1987 Protocol, and dismantled the IJC structures that produced earlier water quality assessments, in favour of SOLEC approaches
- The SAB needs to focus on water quality science
- The SAB needs to give its advice even if it is not requested to do so by the IJC
- The SAB needs to focus on one issue rather than many
- The scientific capacity of the GLRO is key to the effectiveness of the SAB
- There is a need to make bold statements and propose dramatic change rather than take an incremental approach that sustains marginalization.

Dr. Donahue proposed that a writing team pull together the existing information and comments into a brief 2 – 3 page report for consideration by the Board at its February meeting. The following members volunteered to participate on the writing team: Drs. Carey, Donahue, Findlay, Swackhamer, and Diamond.

## **5.0 2005 – 2007 SAB Priorities Report**

The secretary noted that this is the fourth meeting of the Board to review the report, and that many multiple drafts have been reviewed and revised, involving most of the Board members directly in the revisions.

Dr. Klecka requested that further consideration be given to his comments regarding the POPs/Diabetes section, that additional references be included. Several members of the Board agreed, and provided a further revision for this section.

Dr. Swackhamer moved that the report be approved that includes the amendments for POPs/Diabetes section provided by Drs. Klecka and Carpenter. Dr. Bowerman seconded the motion. The revised wording was read aloud for consideration, and accepted by everyone in attendance. The motion was approved by everyone in attendance and the report was approved.

Dec 12, 2007 reconvened at 8:30 am

## **6.0 Invited scientific presentation: “Advances, Prospects, and challenges in Recreational Water Quality Assessment of Great Lakes Beaches”, Dr. Richard Whitman, Research Ecologist/Station Chief, Lake Michigan Ecological Research Station, Porter, Indiana.**

A brief discussion ensued on the inadequate science that is in use by decision makers in their efforts to protect public health through the closing of Great Lakes beaches. In terms of health risk, Dr. Whitman said that if there’s a point source and an exceedance of a water quality objective, it is probable that there will be a health effect, however there needs to be a risk assessment of non point sources. Dr. MacIsaac questioned whether there was any current research on the population consequences for botulism that could endanger the species, e.g. loons. Several members responded that the Canadian Wildlife Service may be researching this question. Several members noted that while nutrient concentrations are known, loadings are unknown making management difficult.

## **7.0 LaMP Progress Report Review Request**

Dr. Austin requested that the LaMP report that was developed for the Commission by staff, be reviewed by January 18.

## **8.0 Review of 2007 – 2009 IJC Great Lakes Priorities**

SAB attendees at the Nearshore Workshop that was held November 19 – 20 in Dearborn, MI, provided their comments to the Board.

- Detailed descriptions of nearshore problems are necessary for a comprehensive assessment
- LaMPs are not focused on nearshore problems; LaMP managers need to be convened to identify regional projects
- A new scientific understanding is needed if cladophora conditions are now worse than they were during the 1970's
- Are there new sources, changes in ecology, increased loadings – better information is needed
- New non point urban sources e.g. lawn fertilizers could be important given the size of the urban footprint in the basin and the loss of wetlands
- What is the scientific basis for management actions in the watersheds
- The second Nearshore Workshop is being planned for March – comments and ideas are invited

The Board reviewed each priority and designated SAB Co Chairs for each of the Priority Work groups as follows: Eutrophication – Joe Koonce, Beach Closures – Richard Whitman, Fish Consumption – David Carpenter, Emerging Chemicals – Gary Klecka and AIS – Hugh MacIsaac. Scott Findlay and John Carey volunteered to have their names included as members of the Work Group on Beach Closures.

## **9.0 Future Meetings:**

Next Meeting:

The February date, meeting #148 was proposed as a joint meeting with the WQB, and the date was changed to February 13 – 14. It was suggested that the meeting be planned close to the Detroit airport in order to facilitate convenient travel arrangements. The secretary was directed to confirm the meeting, as soon as the WQB Co Chairs can be consulted concerning the dates.

### Other 2008 Meetings

Proposed; #149 – May 7 – 8, 2008 Windsor, Ontario

Proposed; #150, September 16 - 17, 2008, Windsor, Ontario

Proposed; #151, December 9 – 10, 2008, Windsor Ontario

### **10.0 Adjournment**

There being no further business of the Board, the meeting was adjourned by the Co Chairs.