



**IJC Science Advisory Board – Science Priority Committee  
Seventh Meeting  
Teleconference Meeting Summary**

**March 24, 2016 – 11:00am to 12:30pm**

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<b>U.S. Members</b>	<b>Canadian Members</b>	<b>Commission Staff</b>
Carol Miller (Co-Chair)	Jeff Ridal (Co-Chair)	Matthew Child (Secretary)
Dave Allan	Bob Hecky	Glenn Benoy (Canadian Liaison)
Mike Murray	Andrea Kirkwood	Antonette Arvai
Dale Phenicie	Christina Semeniuk	Jennifer Boehme
Joe DePinto		Trish Morris
Scott Sowa		

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Regrets: Clare Robinson, John Livernois, Lucinda Johnston, Henry Lickers, Victor Serveiss

**1. Welcome and Introductions, and Approval of Draft Agenda (Jeff Ridal)**

The Canadian Co-Chair welcomed everyone to the meeting. Attendance was confirmed through a roll call. Jeff welcomed the SPC's newest members – Andrea Kirkwood, John Livernois and Joe DePinto – and new members on the call introduced themselves.

The draft agenda was approved, with the addition of the IJC microplastics workshop and the University of Michigan's modelling scenario report to Other Business.

**2. Review of February 17, 2016 Meeting Record and Action Items**

Matthew reviewed the actions from the previous meeting:

- (i) Solicitation for Work Plan items - current Work Plan topics include Fertilizer Application, and Energy. Carol reminded members that their participation on one or more Work Groups is expected.
- (ii) Members requested to self-identify to serve as advisors for specific chapters of the Triennial Assessment of Progress (TAP) report – input was received and each chapter has an SPC advisor assigned to it (see attached table).

### **3. IJC Spring Semi-Annual Meeting**

Carol reviewed the meeting logistics document that was circulated with the agenda. All SPC members, and especially Work Group Co-Chairs, are invited to attend the SPC Appearance. The full SAB meeting will be held prior to the SPC meeting. Members were reminded to pre-register for the IJC Reception, and were advised of a Water Quality Board public event scheduled for the evening of April 18 to review that Board's recent Great Lakes Public Opinion Poll.

### **4. Work Group Updates and Discussion of 2016/17 Work Plans**

#### *Communication Indicators Work Group (Christina Semeniuk)*

The Work Group report process is in its final stages. The report has been provided by the Work Group Co-Chairs to staff for formatting and final editorial review. It will then be circulated back to the Work Group and SPC Co-Chairs, and transmitted to the Commission for their consideration at the Spring Semi-Annual meeting (week of April 18, 2016). Christina thanked the SPC for their many and varied contributions to the report.

Per earlier Commission direction, two additional indicators (Chemicals of Mutual Concern and Aquatic Invasive Species) will use the report's filters to prioritize the CMC and AIS metrics. Work groups for both indicators from the full SAB have been convened, and the output of their analysis will be transmitted to the Commission as a short supplemental report. The supplemental report should be completed shortly after the Spring Semi-Annual meeting.

The relevance and linkage of the communication indicators effort to the SPC's Information Coordination and Flow project was acknowledged. Through discussion it was also acknowledged that the filters developed through this project are equally applicable to the other ecological and human health indicators, and the report's recommendations address important items such as periodically repeating the prioritization process to account for new monitoring and research findings.

#### *Information Coordination and Flow (Scott Sowa)*

Recent progress includes a successful workshop in Windsor on March 2/3, 2016. The workshop was facilitated by the project consultants (Great Lakes Commission and LimnoTech) and was attended by several SPC and other Great Lakes advisory board members. The workshop was well attended and informative, and an interim workshop report is currently being reviewed. The next phase of the project is to complete two case studies - one for each of the GLWQA's General Objectives on recreational waters and invasive species - to assess how well information is flowing to decision-makers.

SPC members who attended the workshop agreed that the workshop was a success, noting that there was a good panel discussion with decision-makers and discussion about how information flows to them and in what form, and its timeliness, and how they use it to make decisions.

#### *Fertilizer Application Work Group (Mike Murray)*

This project is closely related to the Commission's interest in another phase of the Lake Erie Ecosystem Priority (LEEP), and will examine the influence of commercial fertilizers and manure (and other major sources of nutrients) on the western basin of Lake Erie. The Work Group has developed several related documents for this project, including a scoping document which reviews the overall

issue, and a detailed scope of work for a contractor-led assessment of the relative influence of the major sources of nutrients to the lake. The scope of work was previously approved by the Commission and is currently moving through the IJC contracting process; a request for proposals will be issued by the Department of State in the coming period.

A draft Work Plan has been prepared which proposes to complete additional activities that will inform LEEP 2, including an assessment of watershed models and their ability to distinguish nutrient sources, and an assessment of current monitoring programs' capacity to inform understanding of sources of loads. The timeline for completion of the Work Plan, if approved at the Spring 2016 Semi-Annual meeting, is spring 2017.

Joe DePinto expressed his interest in joining the Work Group.

Through discussion, a number of important themes were addressed:

- (i) There is a substantial amount of ongoing work in this area, including research associated with the 4R program, the University of Michigan's SWAT model analysis of the Maumee, and the Conservation Effects Assessment Project (CEAP).
- (ii) The importance of understanding how the different sources of phosphorus getting into the lake translate into algal response.

**Action:** SPC members are requested to provide their written input on the draft Fertilizer Application Work Plan. Additional Work Group calls will be held to finalize the Work Plan prior to the Semi-Annual meeting.

#### *Energy Work Group (Dave Allan)*

Members were reminded that the Commission has asked that the SPC be prepared, at the Semi-Annual meeting, to advise the Commission on any potential value added work that the IJC might consider with respect to Great Lakes water quality impacts associated with the energy sector. The Work Group has developed a draft Work Plan which proposes a focus on the water quality impacts of electricity generation (air and water waste streams) with limited focus on upstream-downstream considerations and water quantity. A near-term projection is also proposed.

There was substantive discussion on the focus of the Work Plan, and whether that focus ought to be on hydrocarbon transport and related issues of energy export. Redundancy with recent energy-related publications was also discussed e.g., *Journal of Great Lakes Research* 41:1 (2015). There was general agreement that at least some focus on transport was appropriate. The Committee also recalled the outcome of the Commission's decision of the April 2015 Energy Work Plan, which was that the plan needed further scoping (and a leaner budget). The Committee agreed that the draft Work Plan needs further consideration since it does not represent a consensus position of the Committee in its current form.

Another potential priority for the SPC was suggested, not directly related to the energy issue – that of the deterioration of water infrastructure (both water and wastewater).

**Action:** SPC members are requested to provide their written input on the draft Energy Work Plan. Additional Work Group calls will be held to finalize the Work Plan prior to the Semi-Annual meeting.

Dale Phenicie expressed his interest in participating in subsequent Work Group calls.

## **5. Other Business**

Antonette provided an overview of the planned April 26/27, 2016 microplastics workshop being held in Windsor, ON. The workshop originated at the Commission level. Roughly 35 attendees are expected from government, non-government, industry and other sectors and several SAB members will be attending. Expected outputs from the workshop include advice and recommendations on research priorities, and successful programs/best practices related to regulatory, policy and voluntary interventions.

Scott Sowa provided a brief overview of the recent University of Michigan study that was completed collaboratively with other partners including The Nature Conservancy entitled *Informing Lake Erie Agriculture Nutrient Management via Scenario Evaluation*. The study used an ensemble of SWAT models to test a number of scenarios geared to answering the question 'what's it going to take to reduce Lake Erie loads by 40%?'. Scott discussed how the study's findings have been applied to policy issues inappropriately by the popular press. Scott will provide additional information to SPC members via email.

## **6. Next Meeting**

A full Science Advisory Board meeting will be held on the afternoon of April 19, 2016 and an SPC meeting will be held on the morning of April 20. Both meetings will be in-person as part of the IJC Semi-Annual meeting in Washington, DC.

## **7. Adjournment**

The meeting was adjourned at 12:30pm.

*Meeting record prepared by Matthew Child and reviewed by Carol Miller and Jeff Ridal.  
Please forward any errors or omissions to [childm@windsor.ijc.org](mailto:childm@windsor.ijc.org)*

**TAP Report Chapters – SPC Member Advisors**  
**April 12, 2016**

<b>TAP Chapter/Agreement General Objective</b>	<b>Directly Related Agreement Annex (if applicable)</b>	<b>SPC Member Advisor</b>
Objective 1 – drinking water		Carol Miller, John Livernois
Objective 2 – swimming and recreational use		Dave Allan, Clare Robinson
Objective 3 – fish and wildlife consumption		Jeff Ridal
Objective 4 – pollutants	Annex 3 CMCs	Dale Phenicie
Objective 5 – wetlands and habitats	Annexes 7 Habitat and Species	Lucinda Johnson
Objective 6 – nutrients	Annex 4 Nutrients	Bob Hecky, Joe DePinto
Objective 7 – aquatic invasive species	Annex 5 Discharges from vessels, and 6 AIS	Andrea Kirkwood
Objective 8 – groundwater	Annex 8 Groundwater	Clare Robinson
Objective 9 – other substances, materials and conditions	Annex 1 AOCs, Annex 2 Lakewide Management, Annex 9 Climate Change Impacts, Annex 10 (Science – Cooperative Science and Monitoring Initiative), Great Lakes Adaptive Management, and microplastics	Dale Phenicie
Other advice	Annex 10 (Science), Indicators, prevention from harm	Mike Murray, Jeff Ridal