



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

July 18, 2017 – 2:30pm to 4:00pm

U.S. Members	Canadian Members	Commission Staff
Carol Miller (Co-Chair)	Jeff Ridal (Co-Chair)	Matthew Child (Secretary)
Scott Sowa	Bob Hecky	Glenn Benoy (Canadian Liaison)
Mike Murray	Henry Lickers	Li Wang
Lucinda Johnson		
Dale Phenicie		
Joe DePinto		
Dave Allan		

Regrets: Andrea Kirkwood, Christina Semeniuk, John Livernois, Clare Robinson

1. Welcome and Introductions, and Approval of Draft Agenda

The U.S. Co-Chair chaired the call and welcomed everyone to the meeting. Attendance was confirmed. The draft agenda was approved by consensus.

2. Stressor Interactions

Dave Allan reviewed the draft work plan circulated with the agenda, noting it incorporates preliminary input already received from SPC members. The work plan contextualizes stressor interactions, highlights previous work, and describes five tasks (defining terms, literature review, identification of a subset of stressors for deeper analysis of interactions, expert workshop, and project reporting). The budget and timeline have not been developed, although the project would require the services of a contractor and probably could be completed within 12 months of project initiation.

Through discussion, there was general agreement that the issue of stressor interactions is gaining attention and interest, and the topic is viewed as important but information and knowledge is underdeveloped. The ‘value proposition’ of the project is to directly examine select stressor interactions from an empirical point-of-view, and identify interacting stressors that are a high priority for science and management attention. Ultimately, the project can provide insights to mitigate surprises or unintended consequences. Because the current management paradigm

emphasizes single stressors, the project will advance our understanding and capacity to address multiple and interacting stressors.

Several specific suggestions for further improving the work plan included:

- Highlight issue of chemical interactions and human health.
- Include a more fulsome summary of the state of knowledge on stressor interactions in freshwater environments.
- Advance the literature review to include a discussion of the most relevant examples or case studies in the Great Lakes.
- In addition to advancing knowledge of stressor interactions that can be empirically examined in the short term using available data, also assess the availability of data to identify and understand other stressor interactions i.e., where longer term improvements in monitoring, surveillance and research are required.
- Consider the spatial variability of stressor interactions across the lakes, and to the extent possible consider how known lake conditions can be attributed to interacting stressors.
- The words and tone that gets used is important.
- The work plan could highlight ongoing SPC projects that provide examples of how interacting stressors influence different ecosystem services.

There was general support for the work plan being further developed for submission to the Commission for approval at the IJC's Fall Semi-Annual Meeting in October, 2017.

The following SPC members self-identified to form the Stressor Interactions Work Group: Dave Allan, Bob Hecky, Henry Lickers, Scott Sowa, Mike Murray, Lucinda Johnson, and Joe DePinto.

Action: Additional members who would like to join the Stressor Interactions Work Group should contact Dave Allan and/or the Secretary.

The draft work plan will be revised to reflect input received, and the work group will hold a call to discuss the revised version in time for SPC approval at their September, 2017 SPC meeting.

3. Coordination with other Advisory Board Activities

Source Water

SPC members are collaborating with HPAB on its gastrointestinal illness project, and both HPAB and SPC members are participating on the Great Lakes Commission's Blue Accounting project that is developing metrics associated with source water quality.

Benefits and Risks of Fish Consumption

The HPAB has proposed a joint HPAB/SPC effort on the benefits and risks of fish consumption, and a preliminary draft was circulated with the meeting agenda. The work plan will include consideration of recent Great Lakes research on n-3 fatty acids and chemical mixtures driving fish consumption advisories, with an initial focus on Akwesasne members in the Cornwall, ON and Massena, NY area. Through discussion, it was confirmed that mortality and morbidity metrics of the affected community are likely to be considered, although caution was expressed to keep the focus as a synthesis assessment, and not a full epidemiological study with its attendant requirements. It was

suggested that the project could include a focus on sustainable fisheries and assess issues associated with imported fish (e.g., carbon footprint, consumption advisories). The complexity of sustainable fisheries was acknowledged, as was the applicability of the project to other parts of the Great Lakes.

Jeff Ridal, Henry Lickers and Carol Miller self-identified to join the proposed work group. Michael Murray expressed interest in providing comments on the workplan.

Water Quality Board CAFO Project

The SPC has received a request to join the WQB project assessing confined animal feeding operations policies and programs. Dale Phenicie self-identified to join the WQB work group.

Upcoming Advisory Board Co-Chairs call

The agenda for a July 20 conference call with the IJC's Great Lakes advisory board co-chairs was circulated with the meeting agenda. It was clarified that the main purpose of the call is to ensure ongoing communication and collaboration, as appropriate, between the advisory boards. In response to a question, it was clarified that the proposed 2018 nutrient workshop relates to the Commission's interest in convening a workshop to conduct a synoptic review of several or all of the IJC advisory boards' current nutrient-related projects.

4. Work Group Updates

Information Coordination and Flow (Scott Sowa)

The project is on track for Commission review at the IJC Fall Semi-Annual meeting in October. A draft report outline with recommendations is nearly ready for work group review. The work group will provide the draft work group report to the SPC for review and approval in September.

Fertilizer Application (Mike Murray)

LimnoTech as submitted its final draft technical report, which was reviewed during a recent work group call. The full SAB has been provided with a copy of the report, and written comments are invited by July 24. The technical report will be finalized in early August, and a draft work group report will be prepared and circulated for SPC review in September. The project is on track for Commission review at the IJC Fall Semi-Annual meeting. Since the IJC Semi-Annual meetings are intensive with limited Commissioner face time for advisory board report review and discussion, SPC project presentations via webinar in advance of the Fall Semi-Annual meeting may be worth exploring.

Action: Secretary to explore opportunities to present the results of the ICF and Fertilizer Application projects to Commissioners via webinar.

Energy Transportation and Water Quality (Mike Murray)

The project will synthesize existing knowledge on potential environmental impacts to water quality and the ecosystem in the Great Lakes region associated with the transport of unrefined liquid hydrocarbons. Recent developments on the topic include the Crude Moves Symposium held in June, and the recent release of the Michigan Pipeline Safety Advisory Board contractor report on Line 5 alternatives. LimnoTech has been retained for the SPC project and a draft science assessment is expected in mid-September. The technical report will be finalized by November 1. The work group report is scheduled for completion in mid-December, 2017.

Declining Offshore Lake Productivity (Bob Hecky)

This project will investigate the role of nearshore retention of nutrients and implications for offshore productivity. LimnoTech has been retained, and four related project tasks will be completed. The first task (literature review) is well underway, and the work group met earlier in the day to discuss the assembled literature. The next task is to review and update data on fish communities and biomass, which is expected to be completed by late autumn. A review of models and assessment of ecosystem changes in response to nutrient scenarios, and technical synthesis report, are expected by March, 2018.

Great Lakes Early Warning System (Matthew Child for Lucinda Johnson)

GLEWS is a joint SAB project which was discussed in some detail at the May 2017 SPC and SAB meetings. That input was incorporated into the project scope of work, which was reviewed during a recent work group call. Several new work group members joined that call – including WQB, HPAB, and external members – and were supportive of the project direction and tasks. A final request-for-proposal document has been forwarded to IJC’s contracting staff for review, and then it will be sent to potential bidders. Additional suggestions for potential Canadian bidders would be welcomed.

5. Upcoming Meetings

A Doodle poll will be sent to confirm a date for a mid- to late-September SPC call.

The next face-to-face meeting is scheduled for October 25 (full day of meetings of SPC and SAB) and October 26 (Commission appearance in the morning). The Secretary will provide meeting details in an Outlook calendar request.

6. Adjournment

There being no other business, the meeting was adjourned at 2:30pm.

*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*