



**IJC Science Advisory Board – Science Priority Committee
Thirty Sixth Meeting
Videoconference Meeting Summary**

April 12, 2021 - 1:00-3:00pm

U.S. Members	Canadian Members	Commission Staff
Carol Miller (Co-Chair)	Gail Krantzberg (Co-Chair)	Matthew Child (Secretary)
Mike Murray	Karen Kidd	Rob Phillips
Mic Isham	Jerome Marty	Victor Serveiss
Drew Gronewold	Mike McKay	Li Wang
Mike Slimak	Maggie Xenopoulos	Raj Bejankiwar
	Nandita Basu	

Regrets: Lucinda Johnson, John Livernois, Joe DePinto
Guest: Jen Vanator

1. Welcome and Introductions, and Approval of Draft Agenda

The Co-Chairs welcomed members to the videoconference. A special welcome was extended to new member Mike McKay, and Gail Krantzberg was congratulated on her appointment as the Canadian Co-Chair.

The Secretary clarified that the meeting agenda packet should have included the February 3, 2021 meeting record that was previously circulated to members, instead of the October 22, 2020 meeting record.

The draft agenda was approved by consensus.

2. Strategic Positioning

2023 Triennial Assessment of Progress & Board Mission Compliance

The purpose of the TAP report as described in Article 7(k) of the Great Lakes Water Quality Agreement was reviewed. The Board’s mandate and functions were reviewed, and it was noted that Board mission compliance is linked to the TAP discussion because both our mission and TAP are grounded in the Agreement. In the discussion that followed a number of points were raised:

- Board members are encouraged to think about how the SPC’s work can contribute to an assessment of the Parties’ progress.

- For all new work plans, an explicit consideration should be how the project can inform and support the next TAP. Structuring the SPC's work so that it supports the TAP does not have to be an exclusive focus of our work, but it should be a part of it.
- The IJC's assessment of progress should consider multiple lines of evidence, and not rely solely on the Progress Report of the Parties and the State of the Great Lakes report.
- Some of the ongoing board projects have the potential to illuminate the Parties' progress on monitoring and research priorities e.g., Great Lakes Science Plan project.
- Sometimes Board products take a while to percolate; the SPC may want to take a longer-term view of how our projects can inform an assessment of progress.
- The process for project selection should be objective and minimize existing biases towards certain types of projects.
- The Parties' indicators need greater transparency, and the technical reporting must accompany the highlights report.
- The SPC is generally doing a good job of developing advice for the Commission's consideration, but the part of our mandate where we respond to matters referred from the Commission and Water Quality Board is not being exercised.
- There is concern that the SAB's advice is not being actioned by the Parties, and there was general agreement that all the advisory boards need continue to develop strategies to maximize the efficacy of our advice.

Commissioner Engagement with Board

It was observed that since current Commissioners were appointed, the WQB and HPAB have invited lead Commissioner participation in meetings, and the WQB Co-Chairs have additional calls with the lead Commissioners. Through discussion, there was general agreement that the SPC would benefit from regular interactions with lead Commissioners, with details to be developed.

3. Ongoing Project Updates

Great Lakes Science Plan (Gail Krantzberg)

A two-round survey was completed in the fall of 2020, and a white paper was developed by the contractor summarizing the results. Key research question and science gaps will be explored through two, two-half day workshops – a disciplinary workshop is planned for April 8+9, 2021 and a lake-by-lake workshop is planned for April 15+16. The project is on track to be completed by December 2021.

Great Lakes Early Warning System – Phase 2 (Staff on behalf of Lucinda Johnson)

Three work group meetings have been held to identify potential case study topics to examine a known stressor, potential stressor and the process for identifying an unknown stressor. In the coming weeks the 'long list' will be evaluated by the core team to select the case studies and develop the case study approach. In response to a question, it was clarified that the project will consider both positivist science approaches and Traditional Ecological Knowledge.

Nutrients Synthesis (Michael Murray and John Livernois)

A preliminary literature review has been prepared which summarizes over 80 papers on the western Lake Erie basin and highlights recent IJC and SAB reports. The focus of the analysis is to identify Lake Erie data gaps and uncertainties. Lake Ontario is also considered insofar as the project includes an

analysis of uncertainties of Lake Erie loads to Lake Ontario. In response to questions the following was clarified:

- The project will consider science gaps and uncertainties associated with beneficial management practices including nature-based solutions e.g., buffer strips, wetland restoration, etc.
- The Annex 4 Co-Chairs were consulted during work plan development to refine project scope and ensure project relevance.

4. Potential New Project Work Plans

Board members are invited on an ongoing basis to identify potential new work plan ideas for consideration. So far, two work plan ideas have been identified for the next round of funding expected in the first quarter of 2022.

Winter Limnology (Maggie Xenopoulos)

This work plan topic is proposed as a full SAB project with Maggie Xenopoulos and Michael Twiss as co-leads. There is a growing appreciation of the extent of biological activity in large lakes during the winter, and there is a great need to fill science gaps especially in an era of changing climate. The project proposes to build on the results of a 2019 Cooperative Institute for Great Lakes Research workshop. Project activities are envisioned to include a survey of ongoing winter sampling and research activities, compilation of existing datasets, and identification of priority science needs and gaps related to winter ecology.

In the discussion that followed it was clarified that the project will be designed to inform management needs. It was noted that the project aligns with the Commission's 2019-2024 Priorities of climate change, and transferability of findings to other transboundary systems.

Economic Valuation of Ecosystem Services (Staff on behalf of John Livernois)

This project was proposed for the last work plan cycle, but was deferred pending the completion of a related project by the Michigan Department of Environment, Great Lakes and Energy. That study is now wrapping up, as is a related literature review completed for the IJC's socio-economic indicators project. These activities highlight that although there have been several large-scale ecosystem valuation studies that utilized the benefits transfer method (using benefit measures that have been estimated elsewhere and applying them to the Great Lakes), very few studies have done an original valuation analysis anywhere in the Great Lakes.

To maximize the impact and usefulness of a full-scale valuation study, an initial step to scope the project would be appropriate. The purpose of a scoping study would be to determine what ecosystem services can be and should be evaluated, and where and how. The scoping study could include finalizing the recent literature review, a survey of experts and interested parties, and convening survey respondents (and potentially others) to review survey results, discuss potential topics and information needs, and develop the operational details associated with advancing those.

5. Board Appearance and Science Advisory Board Meeting Preparation

The draft Appearance PowerPoint presentation was reviewed. In addition to the messages included in the draft, there was general agreement that the importance of the 50th Anniversary of the Agreement and SPC's support of revising the Great Lakes Atlas and Resource Book to commemorate

the Anniversary, should be included. There was also general agreement that opportunities to increase the impact and efficacy of our recommendations should be discussed with Commissioners.

The meeting agenda for the April 14, 2021 Science Advisory Board meeting was reviewed, and it was noted that those agenda items align well with the items discussed at this meeting.

6. Other Business & Adjournment

It was announced that the Society of Canadian Limnologists and the Canadian Conference for Fisheries Research are combining to create the Society of Canadian Aquatic Sciences. The new organization will have a broader mandate and strong aquatic focus.

There being no other business, the meeting was adjourned at 3:00 p.m.

*Meeting record prepared by Matthew Child and reviewed by Carol Miller and Gail Krantzberg.
Please forward any errors or omissions to matthew.child@ijc.org*