



**IJC Science Advisory Board – Science Priority Committee
Fifty-third Meeting
Virtual Meeting Summary**

August 6, 2024 – 10:00am-11:30am Eastern Time

U.S. Members	Canadian Members	Commission Staff
Lucinda Johnson (Co-Chair)	Gail Krantzberg (Co-Chair)	Matthew Child (Secretary)
Donna Kashian	John Livernois	Lyne Sabourin
Laura Johnson	Jerome Marty	Jo Werba
Margaret Noodin	Maggie Xenopoulos	Rachel Wyatt
	Mike McKay	Allison Voglesong Zejnati
	Nandita Basu	Heather Stirratt
		Raj Bejankiwar
		Mark Burrows

Regrets: Bob Sterner, Drew Gronewold, Karen Kidd

1. Welcome and Introductions

The Canadian Co-Chair welcomed members to the meeting, and round table introductions were completed. The April 10, 2024 meeting record was acknowledged. The meeting agenda was approved by consensus.

The draft members directory and letter of recognition were reviewed.

Action: The Secretary will upload the members directory to GoogleDrive, and members are requested to fill in their information.

Action: To have the letter of recognition sent to their institution, members are requested to provide the names, titles and email addresses for individuals who should receive the letter.

2. Status of Ongoing SPC Projects

Microplastics (staff on behalf of Karen Kidd)

Since the last SPC meeting the contractor has submitted the final project report, and the project co-leads have prepared a draft work group report. Once the work group has reviewed the report it will be forwarded to the SAB for review. In addition, the project co-leads have made several presentations to various groups including the Water Quality Board.

Great Lakes Winter Science (Maggie Xenopoulos)

The draft project report was recently submitted by the contractor, and it will be reviewed by the core team soon, followed by the work group. In addition, the project was profiled during presentations at IAGLR in May and ASLO in June.

Traditional Ecological Knowledge (Jerome Marty)

Four additional listening sessions are planned prior to the end of 2024, including at Thunder Bay (Ontario), London/Windsor (Ontario), Grand Portage (Minnesota), and Sault Saint Marie (Michigan). In response to questions, it was clarified that a key audience is the IJC itself, and that project outputs will need to be thoughtfully prepared to ensure that the Indigenous communities' voices are heard. It was noted that discussions need to be carefully contextualized because all Indigenous communities are different. Complementarity between this project and other ongoing IJC activities (i.e., Indigenous Circle of Experts) was acknowledged.

Great Lakes Atlas - Scoping (Lucinda Johnson)

A revised request for proposals was sent to several qualified bidders, and proposals were received by the deadline. Proposals will be reviewed in the coming weeks.

Great Lakes Early Warnings System – Pilot Project (Lucinda Johnson)

The project envisions a Steering Committee that will guide the overall project, as well as two work groups who will examine the case study topics (nitrogen and waterborne anti-microbial resistance). Two separate requests for proposals have been submitted for contractor procurement – one contractor will complete tasks associated with the case studies, while the second contractor will bring a systems analysis and review perspective to ensure overall function as an early warning system. It was noted that a public webinar was held to disseminate findings from the GLEWS Phase 2 project, which was attended by over 200 people.

Great Lakes Science Plan (Gail Krantzberg)

The first project Engagement was held on June 10+11 as a hybrid event, with a focus on governance. There was consensus on a preliminary governance model that will require further refinement. The second project Engagement is planned for October 10+11 as a hybrid event, which will focus on monitoring, modeling and forecasting. Time will be dedicated at that event to develop preliminary cost estimates for associated research infrastructure and human resource needs.

3. 2025/26 Work Plans

Members discussed the work plan topics provided previously.

Ecosystem Services Valuation (Phase 2)

The project would advance the Phase 1 recommendation, namely to focus on valuing coastal wetlands' nutrients sequestration function. Due to an anticipated change in SPC membership, this project would logically be advanced once a new member was appointed with expertise in environmental economics.

Water Quantity/Quality Linkages

This project would build on the work of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrological Data to advance opportunities to integrate water quantity and quality considerations, particularly in light of climate change. Most federal agencies are running physical

process models on the land surface, and across the lakes, but the incorporation of water quality (particularly pollutant fate and transport algorithms) within those state-of-the art models (e.g. FVCOM, WRF-Hydro, GEM-MESH, NEMO, etc.) is limited. This project could help advance progress towards integration of water quantity and quality modeling.

Science for Water and Climate Solutions

This project could explore landscape level solutions to water quality issues, possibly with an emphasis on wetlands, by describing existing efforts and modeling capabilities and synthesizing knowledge needs and gaps related to management responsibilities. In the discussion that followed it was noted that wetlands are a nature-based solution for carbon sequestration, flooding, etc. and therefore are fundamental to climate adaptation. Complementarity between this topic and the Ecosystem Services Valuation topic was noted.

Greenhouse Impacts on Water Quality

The greenhouse sector is large and growing, and greenhouse impacts on water quality are becoming better understood but many science gaps and needs remain. Although those impacts are primarily felt in the Lake Erie watershed, large greenhouse complexes are located in other watersheds and on both sides of the border. The project could identify science gaps and needs, and include an examination of water management challenges related to the greenhouse sector. In response to questions, it was noted that the industry has an association who would be invited to participate on the work group; other suitable work group members include representatives from Agriculture and Agri-Food Canada and the Essex Region Conservation Authority, among others. Linkages to the GLEWS Pilot Project was also noted as it relates to the nitrogen case study.

Assessing the Efficacy of Beneficial Management Practices

The project could update the BMP efficacy work the SAB did as part of the 2014 Lake Erie Ecosystem Priority report, to improve connections between the research and conservation communities. The scope of the project could be expanded to include other shallow eutrophic compartments (e.g., Saginaw Bay, Green Bay, etc.) to ensure relevance of the outputs for several regional management districts. Through discussion, parallels and potential synergies between this topic and the Science for Water and Climate Solutions topic were noted. A blended project could be considered; it would need to be carefully scoped, perhaps initially focusing on rural BMPs with urban BMPs a potential second phase. The relevance of the recent SAB/WQB Nutrients Synthesis report was noted.

Action: Members who are interested in advancing their work plan topic for the next cycle are requested to prepare a one-page description by September 9, for discussion during the next SPC call.

Through general discussion about work plans, it was noted that many of the proposed topics include a strong synthesis component, and the SPC might benefit from additional information on approaches to synthesis research. It was also noted that opportunities exist to increase consideration of underserved, economically disadvantaged and Indigenous communities into SPC projects, and knowledge co-production and knowledge translation methods can be used to help achieve this.

4. Operational Considerations

The recent public call for Advisory Board nominations resulted in 42 applications to the SAB. Staff have been working with Co-Chairs to identify a preferred candidate, and Commissioners are expected to make an appointment decision at the IJC Executive Meeting in September 2024.

The SAB Directive specifies that “(e)ach Committee will convene every other month and hold at least two meetings in-person on an annual basis, with one meeting being in conjunction with the full SAB at a semi-annual meeting. The other meeting will take place in Windsor or at another location in the Basin. The remainder of the meetings may take place by teleconference or videoconference”. Due primarily to travel budget pressures across all IJC Boards, all Boards will return to the meeting pattern described in their Directive by alternating meetings at the Spring and Fall Semi-Annual meetings. For SPC, this means that starting in 2025 the SAB will meet in-person in the spring at a location in the Great Lakes basin, and in the fall at the IJC Semi-Annual in Ottawa. For 2026, the SAB will meet in-person at the Spring Semi-Annual in Washington, DC and in the fall at a Great Lakes basin location, and so on and so forth.

In response to a question, it was clarified that Commissioners recently discussed a refresh of the Commission’s strategic priorities. Commissioners are expected to share the outcomes from their discussions soon. In the meantime, the Boards should expect that the previous priorities related to Indigenous engagement, and climate change, will remain on the list.

Staff provided an update on the Health Professionals Advisory Board’s Knowledge Translation project. Margaret Noodin has kindly agreed to join the project work group. The project will work towards identifying tangible strategies, tactics and communications approaches to reach diverse audiences more effectively, and therefore it will be relevant for the SAB as well.

5. Other Business & Adjournment

A Doodle poll will be circulated to schedule the September meeting of the SPC.

There being no other business, the meeting was adjourned at 11:35 a.m.

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