



**IJC Science Advisory Board – Science Priority Committee
Forty-ninth Meeting
Meeting Summary**

October 17, 2023 – 9:00am-12:00pm Eastern Daylight 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 |
| Drew Gronewold | Jerome Marty | Jo Werba |
| Laura Johnson | Mike McKay | Heather Stirratt |
| Joe DePinto (virtually) | Karen Kidd | |
| | Nandita Basu | |
| | Maggie Xenopoulos | |

Regrets: Bob Sterner, Margaret Noodin

1. Welcome and Introductions

The Canadian Co-Chair welcomed members to the meeting, and round table introductions were completed. The September 15, 2023 meeting record was acknowledged. The meeting agenda was approved by consensus.

2. Status of Ongoing SPC Projects

Great Lakes Early Warning System – Phase 2 (Lucinda Johnson)

The Great Lakes Early Warning System (GLEWS) work group report is nearly finalized and will be circulated to the SAB and WQB for ‘red flag’ review soon. The report recommends an organizational approach and decision framework, and that a pilot project be undertaken. In the discussion that followed several points were raised:

- A recent United Nations project on early warning systems could hold insights for the Great Lakes.
- GLEWS has been conceptualized to address water quality and water quantity issues.
- A Canadian Adaptive Flood Forecasting and Early Warning System is under development and could hold insights for GLEWS.

Microplastics (Karen Kidd)

The project was initiated in September, 2022 and since that time the contractor has completed a literature review and the first of two workshops has been held which focused on the development of a coordinated monitoring framework. The workshop included participants from the Great Lakes, Chesapeake Bay, the Pacific Northwest and southern California. A second workshop focused on risk

assessment is being planned for January, 2024. In response to a question, it was clarified that the second workshop will focus on ecological risk assessment, and that a potential Phase 2 project could focus on human health risk assessment. It was also noted that EPA's Office of Research and Development has microplastics work ongoing.

Great Lakes Winter Science (Maggie Xenopoulos)

Two virtual project workshops have been held (May and September, 2023) which assessed winter science gaps/needs and research coordination. The workshops were supported by contractor reporting that included a literature review and description of publicly available winter science databases. A third workshop is planned for early 2024 that will be held in-person and will synthesize and expand on the findings of the first two workshops. In response to a question, it was clarified that the project is focusing primarily on the Great Lakes proper.

Traditional Ecological Knowledge (Jerome Marty)

A literature review and engagement plan have been previously developed by a contractor. A listening session was held in September 2022 with the Akwesasne community. Five additional community listening sessions are planned, although some of the communities are seeking assurances of a base level of cultural competency for SAB and IJC attendees. In the discussion that followed there was general agreement that aligning Indigenous engagements for all advisory board project needs is appropriate, and that cultural competency training for SAB members would be helpful. Additional discussion is expected as part of the relevant SAB meeting agenda item.

Ecosystem Services Valuation – Phase 1 (John Livernois)

The project workshop was held in June, 2023 and the work group has provided feedback on the draft contractor report. The work group will be meeting soon to confirm a topic for Phase 2 consideration, which will be selected based on several criteria e.g., what is the topic that we know the least about? Will findings be generalizable? Is the topic management and policy relevant?. The largest knowledge gaps are for non-use values and potential topics for Phase 2 consideration include wetlands, Areas of Concern remediation and harmful algal blooms.

Great Lakes Science Plan (Gail Krantzberg)

A project Collaborative (i.e., work group) is being formed to represent diverse interests including agencies, universities, First Nations and Tribes, and other stakeholders. A contractor has been selected to support the Collaborative and to organize and implement six workshops/convenings that will inform the Science Plan. The sequencing and content of workshops is still being developed and will include science gaps and needs (and how traditional knowledge can inform them), appropriate governance arrangements, and implementation costs.

Great Lakes Atlas - Scoping (Lucinda Johnson)

The project Work Group co-chairs (Lucinda Johnson and Jon Allan) have been working with staff to identify potential work group members. Once the work group is formed, the content and format of the Atlas will be developed considering its end users. The contracting process is expected to proceed in late 2023. Through discussion it was confirmed that the Atlas will be primarily a digital product, and opportunities for data visualization will be explored as part of the scoping process.

3. Advancing New Board Projects

Several potential work plan topics for the next funding cycle were discussed, as summarized below. The GLRO Director noted that guidance will be developed soon for advisory boards to consider in developing their work plans.

Great Lakes Early Warning System (GLEWS) pilot project (Lucinda Johnson) – The GLEWS co-chairs propose that a GLEWS pilot project work plan be developed to test the organizational approach and decision framework developed in earlier phases of the project. Through discussion it was clarified that the topic selected for the pilot would ideally be multinational in focus and could be drawn from one of the Phase 2 project case studies or an ongoing advisory board project e.g., beach closings and microbial monitoring.

Connecting Waters (Mike McKay) – the RCC’s earlier work on connecting waters could be expanded through an SAB work plan to establish a Collaborative to focus and prioritize science, monitoring and management actions in connecting waters. Establishing a Collaborative was a central recommendation of a July 2023 workshop supported by the Cooperative Institute for Great Lakes Research. Through discussion it was noted that Annex 2 of the Agreement assigns responsibility for upstream connecting waters to individual LAMP Binational Partnerships.

Water quantity/quality linkages (Drew Gronewold) – water quantity, levels and flows in the Great Lakes have been assessed since the 1950s by the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrological Data. Engaging with the Coordinating Committee, particularly related to the connecting waters, may yield good opportunities to integrate water quantity and quality considerations e.g., hydrodynamic modelling to inform sediment or contaminant transport. In the discussion that followed it was noted that the SAB could learn more about the Coordinating Committee through a guest presentation at an upcoming Semi-Annual meeting.

Science for water and climate solutions (Nandita Basu) – the SAB could further explore landscape level solutions to water quality issues. For example, wetland protection and restoration relies on disparate communities that don’t always interact effectively (wetland managers, agricultural producers, etc.). A project could describe existing efforts, and synthesize knowledge needs and gaps related to management responsibilities. In the discussion that followed it was noted that the SAB’s contributions to the Lake Erie Ecosystem Priority (2014) report could be revisited, specifically as it relates to the efficacy of beneficial management practices.

4. SPC Appearance & SAB Meeting Preparations

Minor adjustments to the draft Appearance presentation slides were discussed. The SAB meeting agenda was reviewed.

5. Other Business

Gail and Drew provided an overview of the recently announced Global Center for Understanding Climate Change Impacts on Transboundary Waters (learn more [here](#)). The Global Center is supported by grants from the National Science Foundation, the National Sciences and Engineering

Research Council, and the Social Sciences and Humanities Research Council. The Principal Investigators are pursuing IJC participation on the Global Center's Advisory Board.

The meeting was adjourned at 11:55 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*