1. Welcome and Introductions, and Approval of Draft Agenda

The SAB Co-Chairs welcomed everyone to the videoconference, and round table introductions were made. The April 22, 2020 meeting record was acknowledged and the October 22, 2020 agenda was approved by consensus.

2. Great Lakes Science Plan

The Work Group Co-Chairs presented the purpose, approach and status of the project (see attached PowerPoint slides). The second round of a three-round set of surveys is currently being developed. It will be circulated widely to try to ensure a diversity of respondents.

Through discussion a number of issues were raised:

- Investments in the Great Lakes and freshwater research and monitoring is only a small fraction of the investments made in ocean research and monitoring.
- Accessing Indigenous perspectives is very difficult in a pandemic; the most effective way is face-to-face, preferably over a meal.
• Area of Concern coordinators are likely to have insights on how to access Indigenous and other perspectives for the geographic areas included in AOCs.
• The surveys and virtual workshop(s) should engage leadership in major science organizations.

3. Great Lakes Early Warning System (Phase 2)

The Work Group Co-Chairs provided an overview of the project, referencing the project work plan that was distributed with the meeting materials. Phase 2 was approved earlier in the year and a contractor (LimnoTech and AECOM) was confirmed in September, 2020. The project will advance the work started in Phase 1, which provided an overview of the components of existing early warning systems and recommended an organizational approach.

Phase 2 will summarize existing early warning systems and their approaches, and develop analytical approaches and a risk assessment framework that will be applied through three case studies that examine a known stressor, potential stressor and unknown stressor. Both positivist science and Traditional Ecological Knowledge will be emphasized.

It was suggested that the project consider geopolitical threats.

**Actions:** Members are requested to send information and relevant literature on existing early warning systems.

Members are requested to send suggestions for case studies that address known, suspected, and unknown stressors.

4. Other Board Projects

Brief oral updates on ongoing SPC and RCC projects were provided.

**Nutrients Synthesis (Michael Murray and John Livernois)**
The project was approved earlier this year and a contractor was recently confirmed. A Work Group is being formed and suggestions for external members would be welcomed. The project is being coordinated with RCC’s Phase 2 Great Lakes Nutrient Adaptive Management work plan which is currently under development. Debbie Lee of RCC is interested in joining this Work Group.

**Great Lakes Hydrological Conceptual Model (Sandra Eberts)**
This is the second phase of the project and will solicit input on groundwater practitioners’ needs to develop a science management framework, and develop a conceptual model. The initial Work Group meeting is scheduled, and includes the participation of Annex 8.

**Great Lakes Connecting Channels (Michael Twiss)**
The contractor report is complete, and the Work Group report will be finalized soon. The Work Group will carefully plan report dissemination activities to ensure the profile of connecting channels is raised.
Science Vessel Workshop (Mark Burrows)
The workshop is typically held in January, and due to the pandemic it will be held virtually in 2021. A contractor is in place to complete annual updates to the website.

5. New Work Plans

Traditional Ecological Knowledge (Mic Isham and Jerome Marty)
The draft Traditional Ecological Knowledge (TEK) work plan that was circulated with the agenda was reviewed and discussed. The work plan focuses on identifying obstacles and opportunities to improve incorporation of TEK into IJC advice, and improving Indigenous engagement on IJC boards. Preparation of the draft work plan considers related IJC Indigenous engagement activities, and a TEK guidance document being developed by Annex 10.

The Work Group has received a list of other Great Lakes Advisory Board members who are interested in the topic, and they will be consulted to ensure cross-board collaboration. A final Work Plan will be developed by the end of the calendar year. Through discussion the following points were made:

- In addition to Annex 10, some individual agencies are also working on TEK related matters so aligning efforts once the Work Plan is approved will be important.
- There are other watersheds across the transboundary where TEK is relevant e.g., Souris River.
- The Health Professionals Advisory Board project on fish consumption advisories at Akwesasne may provide insights that can be applied to the TEK Work Plan.

Great Lakes Nutrients Adaptive Management (Phase 2) (Debbie Lee)
The Phase 2 project builds on the Phase 1 project results, which included an assessment of the adaptive management process in contributing to the forty percent phosphorus load reduction target for Lake Erie. Phase 2 will complete an evaluation of institutional arrangements to effect ecosystem management through adaptive management in Lake Erie. Work plan development is being coordinated with the SPC’s Nutrients Synthesis project, since both include a focus on Lake Erie Domestic Action Plans.

Citizen Science (Chris Winslow)
The Work Plan is motivated by an increasing interest in community involvement in environmental monitoring. The Work Plan proposes an initial focus on compiling existing citizen science resources to evaluate water quality, and the compilation of state/provincial/federal guidelines on useful and credible data that can be applied to educational, university, and regulatory contexts and needs. Water quality monitoring will be the main focus, but the Work Plan may also consider ecosystem monitoring e.g., marsh monitoring.

Jeff Ridal and Jerome Marty volunteered to join the project Work Group.

6. Coordination of SPC and RCC Appearances

Triennial Assessment of Progress Report
Board members were advised that Commissioners recently approved 2020 TAP report content. An embargoed version of the report will be provided to the Board Co-Chairs prior to public release.
For the 2017 and 2020 TAP reports, Board involvement was primarily limited to draft report review and input. Commissioners have asked the Boards to consider how they can contribute to the 2023 report. Through discussion, there was general agreement that the monitoring priority discussed by the Great Lakes boards could be advanced.

**Efficacy of IJC Recommendations and Advice**

Another theme that could be pursued for a subsequent TAP report, or as a stand-alone analysis, is improving the efficacy of IJC advice and recommendations, which could be considered by asking questions like:

- How can we get the governments to pay more attention to the recommendations the IJC sends them?
- What can the Boards do differently?
- What can Commissioners do differently?
- How do we overcome the resistance we’ve experienced?

Through discussion additional suggestions were offered:

- Efficacy would likely improve with more face-time with agency staff; sending emails with attached reports is not enough.
- One potential audience includes the recently announced U.S. Water SubCabinet.
- The Boards should make sure they are not duplicating work that is already being done by the governments.
- The SAB could consider establishing a Work Group to focus on improvement of Board and Commission efficacy.

**50th Anniversary of Agreement**

The SPC is of the view that the 50th Anniversary of the Great Lakes Water Quality Agreement presents a unique opportunity for public outreach and engagement related to water quality successes and challenges. Due to time constraints the 50th Anniversary was not discussed further.

7. **Other Business & Adjournment**

There being no other business, the meeting was adjourned at 3:20 p.m.