



Team Meeting

Notes

Attendees:

In-person: Chris Winslow, Carl Platz, Jason Borwick, Ram Yerubandi, Sandra Eberts, Sergio Paulo, Val Klump, Rebecca Rooney

Staff: Lizhu Wang, Heather, Matthew Child, Oliver Dumville, Rachal Wyatt, Allison Voglesong Zejnati, Mark Burrows

1. Welcome – Round table introductions, approval of agenda, and approval of last RCC meeting summary.
 - Co-chairs welcomed attendees.
 - Draft agenda was approved as presented.
 - April 2023 RCC Meeting Summary was approved.

2. On-going project progress update
 - GL Early Warning System

The phase-1 of the project report was transmitted to the Parties in 2020. This report focused on an organizational approach and included the recommendation that the IJC should create a GLEWS that would operate as an entity reporting to the Great Lakes Water Quality Board. The IJC would be responsible for GLEWS oversight and ensure that the IJC Commissioners are aware of emerging issues. To function appropriately, a GLEWS requires highly qualified personnel and resources to assemble, assess, rank and report on emerging threats. It recommended that GLEWS be supported by subject matter experts provided by the Parties. The IJC would serve the role of oversight by convening additional highly qualified personnel to evaluate the effectiveness of the GLEWS.

The phase-2 of the project is to review early warning system analytical approaches, develop a decision framework, complete five case study analyses for each stressor class (biological, chemical, nutrients, climate, human/behavioral), and convene an expert workshop to review interim project findings, evaluate the analytical techniques and decision framework, and the degree to which the proposed approaches can be operationalized using available data and information.

The phase-2 contractor report was recently received and reviewed by the workgroup. The workgroup has completed inputs to finalize the contractor report. The workgroup

leads are in the process of developing a manuscript. It has been decided that the workgroup will develop a brief workgroup report to summarize study process, findings, and recommendations. RCC members will receive a version of the summary report within a couple of months for review and approval. There were some discussions on next phase of the project, and it has been proposed to conduct a pilot study around specific type stressors. The ideas of development of a pilot study will be further socialized.

- *Governance of Nutrient Adaptive Management*

The contractor project report has been completed. The workgroup adapted the contractor report as a board report. The workgroup has developed a Foreword, which will be inserted into the report to emphasize the findings and recommendations of the project. Staff is in the process of development of a Briefing Note and a transmittal letter signed by the RCC Co-chairs, which will be submitted along with the report to the Commissioners for approval.

The workgroup and staff have collaboratively developed a unified engagement and follow-up plan that identifies key audiences, tactics, and messages for jointly publicizing this report alongside the recently approved report by the SAB-SPC. Commissioners previously approved this plan when the SAB-SPC report was approved. SAB-RCC members are participating on the committee of workgroup and staff that is currently planning the joint roll-out of the two reports, which will occur following Commissioner approval of this report.

- *Community Science*

The phase-1 report has been completed. Since the only recommendation of this report is to develop a community science handbook, the workgroup has decided not to submit the report to Commissioners until the completion of a phase-2 report. Chris will add an executive summary to the report.

The objectives of the phase-2 project are to: develop a high-level outline or scope for an accessible community science handbook that is specific to the tributaries, nearshore, and open water areas of the Great Lakes, outline a plan for IJC (and/or sister commission) to serve as a facilitator of active transboundary community science information exchange, and identify a lead agency or agencies in Canada and the U.S. to play a more formal and leading role in coordination of community science information, resource curation, training, and data management.

The SOW of phase-2 has been completion and is ready to be submitted to the Department of State for consolidating proposals.

- *Microplastic Monitoring and Risk Assessment*

The contractor has completed a draft literature review report, which will be finalized in a few weeks. The literature review covers what is known about how plastics are characterized in field sampling, and sample processing by matrix particle analysis methods. The monitoring results from across the Great Lakes basin included a focus

on sources, pathways, and fate of microplastics. There is also a review of literature on effects, including ecotoxicology and contrasting different polymer types and particle sizes, a review of existing monitoring programs, risk assessment approaches, and how to integrate monitoring microplastics into our existing infrastructure and capacity for Great Lakes monitoring.

The workgroup held a 1.5-day session at the 2023 IAGLR conference. The session included talks on a variety of topics, such as QA/QC of lab and field methods, effects on freshwater biota, reviews on existing monitoring and policy around microplastics in the Great Lakes region. The contractors put together a summary of the session detailing the different topics that were covered, which would be useful in identifying people to be invited to the upcoming workshops.

An in-person workshop has been planned for September 12-13 in Ann Arbor at the LimnoTech Office. It will bring together individuals representing monitoring programs in the Great Lakes and individuals with practical experience of sampling and sample analysis of microplastics from water, sediment, biota, and shoreline debris to help develop a monitoring framework for tracking their fate and effects. The workshop will invite about 40 attendees.

The workgroup is working closely with a South California group who are leaders in standardizing monitoring and analysis methods. The workgroup is also connected to a Chesapeake Bay plastic pollution team who are tackling the same questions on standardization and harmonization of methods. The workgroup is trying to use the synergy and leverage it to come up with a harmonized set of answers on how to develop a monitoring program and how to interpret the results of monitoring data in a risk assessment framework.

It was commented that microplastic topic has been come up very often in a variety meetings.

- *GL Winter Science*

The project was approved by Commissioners about a year ago and had a contractor on board in early October 2022. The workgroup has had a series of meetings over the winter that led to a well-developed literature review as well as a summary of available winter science datasets.

The project includes three workshops with the first two being virtual and the third one in person. The first virtual workshop was held in May and addressed science gaps and needs. The second workshop is planned for September to address research, infrastructure, and operational challenges. The third workshop will be in 2024 to synthesize and finalize findings and to develop recommendations.

For those who might be interested in attending the second workshop on September 19-20, please let staff know. The location for the third in-person workshop has not been decided.

It was asked if anyone from the provincial governments has been involved in the project. It was responded that Todd Howell from the OMECP has been serving on the workgroup. Jason is interested in providing names from OMNRF to participate in the workshops. Ram will also provide names from ECCO to participate in the workshops.

3. Newly approved projects update

- *Development of GL Science Plan*

The Great Lakes Science Strategy report has been approved by the Commission and transmitted to the Parties. The workgroup and IJC staff have developed a 2-pager and a list of frequent asked questions and answers.

This second phase of the project is to develop a detailed Science Plan. The core team just had a call last week to finalize the scope of work, which focuses on three main themes. One is to design an operational architecture for a Great Lakes science initiative and develop a detailed cost estimate. The second one is to identify approaches and mechanisms to interweave western science and Indigenous knowledge in the plan, which is an overarching theme that will be integrated into each other step. The last key piece is to evaluate and recommend mechanisms and governance arrangements. This is a key for going forward regarding what it is, what needs to be done, and how we are going to do it. The plan is we need to be relatively flexible in terms of how to develop it, through interplays between consultations and workshops.

We had a town hall meeting at the IAGLR Conference in May with about 70 participants. We also sent out a survey but got only a couple dozen responses. It is suggested that the RCC members send the survey link to colleagues and also announce it in the IAGLR Newsletter to encourage more participants of the survey. The survey asks questions about how you think the investment should be spread across various initiatives from basic research centers of excellence, and what would be your recommendation with respect to a choice of an administrative entity.

It was mentioned that the IJC is in the process of developing a Memo with GLC and GLFC to collaborate on this effort. The Memo will also include other 3-commission efforts, such as CSMI, vessel workshop, declining offshore productivity, and climate change.

- *Community Science Handbook*

This project is to develop a community science handbook. The SOW of this project has been fully developed. Chris will have a final review in a week or so. After that it is ready to be submitted.

- *Great Lake Atlas*

The project proposes to conduct and complete a scoping process to assess and gather information on the use and utility of a Great Lakes Atlas. It will seek insight from potential users, the public, educators, activists, agencies and others that can further refine and inform the development of such an undertaking. It will also seek to understand how such a product or set of products could assist in raising the public's awareness of the inherent value of the Great Lakes or answer questions related to the Great Lakes region, its history and influences, its economy, hydrology, biology, ecology, and its social and culture condition.

The SOW of this project has also been fully developed. Lucinda and Jon Allan are the workgroup leads. John Wilson is the staff lead. We do not have a workgroup yet.

If we do not have enough U.S. fund from the 2022-2023 FY, this project will be funded by the next FY.

4. TAP Update

- After all RCC members had an opportunity to provide input, the draft report has been sent to Commissioners for review. So far, we have received very positive feedbacks. Staff is working with the contractor to revise the report. The plan is to share the next version on July 10-13 for Commissioners' red flag review and to be approved by July 20th.
- It was commented that the report is well written.

5. Other Topics

- Sea Grant has a webinar on harmful algal blooms in Lake Erie. <https://ohioseagrant.osu.edu/news/calendar/2023/06/29/62on5/habs-forecast-2023>
- There was a brief discussion on how agency staff has been involved in the GLEWS Phase 2. Matthew provided the following as a follow up on this discussion:

Phase 1 extended from 2017-2019 and project reporting was transmitted to the Parties in 2020 (accessible at <https://ijc.org/en/sab/towards-great-lakes-early-warning-system>). The project report focused on an organizational approach, and included the following recommendation (which I paraphrase): the IJC should create a GLEWS that would operate as an entity reporting to the Great Lakes Water Quality Board. The IJC would be responsible for GLEWS oversight and ensure that the IJC Commissioners are aware of emerging issues, per Article 8.3 (b) of the 2012 Agreement, through the action of the WQB. To function appropriately, a GLEWS requires highly qualified personnel and resources to assemble, assess, rank and report on emerging threats, which the Parties have available in their agencies. Therefore, we recommend that GLEWS be supported by subject matter experts provided by the Parties (e.g., the governments of Canada and the United States). The IJC would serve the role of oversight by convening additional highly qualified personnel to evaluate the effectiveness

of the GLEWS. The precedent for a similar functioning group is the current Great Lakes-St. Lawrence River Adaptive Management Committee.

Phase 2 got underway in 2020, and has been guided by a Work Group that includes Ngan Diep, MECP. The project included the following objectives:

- *Review early warning system analytical approaches and development of a decision framework.*
- *Complete five case study analyses for each stressor class (biological, chemical, nutrients, climate, human/behavioral).*
- *Convene an expert workshop (September 2022) to review interim project findings, evaluate the analytical techniques and decision framework, and the degree to which the proposed approaches can be operationalized using available data and information.*

The Phase 2 contractor report was recently received, and the Work Group will be preparing a short summary report based on the contractor report. Both reports will be sent to the SAB for red flag review in ~4-6 weeks, then to Commissioners for approval. The main recommendation of the Phase 2 report is to undertake a pilot project to implement GLEWS for a specific stressor category (biological, chemical, etc.). At this point the pilot project would most likely be enabled through a subsequent Board work plan, which would be developed collaboratively with prospective GLEWS Committee entities.

- Next Call – Doodle poll for 9/18-22 and 9/26.

8. Adjourn

- The meeting was adjourned at 12:30 pm
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