



Team Meeting

Notes

Attendees:

RCC members: Chris Winslow, Carl Platz, Debbie Lee, Eric Boisvert, Jason Borwick, Michael Twiss, Rebecca Rooney, Sandra Eberts, Sergio Paulo, Val Klump.

Staff: Lizhu Wang, Heather Stirratt, Matthew Child, Oliver Dumville, Mark Burrows, Rajendra Poudel.

Guest: Jerome Marty

1. Welcome, roll call, approval of agenda, and approval of last RCC meeting summary.
 - Co-chairs welcomed attendees.
 - Draft agenda was approved with minor revision in the Others agenda section.
 - April 2023 RCC Meeting Summary was approved.

2. Presentation on SPC's TEK project
 - The workgroup lead of the SPC's TEK project, Jerome Marty, presented the progress made for the Building a Framework Toward Bridging Traditional Ecological Knowledge and Western Science project.
 - The project is designed to advance knowledge on how TEK can have a meaningful role in the primarily Western science approach to IJC advice and to develop recommendations on a framework through which TEK and Western science can collaborate.
 - The objectives are to identify key examples that show how TEK and Western science collaborated in the Great Lakes basin; identify key barriers and challenges; develop a working definition for data sovereignty, and make recommendations.
 - The project has done literature review, development of outreach and engagement plan, and holding several listening sessions.
 - The next step is to recruit additional members and host additional listening sessions in both US and Canada in the fall of 2023. The project will produce a reports in 2024.

Discussion:

- It was requested that the presentation slides being shared (done).
- It was shared that there is a training tool on the First Nations principles of ownership, control, access, and possession (OCAP), <https://fnigc.ca/ocap-training/>. The First Nations principles of OCAP establish how First Nations' data and information will be collected, protected, used, or shared. The OCAP is a tool to support strong information governance on the path to First Nations data sovereignty. Given the

diversity within and across Nations, the principles will be expressed and asserted in line with a Nation's respective world view, traditional knowledge, and protocols.

- It was commented that it has also used Positivist science in the replace of Western science.
- Sandy Eberts is interested in providing a review to the SPC's TEK report if there is an opportunity.

3. On-going project progress update

- Great Lakes Early Warning System

- The project is very close to completion. Contractor report has been completed and approved by the workgroup.
- A workgroup report that summarizes the contractor report, including phase 1 information, has been in review by workgroup.
- The workgroup report will be sent to the SAB for review soon.
- It is expected that the contractor report and workgroup report will be submitted to the Commission in late fall or early winter.

- Governance of Nutrient Adaptive Management

- The project report has been approved by the commissioners and was transmitted to the governments of both US and Canada.
- The engagement webinar has been scheduled for September 25. Webinar invitations have been sent out.
- This engagement webinar is a combination of the SPC's Lake Erie and Lake Ontario Nutrient Review report and the RCC's Nutrient Adaptive Management report.
- The completion of these reports is a good timing because the EPA is in the process of updating the Lake Erie domestic action plan.

- Microplastic Monitoring and Risk Assessment

- The project has completed a literature review report and continued to add information to the database.
- The workgroup held its 1st in-person workshop on September 12 and 13 with 32 attendees from different agencies and academic institutions. The focus of this workshop was on harmonized methods for sampling microplastics in different matrices like water, sediment, and biota for the development of a sampling protocol and framework for microplastic monitoring in the Great Lakes.
- With the workshop outputs, the workgroup will propose some methods for each microplastic matrix, including tributaries, open water, sediment, biota, and shoreline debris.
- There were representations at this workshop from the Chesapeake Bay Pollution Plastic Pollution Action team and from the Southern California Water Research Work Group. All three projects are at the same juncture of trying to design proposed field protocols and a monitoring framework. Hence, the workgroup has

a wonderful opportunity and synergy for harmonization. So, a similar protocol will be proposed that will apply across all those jurisdictions.

- The 2nd in-person workshop will be held either in December or January, which will focus more on risk assessment and how to interpret monitoring results, which will accumulate knowledge with respect to potential toxicology at the level of concentrations for each type of matrices. Risk assessment framework is the next piece the workgroup will be working towards.

Discussion:

- It was mentioned that only 8% microplastic papers submitted to journals were acceptable in 2015 (Twiss, M. R., 2016). Standardized methods are required to assess and manage microplastic contamination of the Great Lakes system. Journal of Great Lakes Research, 42(5), 921-925. It was discussed that the research in this field has been increased very fast and now many papers have been published. The literature review of this project is an effort to include and synthesize such developments.
 - It was asked that if any discussion on regulatory framework to stop plastics to get into the water system. It was responded that this is not included in the current project, but a monitoring program will help identify sources of plastics and increase of awareness, which may help the development of regulatory frameworks.
- Great Lakes Winter Science
 - The project has had two virtual workshops. The 1st one looked at the winter science priorities related to what we need to know and where our knowledge gaps are.
 - The 2nd workshop focused on identifying, assessing, and describing the needs related to winter science infrastructure, training, and coordination among management agencies to meet the science priorities identified in workshop 1.
 - The upcoming 3rd workshop will take place in early 2024. At that point, the workgroup will bring together the identified science priorities and research capacities to provide recommendations.

4. Status update on newly approved projects

- All approve Great Lakes Boards' projects are moving forward. For financial reason, several projects (including the Great Lakes Atlas project) will use FY 2024 budget.
- For the 3 projects that will be funded by 2022-2023 FY, the RFPs have been sent to potential small business set-aside bidders with a proposal deadline of September 15th.
- Some proposals have been received. We will go through the proposal evaluation process and recommend or reject the proposals.
- The board members raised the concern again for the US contract bidding process.

5. TAP Update

- TAP report has been progressed as scheduled. Commissioners have approved the final version of the report and an out-reach plan. Tremendous efforts have made to ensure

the report graphs are geographically representative of the full suite of the binational watersheds.

- It is planned to have an English fully laid out and an electronic format report to be shared with the governments formally in advance of the fall Semi-annual meeting.
- The team has been working on the French translation version. There will be a bilingual webinar where Commissioners will be rolling out the report publicly in November.
- It was discussed to share the English embargoed copy with the Great Lakes Boards' Co-chairs as a courtesy.

6. New project ideas for 2024 funding cycle

- A pilot project on GLEWS was discussed in previous and this calls.
- Salinization resulted from climate change and human activities is considered an important topic.
- Eric Boisvert has involved in a project on Rainy River and Lake of the Woods to build a database on mining (involving HPAB). The project team has talked to expand it to the other watersheds and how this project can be linked to the SAB's projects. It was suggested that Eric provide in writing a fundamental document (where and what) for the RCC Co-chairs to digest and decide where to go from there.
- Media communication products – It was suggested that short (2-4 minutes) videos are an effective tool for communication, especially for early education. Focus should be forward thinking and something new (not yet exist), but it could be going forward. Considering Antimicrobial Resistance Monitoring System (AMRMS) as an example, it may be applicable to the Great Lakes to address water issues. The USGS Integrated Water Availability Assessment program has been investigating salinity trends across the United States. Earlier work showed increases in salinity in urban areas -- not limited to areas where road salt is used. Fish-nutrient interaction of the Great Lakes was also brought up as an example of video communication. It was mentioned that having foundation \$ for a video of hypoxia is a good example.
- Climate resulted population dynamic to the Great lakes – Due to climate change, people move into the Tribal land as a result of population increase; the census bureau in NOAA may have information on this. There is a publication on this (Fergen, J. T., Bergstrom, R. D., Twiss, M. R., Johnson, L., Steinman, A. D., & Gagnon, V. 2022; Updated census in the Laurentian Great Lakes Watershed: A framework for determining the relationship between the population and this aquatic resource. *Journal of Great Lakes Research*, 48:6, 1337-1344). Long term increased agricultural trend in water use will impact water quantity and quality. Fire may also be a potential problem, which needs attention; the USGS has put a lot of effort on that.
- The Section liaison pointed out that new projects may consider the products that can support future TAP report priorities.

7. Potential agenda items for Oct RCC/SAB meetings

- No discussion.

8. Other Topics

- IJC just got a US Commissioner Co-chair, Jerry Acher, from Detroit, Michigan; the new secretary for HPAB is Raj Benjankiwar and secretary for WQB is Rajendra Poudel.
- The SAB meeting on Oct 17th will invite Mike Goffin to give a presentation on Canada New Water Agency.
- Jerome Marty has invited SAB members to have dinner at his house in the evening of October 17th.
- Schedule of RCC meetings during the Semi-annual meeting has been distributed. Please note time change for the RCC Board Appearance, now is from 11:15am-12:00pm on Sept 18th.
- IJC will not change its Semi-annual meeting schedule if US furlough occurs.
- Next meeting – October 17 in Ottawa.

8. Adjourn

- The meeting was adjourned at 3:30 pm
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