



Notes

Attendees:

RCC: Gavin Christie, Chris Winslow, Erich Emery, Dale Hoff, Jason Borwick, Kathy McKague, Michael Twiss, Ram Yerubandi, Rebecca Rooney, Sandra Eberts, Val Klump

Guest: Michael Greer

Regrets: Debbie Lee, Ian Campbell, Réjean Couture

Staff: Lizhu Wang, Matthew Child, Alison Voglesong Zejnati, Mark Burrows, Victor Serveiss

1. Roll call, approval of draft agenda, and acknowledge Nov 2021 Meeting Summary
 - Introduced Michael Greer from USACE who is a candidate to replace Erich Emery in future. Michael has experience of working on Great Lakes issues related to AIS and LAMP. He is looking forward to working with the group.
 - Agenda is approved as presented.
 - Meeting record of November 2021 is acknowledged.
2. Discussion and approval of GL Groundwater and Surface Water Framework report
 - The report was distributed only one day before the call due to the delayed in incorporating comments of boards' members by the contractor.
 - The comments from RCC and WQB members have been incorporated into the report.
 - The goal of the report is to develop a groundwater-surface water conceptual modeling framework. The contractor has done a good job.
 - Cathy McKague provided intensive comments related to the unclarity regarding why this work is needed. These comments are from non-science perspective. She has not got time to look at the revised report to check if all her comments have been incorporated. Kathy will take a look at the new version and also make sure some of the Ontario databases are listed in the report.
 - Sandy Eberts (workgroup lead) may be able to look at the report again and make some words adjustments. Sandy has taken a new position as a division director for the Earth System Processes Research Division at the USGS and is not the science coordinator anymore, so she may not have quite as much time to spend on IJC activities as before.

- It is commented that the recommendations need to be clearer and identify what specific things that need to be done. The workgroup may want to produce a report summary to clearly present the recommendations and rationales.
- Michael Twiss provided the following reference to be cited in the report.
 - Kornelsen, K. C., & Coulibaly, P. (2014). Synthesis review on groundwater discharge to surface water in the Great Lakes Basin. *Journal of Great Lakes Research*, 40(2), 247-256.
 - Mackie, C., Lackey, R., Levison, J., & Rodrigues, L. (2021). Groundwater as a source and pathway for road salt contamination of surface water in the Lake Ontario Basin: A review. *Journal of Great Lakes Research*.
 - Van Stempvoort, D. R., Robertson, W. D., MacKay, R., Collins, P., Brown, S. J., Danielescu, S., & Pascoe, T. (2021). The role of groundwater in loading of nutrients to a restricted bay in a Precambrian Shield lake. Part 1.–Conceptual model and field observations. *Journal of Great Lakes Research*, 47(5), 1259-1272.
 - Danielescu, S., Van Stempvoort, D. R., McCrimmon, C., & Valipour, R. (2021). The role of groundwater in loading of nutrients to a restricted bay in a Precambrian Shield lake Part 2.–Numerical modeling. *Journal of Great Lakes Research*, 47(5), 1273-1287.

3. Ongoing project progress reporting

- GL Science Plan
 - The contractor is working on a draft report, which will be sent out for commenting by the large steering committee and board members. The proposed dollar amount needed for the Great Lakes science is about \$100 million per year in addition to what has been spending presently.
 - It is suggested that it may need to produce a short highlight report to be handed out and to be used to communicate with others.
 - Val and Chris had a phone call with a group representing a National Association of Marine Laboratories. The group was asked to endorse the idea of our Science Plan, and they are fully behind it. Val, Chris, Bob Sterner and a few others, including the lobbyists that represent the association, will be working on a two-pagers to put forward as a position paper. This will be very helpful. The association is well recognized by the Capitol Hill, and they weigh in on all things related to Ocean Coast and Great Lakes.
 - The workgroup has organized a session at JASM in May with a focus of science needs; 13 abstracts have been submitted to this session.
- Operationalizing GL Early Warning System
 - Phase 1 developed govern framework.
 - Phase 2 is to identify technical approaches to identify and detect stressors and their riskiness for determining if actions are needed. There are 5 case studies.

Workgroup has worked on the nutrient case study, and now is working on the other 4 case studies.

- It is commented if the project case studies can be shared, it is answered that those interested can contact workgroup leads individually since the work is still in process of development.
 - Nutrient Adaptive Management Phase-2
 - The workgroup and contractor have met on December 2, 2021. The next workgroup-contractor call is scheduled for February 23. The contractor has completed the initial literature/reports review and is in the process of synthesizing the information. The contractor is also in the process of developing survey/interview questions to be reviewed by the workgroup. The project has been progressed as scheduled.
 - Making the Most of Community Science
 - The project is progressed as scheduled. Contractor will set up a share point for the workgroup to use. The next workgroup call will be in late February or March.
4. Briefing on RCC participated other boards' projects
- SPC/WQB Nutrient Synthesis
 - Completed a workshop in April. The contractor has drafted a workshop report for commenting by workgroup. Contractor's draft final report is expected in March/May time frame. Workgroup will produce s report in the fall.
 - SPC/WQB TEK
 - No workgroup meeting yet.
 - WQB GL Manure Management Framework
 - No reporting.
5. Prioritization process for work plans of 2022-2023 funding cycle
- The following Great Lakes board work plans will be discussed during a board Co-chairs' meeting next Friday (Jan 21). The Great Lakes Winter Science is the only work plan proposed by RCC jointly with SPC. This work plan has been reviewed by RCC during the two previous meetings and is ready to be submitted to the Commissioners for approval.
 - Great Lakes Winter Science (SAB)
 - Valuation of Ecosystem Services – Phase 1 (SPC)
 - Follow-up and Critical Analyses of the Third Great Lakes Regional Poll Data (WQB)
 - Climate Change Adaptation for Community Resilience Across the Great Lakes Region (WQB)
 - Climate Change Influence on Human Health Indicators on the Great Lakes (HPAB)
 - It is brought up that some members may be interested making comments on these work plans. Those who are interested can let staff know.

6. New project ideas for 2023-2024 funding cycle

- Microplastics Monitoring and Risk Assessment
 - This work plan is built on the work done by an IJC report in 2016 for the 2023-2024 funding cycle. The Canada has provided about \$7 million to 7 different large multidisciplinary projects. Most of them have direct relevance to the Great Lakes' emerging human health impacts related to microplastics. This would be a good opportunity to synthesize some of this work and get a little bit more traction on some of the recommendations from the IJC 2016 report.
 - This work plan will synthesize recent advances in plastics science relevant to the Great Lakes. It will develop a framework for monitoring plastic pollution in the Great Lakes that would support its use as a sub-indicator in the GLWQA. It will also develop a risk assessment framework for plastic pollution in the Great Lakes with an ecological effect (sediment and water guidelines) and a human health effect (drinking water and fish consumption guidelines).
- Others
 - GW-SW may consider another phase, related to data coordination.

7. Other business

- Next RCC Call – March 22

8. Adjourn
