

The Board's Vision: A healthy and diverse aquatic ecosystem for the benefit of present and future generations.

Mackenzie River Basin Board Secretariat

Mackenzie River Basin Board Meeting No. 62 December 4th, 2019 9:00 am to 5:00 pm, December 5th, 2019 8:30 am to 4:00 pm Cambridge Room, 10th floor, Edmonton Federal Building 9820 107 St. NW, Edmonton AB

Board Members and Alternates:

Nathen RicheaAlternate MemberNorthwest TerritoriesLeon AndrewIndigenous MemberNorthwest Territories

Carmen de la Chevrotière Alternate Member Alberta

Vera Nicholson Indigenous Member British Columbia

Nicholas Mitchell Alternate Member Crown-Indigenous Relations and Northern

Affairs Canada (CIRNAC)

John Fahlman Government Member Saskatchewan

Brian Yee Government Member Alberta Heather Jirousek Government Member Yukon

Nadine Stiller Government Member Environment and Climate Change Canada
Mike Renouf Outgoing Alternate Member Environment and Climate Change Canada

Lynn Kriwoken Government Member British Columbia

Nadine Stiller Chair Environment and Climate Change Canada

Corrine Porter Indigenous Member Yukon

Secretariat:

Paula Siwik Executive Director Environment and Climate Change Canada

Guests December 4:

Laurie Wein Parks Canada Agency

Joseph Flesh Presenter Environment and Climate Change Canada Bradley Summerfield Chair, SOAER SC Environment and Climate Change Canada

Brenda Parlee University of Alberta
Tracy Howlett University of Alberta

Guests December 5:

Lieserl Woods Note taker, facilitator Environment and Climate Change Canada

Guests December 4 and 5:

Ted Zimmerman Incoming Member BC British Columbia

Wayne Dybvig Contractor Strategic Review Consultant
Margo Hurlbert Contractor Strategic Review Consultant

Meghan Beveridge Northwest Territories

Patrick Cherneski

Incoming Alternate Member

Environment and Climate Change Canada

62.1 Call to Order

• Meeting #62 of the Mackenzie River Basin Board was convened at 9:00 am. There was quorum.

62.2 Tab 1: Approval of Agenda (Decision)

- P. Siwik asked to defer discussion on the Roles and Responsibility/Orientation document (Tab 2) as further work was required. H. Jirousek and P. Cherneski offered to do a preliminary review of the Roles and Responsibilities material.
- N. Mitchell shared that he would be asking the Board to approve a new member to the TKSP committee.

Decision: agenda approved as amended. (H Jirousek and P Cherneski)

62.3 Tab 2: Follow up items from Nov 12 teleconference (Goal 9)

Meeting 60 minutes

• P Siwik noted that the track changes version of Meeting #60 minutes and draft minutes for meeting #61 have been shared. She asked for comments by January 18, 2020 for both sets of minutes.

Social Media

• The consultants doing the Strategic Review have drafted some additional material on this topic that P Siwik will circulate to the board. Generally speaking, Board members are comfortable with the idea of having some social media presence.

Action items

The board reviewed the list of outstanding action items.

62.4 Tab 3: Student update; trend analysis in the Mackenzie River Basin (Information) (Goal 4)

- P Siwik introduced J Flesch, an intern student with ECCC who has been working on a number of freshwater projects. One of his projects involved a trend analysis using publically available, long-term hydrometric data to look at flow in the Mackenzie River Basin. The results corroborated what others have found. This works adds to the body of literature, and, most importantly, updates the 2006 basin wide hydrometric assessment. P Siwik and J Flesch have partnered with researchers in the Science and Technology branch and intend to publish the results in the future.
- Overall, the long-term trends (1976 to present) show increases in winter flow. There are also decreases in summer in southern portion of the basin and increases in northern portion.
 - During the Q and A it was noted that a) this work is not able to speak to what caused the change in flow, b) the program used for analysis (EGRET) is designed for data produced on a daily basis, c) similar trends have been noted in work done in the Northwest Territories and preliminary links made to overall warming and permafrost degradation, and d) extreme values were included.

62.5 Tab 4: SOAER Update (Information and Discussion) (Goal 1 and Goal 7)

- B Summerfield provided an overview of the TKSP/SOAER Joint Steering Committee meeting on Dec 3 and started with a review of the milestones and deliverables. The work on the SOAER is driven by 2 needs; a) need to fulfill the duty and b) desire to create an effective online tool that can evolve going forward. The consultants are currently in the data discovery phase. There have been some issues with effective communication from the consultants. B Summerfield and P Siwik are working through them and proactively informing the consultants what they expect to see in the updates.
- Direction from the committee included a) balance between a basin wide perspective and a place based approach, b) imbalances in information are expected and c) the gap analysis aspect of the contract will enable future work. There are some funds earmarked in the contract for filling gaps but it is limited.
- Data discovery and acquisition phase will be completed in January 2020. The analysis and interpretation phase will proceed in winter 2020. There was support from the committee for a heat map that would allow a user to click on each sub basin and explore further. The committee asked for a mock up of one sub basin.

62.5 Tab **5:** Update from the Traditional Knowledge and Strengthening Partnerships Steering Committee (Information and Discussion) – (Goal 5)

- As there is not a chair currently for the TKSP committee, all who were present at the December 3 meeting provided an update.
- V. Nicholson mentioned that Dec 3 was a busy day. The vision for the SOAER is good and the update from Tracking Change was appreciated.
- L. Andrew shared that the update from B. Parlee and T. Howlett (Tracking Change) and the work in the basin is valuable. He noted changes in the species of fish caught in the area. There are fewer grayling and other species are at risk of disappearing. Salmon are travelling to the Yellowknife River further than ever before. He has heard similar stories on how warming water affects fish from different countries and the problem seems to be getting worse.
- C. Porter also appreciated the update from Tracking Change. She shared that she did not have anyone reach out to her after the 2016-17 annual report covering letter was sent out (no news is good news)
- N. Mitchell informed the Board that CIRNAC is nominating George Lafferty for TKSP Committee. Board members were supportive.

Decision: Motion to appoint George Lafferty to the TKSP committee. (N Mitchell, H Jirousek) – passed

62.6 Update from the Tracking Change Project – T Howlett and B Parlee (Goal 5)

- B Parlee thanked the Board for its support over the years. She highlighted the reports available online and shared a video on the New York Knowledge Symposium
- Video: http://www.trackingchange.ca/videos/tracking-change-nyc-documentary/
- Reports: http://www.trackingchange.ca/research/project-summaries/
- 2021 Global Knowledge Symposium forum planned for Yellowknife in 2021.
- Early thinking on possibility of Tracking Change Part 2.
- Considering how to connect dots to pull it all together once research completed. It will likely be organized around common themes and indicators to tell story of trends in region.
- Indigenous monitoring has been going on for generations; same decision processes in the same places for the same species. Rigorous and systematic form of monitoring. Traditional knowledge is not to be plugged into a science project.
- Some of the data aligns with SOAER indicators; algae blooms, water levels, fish health, social and cultural aspects of health of water and of fish.

- Forty communities were involved and generated three years of community based research. \$500,000 has gone to community projects. Communities keep control of data and decide what information they would like to share, and their interest in hearing from other communities.
- Summaries provided by Tracking Change will be useful for the SOAER but the best approach would be to contact individuals within communities who provided the original information.
- Need to make sure that communities are in control of what information is or is not included and how it is referenced or represented.
- Budget update: the focus is on project write up and reporting. Intent to host one more Youth Knowledge Fair and a Global Knowledge Symposium (Yellowknife; June 2021).
- Tracking Change asked board members to consider whether their jurisdictions could provide some funding to support the event.

Tracking Change Part 2

• B. Parlee will apply for grants and consider other funding sources. She is optimistic that funding will be found to maintain the network of people and the momentum that has been gained over the past 5 years.

62.7 Tab 6: Agency Reports – Round Table (Goal 8)

Agency reports are available for review at http://www.mrbb.ca/resources

Alberta - The topics covered in the Alberta agency report include: 1) Alberta River Forecast Centre, 2) Groundwater initiatives between NT and AB, 3) Water regulations for AB's energy industry, 4) Tailings management framework (AER), 5) Tailings management framework for the mineable Athabasca Oil Sands (AEP), 6) Incident response in AB's energy industry, 7) Protecting source drinking water, 8) Advancing denitrifying bioreactors as a beneficial management practice for agricultural drainage waters in Alberta, 9) Nutrient objectives for small streams in agricultural watersheds in Alberta, 10) Alberta Water Research Innovation Strategy, 11) Alberta's land-use framework, 12) Watershed planning and advisory councils, 13) Water north coalition, 14) Land use, climate change and ecological response in the upper North Saskatchewan and Red Deer River basins: a scientific assessment and 15) Update on the Alberta Aquatic Invasive Species program.

Saskatchewan - Topics included in the Saskatchewan agency report include: 1) Progress update on the draft bilateral agreements, and 2) Major projects update. It was also noted that water management in the southern portion of the province is changing. This includes a change in permitting requirements for land drainage, the continued transfer of federal infrastructure (dams) to the province, and interest in how Saskatchewan reservoirs could be included in flood management in North Dakota.

Northwest Territories – The report shared by the Northwest Territories included updates on 1) the implementation of three BWMAs and work on the draft agreement with Saskatchewan, 2) water related legislation, policy, regulations and planning (e.g. NWT Water Stewardship Strategy, NWT Waters Act, Regional Land-use Planning and Climate Change initiatives), 3) Science, Monitoring and Information, 4) Major Projects and 5) Events

L. Andrew shared that, in the Sahtú region, the weather was dry in the mountains, and that rain came in fall but there was an absence of thunder. Work has finished on the Canol road reclamation but people in the area are still concerned about contamination. A section of highway that could link into the Mackenzie Highway in the future has been completed.

Yukon: The report shared by the Yukon included updates on 1) the BWMAs, 2) water-related legislation/policy/regulations and planning (e.g. Peel Watershed Regional Land Use Planning and Yukon Water Strategy and Action Plan), 3) science, monitoring and information and 4) major projects

C. Porter informed the Board that the Guardians have been doing CABIN sampling in the Liard basin. The data will be uploaded to the Mackenzie DataStream.

BC - The report shared by British Columbia included updates on 1) the BWMAs, 2) water-related legislation/policy/regulations and planning (e.g. *Water Sustainability Act* and the *Declaration on the Rights of Indigenous Peoples Act*), 3) science, monitoring and information, 4) major projects and 5) events

CIRNAC: The report shared by Crown Indigenous Relations and Northern Affairs Canada included updates on 1) the BWMAs, 2) water related legislation/policy/regulations and planning (e.g. *Mackenzie Valley Resource Management Act* and Arctic and Northern Policy Framework), 3) links to science based initiatives and 4) major projects

ECCC: The report shared by Environment and Climate Change Canada included updates on science and monitoring in the basin. Other sections will be developed going forward.

62.8 Tab 7: MRBB Strategic Review Contract – Presentation on draft report (Presentation and discussion) (Goal 9)

Board members were challenged to:

Be curious; consider ownership and vision

Be appreciative

Understand our challenges

Celebrate our successes

Not be defensive

• The consultants spoke to the draft report. They noted that the review relied heavily on meeting minutes and annual reports and may not fully reflect Board activities.

Adjourn, Day 1 (5:00 pm)

Note: this document reflects the discussion and work by the Board on December 4, 2019 only. The Board spent the day in a workshop discussing and prioritizing the draft Strategic and Operational Review report.

Mackenzie River Basin Board Goals

- Goal 1: Evaluate the health of the whole basin
- Goal 2: Investigate matters concerning the ecological health of the whole basin
- Goal 3: Advocate for the maintenance and improvement of the ecological health of the whole basin
- Goal 4. Educate the public, share information, and learn from others about matters concerning the ecological health of the whole basin
- Goal 5. Support and facilitate the increased participation of Aboriginal Peoples in MRBB activities
- Goal 6. Encourage the development and implementation of bilateral water management agreements
- Goal 7. Ministers, Aboriginal leaders and appropriate staff of jurisdictions are informed of and engaged in MRBB activities
- Goal 8. Information, knowledge and research are shared among jurisdictions written reports
- Goal 9. MRBB affairs are administered effectively.