
MINUTES OF THE MEETING STEERING COMMITTEE (SC)

Meeting No° 66
Tuesday, April 9, 2024
1:30 PM to 4:30 PM
Videoconference on TEAMS

Present:	Félix Boulanger	EMRWB representative Nation Government
	Marc Dunn	Niskamoon Corporation
	Luc Duquette	Hydro-Québec
	Jean-Philippe Gilbert	Hydro-Québec
	Louie Kanatewat	Cree Nation of Chisasibi
	Mélanie Leblanc	Niskamoon Corporation
	Geraldine Mark	Cree Nation of Wemindji
	Johanna Ménélas	Hydro-Québec
	Ernie Rabbitskin	Niskamoon Corporation
	Stephanie Varty	Cree Trappers Association
	Cassandra Weapenicappo	Cree Nation of Eastmain
Guest:	Réal Courcelles	Hydro-Québec
	Jens Ehn	University of Manitoba
	Zou Zou Kuzyk	University of Manitoba
	Mimie Neacappo	Niskamoon Corporation
Absent:	James Bobbish	Cree Nation of Chisasibi
	Daniel Brosseau	Hydro-Québec
	Carine Durocher	Hydro-Québec
	John Lameboy	Cree Nation of Chisasibi
	Josée Lefebvre	Canadian Wildlife Service
	Marie-Eve Lemieux	Hydro-Québec
	Gregory Mayappo	Cree Nation of Eastmain
	Graeme Morin	Cree Nation Government
	Ernest Moses	Cree Nation of Waskaganish
	Roderick Pachano	Cree Nation of Chisasibi
	Robbie Tapiatic	Cree Nation of Chisasibi

MEETING CHAIR AND SECRETARY

Marc Dunn chaired the meeting, and Johanna Ménélas acted as the meeting secretary.

PROPOSED AGENDA

1. Approval of the Agenda
2. Presentation of Final report for Ocean Team University of Manitoba (*Zou Zou Kuzyk*)
3. Approval of the minutes from the previous meetings (*Johanna Ménélas*)
 - January 30, 2023 – No° 55
 - February 13, 2023 – No° 56
 - March 8, 2023 – No° 57
 - March 9, 2023 – No° 58 (not ready yet – next meeting)
 - April 21, 2023 – No° 59 (not ready yet – next meeting)
 - September 11, 2023 – No° 60
 - September 26, 2023 – No° 61
 - October 18, 2023 – No° 62 n
 - November 30, 2023 – No° 63
 - February 2, 2024 – No° 64
4. Miscellaneous
5. Summary and Next Steps (*Chair*)
6. Next Meeting

1. Approval of the Agenda

The Chair reviewed the agenda, and no additional points were proposed. Thus, the agenda was approved as presented.

2. Presentation of Final report for Ocean Team University of Manitoba

Zou Zou Kuzyk (**Mrs. Kuzyk**) delivered a presentation titled "Comprehensive research program on the coastal habitat of Eeyouistchee," based on the document Eelgrass Team Final Report and a copy of the presentation and document is appended to these minutes for reference. Throughout the presentation, several questions and discussions emerged:

The Chair inquired about the fluctuations in salinity levels and how they compared to other regions not influenced by man-made structures, questioning if these fluctuations were normal or exceptional. He also asked about the impact of these fluctuations on eelgrass, especially during its dormant winter period. Mrs. Kuzyk explained that while there is limited research on eelgrass survival under ice for extended periods, low salinity does alter their metabolism, making it harder for them to survive. Mélanie Leblanc (**Mrs. Leblanc**) added that this specific question would be investigated in phase two of their research.

Mrs. Kuzyk noted the difficulty of studying eelgrass under thick ice and mentioned their efforts to develop methods to collect eelgrass in winter. She explained that the large size of the La Grande River plume, which affects a significant area, is unusual, and that very few northern rivers have such high winter flows.

Luc Duquette (**Mr. Duquette**) confirmed that the past year was exceptional in terms of low inflows, attributing it to minimal precipitation and forest fires. He also noted that it had been very salty in James Bay recently, with no freshwater present.

Louie Kanatewat (**Mr. Kanatewat**) observed that the cliffs appeared clearer than in previous years, with less erosion and lower water levels, suggesting a significant impact on local water clarity.

Mrs. Kuzyk highlighted the importance of light availability for eelgrass, noting their research shift towards understanding the effects of small rivers in the spring. They are investigating how these rivers, when flowing fast, can bring in sediment and other materials, affecting water clarity and light penetration.

Mrs. Leblanc inquired about the coordination between Mrs. Kuzyk's team and Mary O'Connor (**Mrs. O'Connor**)'s team, particularly regarding the data used by Kaleigh Davis (**Mrs. Davis**). Mrs. Kuzyk confirmed that while they began making light measurements before Mrs. O'Connor's team intensified their work on eelgrass beds, they coordinated in 2021 to place sensors at the beds studied by Mrs. O'Connor's team, providing critical data on light levels and eelgrass growth. This collaboration revealed that while eelgrass was getting enough light to grow, it was not reaching levels that allowed maximum growth.

Mrs. Kuzyk then discussed the importance of placing sensors at each eelgrass bed to monitor light levels from winter through summer, correlating total light exposure with eelgrass growth and spread. She transitioned to discussing sediment analysis, spurred by Mr. Kanatewat's observations of hard sediment layers. In 2021, her team collected sediment cores across five traplines, revealing varying sediment accumulation patterns. They used tracers to date sediment layers, finding that many cores showed disturbed sediment patterns, indicating either erosion or deposition changes.

The Chair sought clarification on whether hard sediment deposition or erosion was occurring. Mrs. Kuzyk explained that in Mr. Kanatewat's trapline, an "algal mat" had been buried by sediment, creating a hard layer. This phenomenon was unique to Mr. Kanatewat's area, while other traplines showed hard layers at the surface due to erosion of softer sediments. The Chair emphasized the need for cautious interpretation, and Mrs. Kuzyk agreed, noting the unprecedented hardness of these sediments.

Mr. Duquette inquired about the absence of February and March data on the graph, suggesting the lack of heat waves during that time. Mrs. Kuzyk explained that satellite sensors are limited to surface measurements and, when ice and snow cover is prevalent, they cannot detect conditions beneath the ice. She confirmed that ice cover typically persists through January, February, and March, making it difficult to obtain relevant marine heat wave data for these months. Mrs. Kuzyk also elaborated that marine heat waves in April and May, despite ice presence, were uncertain in their implications due to the close proximity to ice-covered periods.

The project's future steps include delivering a comprehensive written report and data archive, followed by manuscript submissions for review. These manuscripts, covering topics such as plume behavior, marine heat waves, underwater light, and sediment dynamics, aim to synthesize local and large-scale drivers and feedback mechanisms affecting eelgrass.

Mrs. Kuzyk emphasized the importance of collaboration with the local communities and acknowledged the extensive coordination efforts by team members and the support from local stakeholders. She also stressed the role of long-term field observations and traditional knowledge in informing the research.

Mrs. Leblanc raised a question about the integration paper, asking for clarification on its scope compared to the methods paper. Mrs. Kuzyk described it as an attribution study, linking environmental changes to eelgrass ecosystem shifts and highlighting resilience dynamics and tipping points.

The Chair reiterated the importance of addressing the eelgrass decline issue, even though it was beyond the original research scope, to maintain community trust and acceptability. He emphasized the limitations of drawing definitive conclusions due to the retrospective nature of the study and acknowledged differing community perspectives on the causes, including those attributing more responsibility to the La Grande project.

Mr. Kanatewat supported this view, stressing the significant changes observed by local communities and the increased current strength post-LG1 project, which contributed to underwater disturbances and reduced sunlight for eelgrass.

Mrs. Leblanc suggested working with Mrs. Kuzyk on data exchange to ensure clean, usable data archives for future reference. Mrs. Kuzyk agreed, emphasizing the importance of providing well-curated data for future use.

Mrs. Kuzyk concluded her presentation with expressions of gratitude for the collaborative effort and hopes for continued research partnerships. She praised the Committee's respectful and productive exchange of viewpoints, considering it a model for other projects.

3. Approval of the minutes from the previous meetings

Since Mr. Duquette was the secretary of the following meetings, he proceeded to review these minutes for the benefit of the Committee. He proposed going through the minutes page by page.

- **January 30, 2023 – No° 55:** Changes were made following the Chair comments. Mr. Courcelles also suggested some minor revisions. (Deferred to next meeting)
- **February 13, 2023 – No° 56:** Changes were made based on Chair comments. There was a follow-up question on page 4. (Deferred to next meeting)
- **March 8, 2023 – No° 57:** The Chair had extensive comments, and corrections will be made offline. These will be reviewed with the Committee at a future meeting. (Deferred to next meeting)

Mr. Duquette informed the Committee that the following meeting were not ready yet, they will be for next meeting.

- **March 9, 2023 – No° 58**
- **April 21, 2023 – No° 59**

The Secretary took over, since she was the one who took the minutes:

- **September 11, 2023 – No° 60:** Minor changes were made. The revised minutes were approved.

- **September 26, 2023 – No° 61:** Minor changes were made. The revised minutes were approved.
- **October 18, 2023 – No° 62:** No changes were suggested. The revised minutes were approved as is.
- **November 30, 2023 – No° 63:** Minor changes were made. The revised minutes were approved.
- **February 2, 2024 – No° 64:** Minor changes were made. The revised minutes were approved.

Next Step:

- The Chair and Mr. Duquette will review the minutes with comments offline and bring any changes to the Committee for approval at the next meeting.

4. Miscellaneous

❖ The trip for Tabusintac, New Brunswick

The budget for the trip has been approved by Niskamoon. Mrs. Leblanc proposed confirming attendance with the Committee and finalizing the number of participants from each community. Room reservations have already been confirmed and are taken care of.

The Chair confirmed that the hosts have extended invitations to some members to join them for hunting. He emphasized that participants would need to drive to Tabusintac, as flying with firearms presents complications.

Mrs. Leblanc reiterated hunting regulations in Tabusintac, emphasizing hunting is allowed from sunrise to 1 p.m.

Next Steps:

- Mrs. Leblanc is tasked with sending emails regarding the trip details and confirming attendance.

❖ Alliance Grant submitted - eelgrass coastal habitat project

Jean-Philippe Gilbert (**Mr. Gilbert**) provided an update on the Alliance form for Phase 2, which has been completed and sent.

5. Summary and Next Steps

- Mrs. Leblanc will follow up on the inquiry from the February 13, 2023, meeting (No° 56), specifically addressing the questions raised on page 4.

- Mrs. Leblanc will handle follow-up on the trip details and email communications, working closely with the Secretary to ensure all necessary information is circulated and any logistical issues are addressed.
- The Chair and Mr. Duquette will review the minutes with comments offline. They will incorporate any necessary changes and present the revised minutes to the Committee for approval at the next meeting.

6. Next Meeting

The upcoming meeting is scheduled to review the final report from Paul del Giorgio (**Mr. del Giorgio**), with the meeting planned for late May.

Following the exchange on the availability of each, it was agreed that the next meeting will be held on Thursday, May 30, from 9:00 AM to 12:00 PM via Teams.

Mrs. Leblanc will confirm Mr. del Giorgio's availability for this date and will send a follow-up email to the Committee if any adjustments to the schedule are required.

ADJOURNMENT OF THE MEETING

Considering that all items on the agenda were addressed, the meeting is adjourned at 3h46

The meeting secretary,



Mila Oser

The Meeting Chair,



Marc Dunn