COASTAL HABITAT RESEARCH PROGRAM

STEERING COMMITTEE

MINUTES OF MEETING NO. 50

HELD BY VIDEOCONFERENCE ON AUGUST 31, 2022

PRESENT: Norman Cheezo Cree Nation of Eastmain

Réal Courcelles Hydro-Québec

Marc Dunn Niskamoon Corporation

Carine Durocher Hydro-Québec

Jean-Philippe Gilbert Hydro-Québec (in part) John Lameboy Cree Nation of Chisasibi Geraldine Mark Cree Nation of Wemindji Cree Nation of Eastmain **Gregory Mayappo Ernest Moses** Cree Nation of Waskaganish Ernie Rabbitskin **Niskamoon Corporation** Félix Boulanger **EMRWB** representative Josée Lefebvre Canadian Wildlife Service Louie Kanatewat Cree Nation of Chisasibi Cree Nation Government **Emily Sinave**

Alain Tremblay Hydro-Québec

ABSENT: James Bobbish Cree Nation of Chisasibi

Roderick Pachano Cree Nation of Chisasibi
Robbie Tapiatic Cree Nation of Chisasibi
Kelly Leblanc Cree Nation Government

GUESTS: Zou Zou Kuzyk University of Manitoba

Brigitte Leblon University of New Brunswick

Julian Idrobo TEK researcher

Armand LaRocque University of New Brunswick

Mélanie-Louise Leblanc Eelgrass researcher

Paul del Giorgio UQAM

Kevin Clyne University of New Brunswick

Caroline Fink-Mercier UQAR Jean-François Giroux UQAM Simon Bélanger UQAR

Mary O'Connor University of British Columbia

Shirley Chiskamish Niskamoon

Kaleigh Davis University of British Columbia

PROPOSED AGENDA

- 1) Approval of the agenda
- 2) Revision and approval of the Minutes of the 47, 48 and 49th meetings
- 3) Symposium
- a. Update from the sub-committee
- b. Researchers' video
- c. List of anticipated questions
- d. List of participants, traveling and lodging
- e. Newsletter
- 4) Update Research Teams
- a. Presentation of Brigitte Leblon
- b. UNB Thesis
- c. Presentation of Julian Idrobo
- d. Activity report of the eelgrass team
- e. Results integration (Z.Z. Kuzyk)
- 5) Transfer of drone & camera equipment from eelgrass team to Niskamoon
- 6) Update on the James Bay Coastal Limnimeters Program
- 7) Update on the Website
- 8) Update on the mobile lab
- 9) Next meetings

CHAIR AND SECRETARY

Marc Dunn chaired the meeting. Mhaly Bois-Charlebois acted as Secretary. The meeting began at 1:20 p.m. on Wednesday, August 31, 2022.

1) APPROVAL OF THE AGENDA

Mr. Dunn reviewed the agenda. The agenda was approved with the following modification: revision of minutes was moved to the end of the meeting, if time allows.

Carine Durocher asked to interchange items 3 and 4 to see the results before talking about the symposium.

[Secretary's note: The minutes reflect the order in which items were addressed.]

The researchers joined the meeting.

2) UPDATE RESEARCH TEAMS

a. Presentation of Brigitte Leblon

This item was deferred.

b. UNB Thesis

Brigitte Leblon explained that Kevin Clyne finished his thesis and it is currently being revised by the revision committee of the University of New Brunswick (UNB). She said that they will submit it to the SC afterward.

Mr. Dunn asked Ms. Leblon to backtrack the public document that was distributed by the UNB.

Ms. Leblon said that Mr. Clyne's thesis is made of two papers. She explained that the first paper consists of the eelgrass mapping of 2019, which was done with the fieldwork data provided by Hydro-Québec. She said that this paper, which was published in the ISPRS congress, was reviewed and accepted by the SC. Ms. Leblon said that the second paper is a comparison of reconstruction between 1998, 1991 and 2020. She said that she already presented some of the results at the last SC meeting, and that her team fixed the problems that were present. She added that this part of the thesis is currently under review. Ms. Leblon said that they did the reconstruction of the extent but also compared the imagery from Landsat and aerial photography with Hydro-Québec's data. She said that the correspondence between the two is high.

Ms. Durocher said that she understands that Mr. Clyne's thesis is based on two papers and that the first one has been reviewed, but the SC was unable to find it in its records. She asked Ms. Leblon when the paper was sent to the SC.

Ms. Leblon answered that it was a long time ago, in 2021, and that she didn't remember exactly when. She said that it was already submitted to the SC and discussed.

Ms. Durocher said that she personally remembers having seen only the last presentation Ms. Leblon did. She asked Jean-Philippe Gilbert if he remembers something different.

Mr. Gilbert answered that he remembers the presentation and that the SC had many questions about it and it was decided that the thesis would be kept confidential for a year. He said that he was quite surprised to see this paper. He said that he searched for it in the minutes and could not find it either.

Ms. Leblon said that she will go back to her emails to see when it was sent. She assured the members that she did not publish anything that was not reviewed by the SC.

Mr. Dunn asked if the publication she shared is from Kevin Clyne.

Ms. Leblon said that it is and that it's the first chapter of his thesis. She said she remembers it being discussed by the SC. She reiterated that there are two papers: one about habitat mapping, which was

submitted to the SC, and the second document, which is Mr. Clyne's recent paper. She said that the thesis is a separate document, which includes both papers. She added that Jean-François Giroux had a lot of questions about the second paper, but an agreement was reached and everything was found and validated by the field data directly. She said that paper 2 is not in the loop yet.

Mr. Dunn said that the thesis doesn't include the revision protocol.

Ms. Durocher said that she assumed this meant it was not reviewed.

Mr. Dunn said that they reviewed the results, but not the paper itself. He asked Ms. Leblon to write down everything she said because it's hard for everybody to keep track of what has been done. He asked her to write down what the next steps are and what has been peer reviewed, because publications that are not peer reviewed are not part of the protocol. He added that the next step will be to go through the results with Ms. Leblon because, at the last presentation, the SC saw only the results, without the methodology.

Ms. Leblon said that as soon as UNB finishes the revision of the thesis, she will send it to the SC.

Mr. Dunn said that, in that case, the SC will defer the point. He said that, normally, whatever is presented at the symposium must be seen by the SC beforehand. He asked what results the team intends to present at the symposium.

Ms. Leblon answered that they will present results related to paper 1, because it has already been accepted by the SC. She said that some members appear to not have seen it, so this may have to be discussed. She added that she hopes to send Mr. Clyne's thesis by mid-September.

Jean-Phillippe Gilbert asked which members of the committee have read the paper.

Mr. Dunn said that he is also getting confused, because he doesn't recall paper 1 or 2.

Ms. Leblon said that she will go back in her mailbox to see when paper 1 was sent.

Mr. Dunn said that he remembers one very technical paper the SC revised a long time ago.

Ms. Durocher said that she found a conference paper dated February 2021, presented at SC meeting no. 35.

Ms. Leblon said that this matter is important because she wants to know if they can present the results of this paper or not.

Ms. Durocher showed the paper entitled *Use of the LANDSAT-8 OLI IMAGERY and local indigenous knowledge for eelgrass mapping in Eeyou Istchee* to the committee members. She said that the SC was under the impression that some of the areas identified as turbid waters were actually shallow waters.

Kevin Clyne said that this was possible and that one thing the researchers noted during the first investigation was that the two categories were similar on the images. He said that, in the second paper, they changed the classification based on this recent analysis.

Ms. Leblon said that in the southern areas, there is a lot of turbid waters coming from fire areas.

Mr. Dunn said that the SC is ok with these results being presented and that he does recall them being presented to the SC and being coauthored with Ernie Rabbitskin, even though the paper is very technical.

c. Presentation of Julian Idrobo

Julian Idrobo began a presentation entitled Cree knowledge of eelgrass and waterfowl study.

Ms. Durocher said that the SC has not yet seen Mr. Idrobo's report and asked when he expects to send it.

Mr. Idrobo apologized for not having sent it yet and said that he plans to do so in a couple weeks. He said that he will probably submit his paper in late September and that he will send it beforehand to the SC for revision.

Ms. Durocher said that this means the submission will be after the symposium. She asked if some of the results have been validated by the people interviewed.

Mr. Idrobo answered that some of them have been and that he has shown certain results to the interviewees and modified some of the information based on their comments. He said that he is adjusting the last details.

Ms. Durocher said that she wants to be sure it's accurate to label these results as Cree traditional knowledge.

Mr. Idrobo said that he is not Cree nor indigenous and he is just organizing their knowledge.

Ms. Durocher said that she understands but she wants to be sure that the information presented reflects at least the view of the Cree members of the SC.

Mr. Idrobo said that, overall, people agree with what he is saying.

Ms. Durocher said that she's surprised that people are talking about the greening of the arctic.

Mr. Idrobo said that people are saying that everything is changing and there is more vegetation and more growth in the James Bay area.

Ms. Durocher said that she believes it would be clearer if he used "James Bay area" instead of "the arctic."

Mr. Idrobo said that the phenomenon is labeled "greening of the arctic" in scientific literature, but that he understands her point.

Ms. Durocher said that she would like more information about the white slime he talked about in the presentation and asked if it is scum.

Mr. Idrobo said that he doesn't know the technical term for it, but that it was mentioned in Eastmain, on the coast of river.

Ms. Durocher asked the other members what the right term is.

Mary O'Connor answered she doesn't know what it is because she hasn't seen it. She said that scum and foam are very different, because scum involves a bacterial process. She added that if they're talking about something slimy on the rocks, it's usually algae.

Mr. Idrobo said that it's more of a film on the water.

Ms. O'Connor said that her team did see something that looked like that.

Alain Tremblay said that he's surprised that, according to Cree knowledge, isostatic rebound affects geese. He said that he's worked with Crees in other projects, and they see it more like a complication for navigation. He added that he's surprised they don't relate it more to hunting than eelgrass.

Mr. Idrobo said that something he found interesting in Wemindji is their openness to talking about what has changed on the coast. He said that, in Wemindji, almost all conversations started with isostatic rebound.

Mr. Dunn said that, in the goose project Niskamoon developed in Chisasibi, they received many comments about the forest moving toward the coast: the land becomes dryer and forest takes over. He added that different things may be mentioned or not based on how the conversation evolves but the knowledge may exist even if it isn't mentioned.

Ms. Leblon said that the effects are not only related to isostatic rebound, but also to climate change. She said that climate change leads to the greening of the arctic, which is well documented by remote sensing. She added that the tree line is moving north.

Mr. Idrobo said that he tried to report the changes from the Cree perspective, and what they say is that there is more vegetation and that it is growing faster.

Ms. Leblon said that their observation is right and related to the greening of the arctic.

Emily Sinave said that, since Mr. Idrobo has not submitted the report, she wonders what he will present at the symposium. She added that people are expecting those results to be presented.

Mr. Idrobo said that he plans to integrate sets of results from the eelgrass teams, the oceanography team and the goose team. He said that he has very little time to incorporate the details, and that he hopes he will be able to have all the sets after the symposium.

Ms. Sinave said that the committee members were talking about having Cree speakers discuss how they were involved in the project. She asked if Mr. Idrobo could suggest people, since he talked to many land users.

Mr. Idrobo said that he will think about would be a good fit, and that it's a good idea, even if he's not sure if land users will like being put on the spot.

Mr. Dunn said that he discussed this with Ernie Rabbitskin and they agreed that it might be too much to ask land users, but that he thinks they could record them beforehand. He said that he will check with technical support if it can be done.

Ms. Durocher said that she wants to make sure she understands the slide where there is a graph showing geese going out into the bay and coming back. She said that she understands the after part, but wants to confirm that the main conclusion is that, after decline, goose behavior is no longer the same, in part due to the lack of eelgrass, but also because there are less berries inland. She said that this is new to her. She asked if the land users provided information on what happened with the berries.

Mr. Idrobo said that this is something that has been reported as far back as the mid-2000s. He said that it's related to climate change and that the hotter weather leads to less production. He said that all communities, from CH7 to Waskaganish, mentioned that the season is too hot in the north.

Ms. Durocher said that she finds this interesting and wants to hear more about it in future research.

Louie Kanatewat said that Mr. Idrobo had spent time in bush camps with the land users, and that this experience came through in the presentation. He added that berry abundance is low on the coast and that this year was a bad year for geese. He said that, down south, there are a lot of berries, but in the Chisasibi area they are lacking. He added that this could affect waterfowl, because when there is no eelgrass and no berries, it's hard to attract waterfowl. He said that Canada geese know where the food is and they're not going to Chisasibi because there's no food.

Ms. Durocher said that the decline dates Mr. Idrobo used are pre-1990s and post-1990s, so a full decade. She asked if Mr. Idrobo can give more precise dates for the beginning of the decline and whether these are consistent with testimonies.

Mr. Idrobo said that, mostly in Chisasibi, eelgrass presence started to decline around the late 80s. He said that CH33 reported 1986, and then the decline continued slowly until the late 90s. He added that Wemindji said the decline began the year the road was opened, in 1985. He said that it's easier to remember an event that happened at the same time as another event that has a clear date.

Réal Courcelles asked if the presentation Mr. Idrobo just gave is the same one he'll give at the symposium.

Mr. Idrobo answered that the main structure will be similar, but that he still has to work with the other researchers.

Mr. Courcelles said that the SC needs to have received all researchers' presentations by Friday, September 16, so the members have time to review them and maybe have a SC meeting.

d. Activity report of the eelgrass team

Ms. O'Connor said that her team wants to present some new results to the committee, from an experiment they did in 2020.

Kaleigh Davis gave a presentation entitled *Nutrient and light limitations of eelgrass in two Chisasibi traplines*.

Mr. Dunn said that he's very happy to see this. He said that it's part of trying to draft a big picture of the project. He asked to confirm his understanding that eelgrass beds in James Bay are poorly adapted to areas where light is limited. Mr. Dunn said that he's assuming that a lot of light goes through in areas where the water is clear, but that it's difficult to adapt in areas where water is less clear.

Ms. Davis said this was correct and explained that the eelgrass abundance curves on the graph change from bed to bed. She added that they have curves where water is clearer, and they show similar curves.

Mr. Dunn asked if traplines CH33 and CH34 have the same amount of light exposure. He said that CH33 definitely has good light, and that maybe CH34 has less.

Ms. Durocher said that she understands from the presentation that there is a type of eelgrass adapted to low nutrients, but not to low light. She asked if there are signs of light adaptation.

Ms. Davis said that she first flagged that eelgrass has access to a lot more nutrients in sediments, but that water column changes can interfere with this. She said that they're trying to look for a couple of parameters to estimate the effect: first how quickly this curve approaches the maximum, and when it adapts and a plateau shows up.

Ms. Leblon asked how the analysis is done when the ice breaks up.

Ms. O'Connor said that they visited sites on different days in the summer, during growing season, and that they believe it still grows under the ice because, when they visit, it shows that it's still growing. She said that they used to extrapolate to simulate what it would be if they had come earlier. She added that they're also working on the relationship between turbidity and ice breakup, but that research is not done yet.

Mr. Dunn said that he will go back to the protocol. He said that he understands that the team wants to present these results at the symposium. He said that he agrees with the idea, however, Niskamoon will also be present saying that all the work is peer reviewed. He asked how they will present the results if they are not peer reviewed yet. Mr. Dunn said that he believes they need to clearly state what has been peer reviewed and what hasn't. He said that the average person at the symposium will not care or know the difference, but he believes they have an obligation to disclose this information.

Ms. O'Connor said that all the information presented is part of a peer review process at different stages. She said that Ms. Davis' paper is part of a peer review process. She added that her team didn't plan to present Ms. Davis' results, but rather to present the synthesis along with the other

researchers. She added that, in that sense, the presentation will not align with peer review, because it's a synthesis.

Mr. Dunn said that he believes it's important that they initiate this discussion, but that it's true that the researchers' consortium and the Steering Committee are part of a peer review process. He added that the constant feedback is the strength of this project. He said that it's really important to communicate this at the symposium and researchers should highlight it.

Ms. Durocher said that they can call it prefinal results, as not everything has been reviewed and there may be some changes. She said that the global picture will not change much, but the details might. She recommended being cautious about calling it findings, because they want to leave room to integrate people's comments from the symposium and workshop.

e. Results integration (Z.Z. Kuzyk)

Zou Zou Kuzyk gave a presentation entitled *Update on results integration*.

Mr. Dunn said that he appreciates this presentation, all the work the researchers do and the time they put into the integration. Mr. Dunn said that the current integration product seems biased toward some of the research and that some data are not being relayed in the process of being integrated. He added that there is a lot of information about the La Grande area, which is understandable because it's a major focus, but that he had been asked about all the other rivers and how it was different for them. He said that there is still work to do for the final product. He asked where the researchers are in terms of reaching this final product.

Ms. Kuzyk said that they did focus on the La Grande area and that the question about the other rivers is a good one. She said that they removed a lot of material that seemed less important for the main two questions of the research. She added that all the rivers are important sources of nutrients to the coastal waters, but that eelgrass does not seem to be limited by those nutrients, which is why they removed the comments on how all the rivers work. She said that they are happy to add and remove information as needed. Ms. Kuzyk thanked the committee members who had already sent their feedback by email and said she hoped to receive more. She added that she planned to address the comments, revise the two and half pages and get them translated before the symposium. She said that she wants this document to communicate the results clearly, and she is open to making any changes necessary.

Mr. Courcelles thanked Ms. Kuzyk and said he read the document and it's very good. He said that, since a video will be made based on this paper, it's one of the most important documents and will be disseminated widely. He added that he understands that they removed less important information, but considering that the mandate given to all researchers was to study the entire coastline, they could start from south to north and explain what the inputs of major rivers are. He added that, based on Ms. Leblon's imagery, there is a lot of material coming from the Rupert Bay. He said that he believes it would be worthwhile to explain what is happening from south to north in terms of eelgrass and other parameters. Mr. Courcelles said that it seems the southern part of the bay is more affected, and that the north of La Grande River is a different habitat. He said that he doesn't know how to address that, but that they must take into consideration that they don't have a lot of information for traplines CH4, CH5 and CH6. Mr. Courcelles said that there is a missing link in the results and it can't

be swept under the rug. He explained that even if everyone knows that the researchers were not allowed to go on those traplines, they shouldn't ignore those areas and they should mention the situation to the public.

Ms. Kuzyk said that this is an excellent perspective and exactly the kind of information she was hoping to get from the SC.

Ms. O'Connor said that she wants to emphasize what Ms. Kuzyk said. She said that they all agree that this document will be the most widely distributed and that it will include the main findings, but the number of results is huge and it's important to remember how hard it is to create an effective document. Ms. O'Connor said that the previous version of the document was 5 pages and they cut out a lot of text. She said they need to work very hard to make the information in this document as clear as possible and this is the main reason they don't have all the information yet.

Ms. Durocher thanked Ms. Kuzyk for the introduction and said that she understands how much work it takes and how difficult it is to summarize all this information considering that some of the results were added recently and that the program is integrating aspects from a very wide range of research topics. She said that she sent comments to Ms. Kuzyk and that she wants to emphasize one of those comments. She said that the objective of the summary is to explain what is happening on the coast in general, to provide a general understanding. She explained that if the conclusion is focused on the La Grande area, it may be misleading and that people might assume that if they fix the issues in the La Grande area, it will fix everything. She said that it might give people false hope. She added that this is why she considers the two paragraphs under the headline, about why eelgrass isn't recovering, more important. Ms. Durocher said that the text presents the main aspects: not enough light and the water is murkier than before. She added that, thereafter, the text tries to explain why the water is murkier than before. Ms. Durocher said that she understands that the first argument is that there is not enough eelgrass, so sediments move easily, but besides that, she still wonders why it's murky. She said that there is a part that needs to be reworked because it goes directly to the La Grande River containing sediments because of erosion, but when they look at Brigitte Leblon's work on all the rivers, the La Grande water is clearer than other parts in the bay. She said that some research done by Hydro-Québec shows that sediments remained near where erosion occurs in the La Grande River.

Mr. Dunn said that this may be the case, but fine sediments travel much more than the others.

Ms. Kuzyk said that she understands the comment. She added that, regarding the question of why the water is murkier, it's because of the cascading effect from the loss of eelgrass, and after that there is the whole scale of the region to consider. She explained that in the last two decades, data indicate that water became murkier some months of the year and is also influenced by other factors. She said that the local factors are different based on the location. Ms. Kuzyk said that this is where the Crees' knowledge comes in. She said that when the Crees in Chisasibi see erosion, it is very striking for them. She added that the satellite images show sediments going along the coast after an erosion event. She said that the message needs to be communicated correctly; there are three factors.

Paul del Giorgio said that he wants to add something to address Ms. Durocher and Mr. Dunn's points. He said that he wants to specify that it isn't that the river study was not considered. He explained that the information is in the summary and that, at every step, they considered all of it, but the summary only includes what they chose to say. Mr. del Giorgio said that, to answer Mr. Courcelles' question, the Rupert River put a lot of turbidity in the bay. He added that the water always had clay

in it and southern rivers have always been turbid. He emphasized that he is not saying that any of this information is not important, but that the goal is to address eelgrass decline. He said that they tried to address the bay-wide issue, but also local issues, and that the goal was not to focus on La Grande, because something is happening bay-wide. Mr. del Giorgio said that the main conclusion of the study is probably that a bay-wide change is affecting the functioning of the bay. He said that the intention was not to exclude river data, but that the researchers considered the bay issue big enough. He added that La Grande is there because it has an important local impact. He said that, regarding Mr. Courcelles' suggestion about the gradient of the sediment from south to north, those results will be communicated and available in the paper, but they don't explain the decline; the issue is a malfunctioning of the bay. Mr. del Giorgio said that they have no reason to think that the Rupert River is bringing more sediment than it used to. He said that what they tried to communicate is that something big has happened in the bay, which still has an effect to this day. He added that he disagrees that the summary is focused on La Grande, or at least that this was not the intention. He said that it's a work in progress and a lot of people are working on this to find a consensus and they all have different perspectives, but there is definitely not a preconceived intention to focus on La Grande.

Alain Tremblay said that he understands the difficulty of creating the summary. He added that his perception was that the summary doesn't cover a bay-wide perspective, but rather is more focused on La Grande. He said that he understands it wasn't the intention, but that is what came across to him. He said that Cree knowledge needs to be considered but shouldn't impact the imperative of covering the entire coast.

Ms. Kuzyk said that the Cree land users have a whole lifetime of observation. She said that the scientific observations are very limited in time, and that traditional knowledge brings richness to those observations. She said that the goal is to keep both types of knowledge on the table. She added that the observations are all equal, and that the science tries to provide plausible explanations to all these observations and nothing can be discarded.

Mr. Tremblay said that he's not saying that Cree knowledge should be discarded, but that asking Crees about something that happened 30 years ago can't be as accurate as the actual observations. He said that the actual observations must been integrated into the whole portrait.

Mr. Dunn said that summarizing all this work in two pages is hard. He said that the SC needs to appreciate that and understand that each group will have its own perception. He added that the discussion they are having is important to clarify issues.

Ms. Leblon said that the key thing happening in Eastmain and Chisasibi are the fires. She said that they don't have the mandate to study them, but it would be important to study the impact of the fires over the decades. She said that Cree observations fit with the impacts they see on satellite images. She added that what happens locally has an impact on other places.

Mr. del Giorgio said that the summary will not be the ultimate product. He said that they wanted to have a document in plain language that they could share with the communities before the symposium. He added that creating the document was a challenge because it can't be 10 pages long. He added that using accessible language also limits the elements that can be included, so they must compromise. Mr. del Giorgio said that, out of respect for the communities, they tried to express what they have concluded in terms that the communities will understand. He said that it's now clear to

him that something has not been communicated well, because Ms. Durocher and Mr. Tremblay got the opposite message from what the document is trying to express. Mr. del Giorgio said that the main point they want to communicate is not that something has happened in La Grande, but that something is happening in the bay. He added that they need to revise the document because they want to communicate the right message to the communities.

Ms. Durocher said that maybe the information missing in the summary are the reasons the water is murkier bay-wide. She said that, if the increased murkiness is general, what are the causes besides eelgrass disappearance? She added that if there are different factors, the summary should include them and not focus on the La Grande area. Ms. Durocher said that, regarding the comment they made about the sediment coming out of La Grande, she wants the researchers to know that the SC has not seen the report of Julian Idrobo. She said that they only saw a presentation today, which summarized a lot. She explained that Mr. Idrobo didn't emphasize erosion, and that the information about erosion and satellite images was not shown either, which is why the SC members were surprised. She added that they're concerned that some of the information in the system is not properly understood. She said that they need to see the data and establish a common understanding of this situation before it gets published or broadcast at the symposium.

Ms. Kuzyk said that, in response to Mr. Tremblay's comments, she wants to point out that in the document they used the statement "we suspect." She said that they chose this term carefully and that based on the information available on the way the environment was modified, it's scientifically reasonable for them to have the hypotheses they have. She added that there is no data to clearly establish the reason of the decline. She said that in terms of why the whole bay is murkier, they can add things they suspect at a larger scale, but they can't prove anything. Ms. Kuzyk said that when they say "we suspect," it's because they can't prove their hypotheses and it's hard to translate that into Cree.

Mr. Dunn suggested wrapping up the discussion due to time limits but said that it was a good discussion. He asked about the next step for the integration.

Ms. Kuzyk said that she will suggest a deadline to send the researchers the comments on the summary through Ms. Bois-Charlebois. She said that her team will recirculate the comments among the researchers' groups. She added that it's important to get this summary ready as soon as possible for the translation to be done. She said that several studies are in the middle of peer review processes. Ms. Kuzyk explained that they must make it clear that this is the researchers' point of view and that it is independent research. She said that they can work on this statement. She said that they aimed to do that within a week and send it back to the SC as quickly as possible.

Mr. Dunn said that the comments should be sent by the end of this week, given the timeline.

Ms. Durocher said that they need to see the missing data about the local effect of the La Grande River before the symposium.

Ms. Kuzyk said that her team will send responses and a few figures in a separated document.

Mr. del Giorgio said that he wants to reiterate that Ms. Kuzyk has done an incredible job integrating the different opinions. He added that he believes they are very aware of the importance of this

document and its language. He said that he is sure they will arrive at a document that will be a better compromise, even if it doesn't satisfy everyone.

3) SYMPOSIUM

a. Update from the sub-committee

Mr. Dunn said that the symposium will be on September 27, 28 and 29. He said that the Grand Chief will be present. He said that the schedule has been circulated and the days will run as follows: the first morning will start with words of welcome, and then Niskamoon will present the agreement, the strategy, and the standards the committee applied; on the first afternoon, and the morning of day 2, there will be the presentation of results in a more integrated way than the last symposium; the third day will be the workshop and during the last afternoon, there will be some wrap-up messages. Mr. Dunn said that the symposium will be recorded, including the participation of land users. He said that the committee is still looking for recording technology and asked the researchers if they have software. He added that Jean-François Giroux will present four 5-minute videos. He said that Ms. Bois-Charlebois will send the link to the members. Mr. Dunn said that he asked James Bobbish to be the chair of the symposium and Mr. Bobbish accepted. He said that Mr. Bobbish is the ideal candidate since he is from Chisasibi, and that he is familiar with the project and can manage the discussion. He said that Shirley Chiskamish has reserved all the hotel and the bed and breakfast, so if people want to stay at the hotel, they will have to confirm with Ms. Chiskamish. Mr. Dunn specified that Niskamoon makes the reservation but doesn't pay, except for land users. He added that they booked a charter for the 29 and it will be first come, first booked. Mr. Dunn said that they're going to figure out how to share the cost, but the charter is much cheaper than booking individual flights. He added that they were looking to book a flight for the 26 or 27. He said that the invitations for the symposium have been sent out to the chiefs and Grand Chief, the Eeyou Marine Region and the chairs of CTA. He added that, for the workshop on day 3, Emily Sinave has scoped out questions. He said that Ms. Bois-Charlebois will share them with the members of the SC. Mr. Dunn said that they will consider having Zoom options during the symposium and that there will be translation booths. He said that it will be a different translator than last symposium and that they will record the event and likely broadcast it on local radio. He resumed by saying that the newsletters have been disseminated in the communities by the Niskamoon officers.

Ernest Moses said that this project has been challenging for everyone, and that the Crees have noticed changes in the region. He said that it's important to keep in mind that the land users were the ones out there during those changes, that they are the ones that observed what was happening on a daily basis. He said he accompanied a group of land users on the 22nd to see the changes on the Rupert River. He added that these users make annual visits to observe different aspects, and they have noticed that changes are rapidly occurring. He said that one of the things that's important for the Crees is to maintain their lifestyle. Mr. Moses said that it's challenging to summarize all these changes. He said that they might not have the answers to everything, but it's important to keep content concise and simple. Mr. Moses said that there will be people at the symposium who were not there last time. He said that he has noticed growth of new vegetation and that he no longer sees the same number of geese landing across Rupert Bay. He added that Mélanie Leblanc was at Boatswain Bay and it hasn't really been affected yet but he believes it will be eventually. He added that there are some places they can't go and that the land users will have questions for them so they have to be well-prepared. He said that he enjoyed the time with the researchers and seeing what they accomplish as scientists. Mr. Moses said that they might not have the full answer, but they have

some things to work with. He invited the researchers to return to Waskaganish anytime and said he hopes they will meet again.

b. Researchers' video

Mr. Dunn said that he believes they agreed to let this go for now. He said that what he recommended to Ms. Leblanc was that they present the website in its current form even if the data are not updated, and let people know when it will be updated. He added that sharing reports is challenging because they include a lot of information, and he worries that putting them out there could lead to misinterpretation.

The researchers left the meeting.

Mr. Courcelles said that it was a necessary discussion and that he hopes they'll have everything ready by September 16.

Ms. Bois-Charlebois will send an email with the deadlines to the researchers.

c. List of anticipated questions

This item was deferred.

d. List of participants, traveling and lodging

This item was addressed previously in the meeting.

e. Newsletter

This item was addressed previously in the meeting.

7) NEXT MEETING

No meeting was planned.

The meeting adjourned at 2:40 p.m.

Marc Dunn, Chair of the meeting