COASTAL HABITAT RESEARCH PROGRAM STEERING COMMITTEE

SIGNED MINUTES OF THE 5TH MEETING HELD IN WEMINDJI ON FEBRUARY 1 AND 2, 2017

PRESENT: Alain Tremblay Hydro-Québec

Carine Durocher Hydro-Québec Jean-Philippe Gilbert Hydro-Québec

Marc Dunn Niskamoon Corporation

Norman Cheezo Eastmain

Réal Courcelles Hydro-Québec

Robbie Tapiatic Chisasibi

Simon Marcotte Hydro-Québec

William Blackned Wemindji

ABSENT: Merlin Whiskeychan Waskaganish

Nadia Saganash Cree Nation Government

GUEST: George Lameboy Chisasibi

Louie Kanatewat Chisasibi

CHAIR AND SECRETARY

Mr. Dunn chaired the meeting of February 1 and 2, 2017. Mr. Courcelles acted as Secretary.

Mr. Dunn introduced Mr. Lameboy to the meeting.

APPROVAL OF THE AGENDA

The meeting began at 1:50 p.m. The Chair reviewed the agenda.

Mr. Dunn informed the meeting that the Canadian Wildlife Service (CWS) had appointed Mr. Jean Rodrigue as its representative on the SC and that he would be calling him by conference call at 3 p.m.

Mark ...

Mr. Dunn asked that "Proposal from Chisasibi Community Research Center" be added to the agenda as the new Item 6. Consequently:

- "Business arising from previous meeting" becomes Item 7; and
- "Next meeting" becomes Item 8.

Mr. Dunn asked that "Ernie Rabbitskin" be added to the agenda as Item 6 b) with "Update on coastal mapping and rates".

Mr. Dunn asked that "To Do List" be added to the agenda as Item 6 e).

APPROVAL OF THE DRAFT MINUTES OF THE 4TH MEETING OF THE STEERING COMMITTEE

Mr. Marcotte distributed copies of the minutes of the 4th meeting.

The Chair reviewed every page of the minutes of the 4th meeting. Some corrections were requested and the minutes were approved as corrected.

Ms. Durocher asked that a correction be made to paragraph 7 on page 8 of the minutes of the 4th meeting, stating that she meant "researchers" rather than "land users".

SC-01-2017 RESEARCH PROTOCOL - RIVER

Mr. Tremblay gave a PowerPoint presentation, dated February 1-2, 2017 entitled "River project 2016 - 2019 proposal, Alain Tremblay, Hydro-Québec, Wemindji, 1-2 February 2017." A copy was appended to the minutes.

Mr. Tremblay asked whether rivers other than those mentioned in the presentation should be sampled. After discussion, the following requests and modifications to the PPT were made:

- Add "Eastmain River" under Eastmain.
- Add "Jack River" under Eastmain.
- Add "Old Factory River" under Wemindji.
- Move "Rivière Castor" under Chisasibi.

Mr. Tremblay said that he would make the corrections and would send a revised version to the members and participants.

Mr. Tremblay said that these were the first rivers selected and that the selected researcher can add other rivers he considers relevant to his proposal.

Mr. Tapiatic requested that for the rivers under study, the researcher should distinguish between those that are influenced by reservoirs or other developments, and natural rivers, i.e. those not influenced by development.

Mr. Tremblay agreed. The researcher will be asked to make a distinction between these two types of rivers and to verify all rivers under study to determine whether they are influenced by development.

- Mr. Tapiatic requested that the researcher take the type of winter that preceded the sampling campaign into account. The thaw that followed the very cold temperature at the start of winter 2016-2017 has left all snowmobile crossing facing Chisasibi ice-free, and this may have an impact on the characteristic of the water in the river.
- Mr. Tremblay answered that the preceding winter conditions will also be noted. Furthermore, he said that the researcher will have access to hydrological data from HQ and, where applicable, from Québec government gauging stations. Finally, he said that for rivers were there are no gauging stations, the researcher will be able to extrapolate the data through calculations.
- Mr. Kanatewat said that there is already slush on the ice in James Bay.
- Mr. Cheezo asked whether the calculations and data extrapolation are still valid since climate change affecting the weather and river flows.
- Mr. Tremblay said that the instruments to be used will take these variations into consideration.
- Mr. Tremblay said that sampling will be carried out in spring, summer and fall. For the time being, winter sampling is not being considered.
- Mr. Marcotte said that winter sampling should be avoided because the logistics are more complicated.
- Mr. Cheezo asked what "DIC" and "DOC" in the PPT presentation mean.
- Mr. Tremblay explained that "DIC" means Dissolved Inorganic Carbon and "DOC" means Dissolved Organic Carbon.
- Ms. Durocher asked what "Dedradability" means?
- Mr. Tremblay explained that the word should read degradability which refers to how easy or difficult it is for organic matter (trees, animals, etc.) to decompose. For example, fish decompose easily whereas trees will take many years to decompose (the estimate is about 900 years for a tree trunk in a reservoir (*Alain Tremblay, personal communication, February 9, 2017*).
- Mr. Tapiatic requested that water samples be taken at different depths.
- Mr. Tremblay confirmed that, where required, they will be taken at different depths. However, he pointed out that swift sections of rivers with rapids won't need to be sampled at different depths since the water his thoroughly mixed. He said that in such cases there is no stratification in the water column.
- Mr. Dunn asked whether the parameters shown on the slide will be the only ones sampled.
- Mr. Tremblay answered that although these are standard parameters, the researcher has the freedom to add more if he feels it is required to meet the objectives of the study.
- Mr. Dunn asked what the difference is between "fulvic" and "humic."

Mr. Tremblay answered that both parameters are associated with bogs. Humic and fulvic acids come from soil, peat and sediment. The percentage of humic vs fulvic acid gives an indication of the origin of the organic matter.

Mr. Lameboy said that the types of instruments presented are the same as those currently use out in the bay in Chisasibi. He is surprised at how eager young Crees are to learn and use these instruments. He said that they would be interested in working with the types of electronic probes and tools used to measure the different parameters.

In closing his presentation, Mr. Tremblay suggested that the SC consider hiring Paul del Giorgio from the Université du Québec à Montréal and his team to carry out this specific study.

Mr. Lameboy asked whether Mr. del Giorgio would be subject to a peer-review.

Mr. Tremblay answered that Mr. del Giorgio would be expected to write an article and that the SC could request that the article be subject to the peer-review process.

Mr. Dunn said that, at first glance, the Crees don't have a problem with the researcher suggested, but will get back to him on this subject.

The meeting paused at 3:05 for few minutes, so that the call to Mr. Rodrigue from CWS could be placed.

SC-02-2017 UPDATE ON CWS PARTICIPATION

Mr. Dunn welcomed Mr. Rodrigue to the meeting.

Mr. Courcelles asked Mr. Rodrigue whether he had received the copy of the agreement on the Coastal Habitat Research Program that had been sent to him by e-mail shortly before the call.

Mr. Rodrigue said that he had received the copy of the agreement but had not yet had time to read it.

Mr. Dunn reviewed the SC's mandate, the objectives of the agreement and the study programs planned, including the study of waterfowl population dynamics along the east coast of James Bay. He said that this is where the SC needs the CWS's support in developing a specific study on this issue.

Mr. Dunn said that, before developing a research program on coastal goose population dynamics, the SC needs more information on the research already carried out by the CWS and the available data.

Mr. Rodrigue asked what the study area encompasses.

Mr. Dunn responded that the study area is the entire East Coast of James Bay.

Mr. Rodrigue said that since the SC is interested in eelgrass, then study should focus more on Brant than Canada goose.

Mr. Dunn replied that the SC doesn't want to discard Canada goose since this species is of interest for the Crees.

Mr. Lameboy said that he saw that migrating Canada geese stopped using his area, after the eelgrass beds disappeared. He said that his concern is to know where the Canada geese have gone since the disappearance of the eelgrass beds. Are they using another flyway?

Mr. Rodrigue said that he has to check the CWS data, but that there are 3 groups of Canada goose populations in Québec, one of which uses the Atlantic Flyway. This is also the case for the geese found along the east coast of James Bay. He also said that there is another group that migrate along the west coast of James Bay.

Mr. Lameboy asked if Canada geese were now using the Mississippi Flyway due to depletion of eelgrass.

Mr. Rodrigue said that they don't use the Mississippi Flyway. The data shows that they go north and pass over the area used by Chisasibi hunters. He said that approximately 10% of the Canada goose population nest in the area near Chisasibi, and the rest of them nest to the north, in the area around Inukjuak.

Mr. Lameboy said since the disappearance of the eelgrass, there are no more migrating Canada geese. Now there are Long Necks there instead. He invited Mr. Rodrigue to come to his trapline next September and see that the geese are no longer there.

Mr. Rodrigue said that the Canada goose population is very stable in the Atlantic Flyway and that the Long Necks arrive in June for molting. However, the banding results show that as far as nesting is concerned, Canada geese have strong homing instinct, meaning that they nest at or near the same spot every year.

Mr. Lameboy said that the Canada geese have shifted from the Atlantic Flyway to another flyway. Long Necks are now seen using reservoirs as molting sites.

Mr. Rodrigue said that observations show that the geese use reservoirs.

The Chair said that it would be preferable to continue this discussion when Mr. Rodrigue was present at an upcoming SC meeting.

Mr. Rodrigue said that he would not be available to attend an SC meeting in February but he would be able to attend the meeting scheduled on March 22 and 23.

Mr. Courcelles mentioned that the minutes and presentations from past meetings would be sent to him.

Mr. Lameboy left the meeting at 3:30 p.m. and the meeting paused.

The meeting resumed at 3:50 p.m.

SC-03-2017 RESEARCH PROTOCOL - COASTAL

Mr. Tremblay gave a presentation dated February 1-2, 2017, entitled "Coastal project 2016 - 2019 Proposal, Alain Tremblay, Hydro-Québec, Wemindji, February1-2, 2017." A copy was appended to the minutes and a copy will be sent to the SC members and participants.

Mr. Kanatewat said that he went north of Chisasibi last week and the holes being drilled there revealed fresh water instead of salt water.

Mr. Tremblay answered that in winter the fresh water plume can extend into the bay as far as 60 km north of Chisasibi.

Mr. Blackned asked what happens in the bay when fresh water from rivers mixes with salt water.

Mr. Tremblay answered that the point of the study is to collect data on the effects of currents, wind, waves and fresh water from rivers on the saltwater/freshwater mix. The study will also measure how far the freshwater plume extends into the bay and how long it takes for the mix to occur.

Mr. Tremblay suggested that the mandate to carry out the study be given to the research team led by Mr. Guillaume St-Onge de UQAR-ISMER (Université du Québec à Rimouski – Institut des sciences de la mer de Rimouski)

Mr. Dunn said that a research team led by Zou Zou Kuzik from the University of Manitoba is already conducting a similar study in collaboration with the community of Chisasibi.

Mr. Tremblay said that he is aware of this, but that their main study area is in the Hudson Bay.

Mr. Dunn said that he had already spoken with them and that they are open to working with the SC. Mr. Dunn is of the opinion that both teams should work together.

Mr. Tremblay said we can ask UQAR-ISMER whether they would agree to work with them.

Ms. Durocher asked who would lead the research.

Mr. Tremblay said a principal investigator would have to be appointed to lead both the ISMER team and U. of Manitoba teams.

Mr. Courcelles said that as far as the Niskamoon Corporation is concerned a contract would have to be signed with one person or entity that would be in charge of the study.

Ms. Durocher said that U. of Manitoba has already started collecting data in the area facing Chisasibi.

Mr. Tremblay said that the number of sampling stations should not be increased. This doesn't make sense. There is a need to optimize.

Mr. Dunn asked how this is to be managed.

Mr. Courcelles suggested that Mr. Dunn and Mr. Tremblay contact both research teams to find ways to work together.

Mr. Dunn also pointed out that the UQAR-ISMER team doesn't have the knowledge to work with Cree communities, including Chisasibi, and that this represents a challenge.

Mr. Dunn said that we have to find a way for the two teams to work together and produce a joint proposal. He added that Mr. Short should be informed of the two research proposals.

Mr. Tremblay suggested that everyone think about it and talk about how to integrate the two studies when the meeting resumes tomorrow.

The meeting adjourned February 1, at 4:30 p.m.

The meeting resumed on February 2, at 9:00 a.m.

SC-03-2017 RESEARCH PROTOCOL -COASTAL (continued)

Mr. Dunn said that the Crees will review the Coastal Protocol and will send their comments to Mr. Tremblay.

Mr. Courcelles asked when the comments would be sent.

Mr. Dunn requested an in camera session to discuss both the Rivers Protocol and the Coastal Protocol.

The meeting resumed a few minutes after the in camera session.

Mr. Dunn said that both protocols will be sent to Roderick Pachano and Noah Chakapash, and that the Crees will send Mr. Tremblay their comments by mid-February 2017. He also said that he would give Mr. Short a heads-up on both protocols and get back to Mr. Tremblay with Mr. Short's comments.

Mr. Dunn said that everything seem OK as far as the Rivers Protocol is concerned. However, concerning the Coastal Protocol, he suggested that he and Mr. Tremblay contact both research teams via conference call first and then send them the appropriate documents.

All committee members and participants agreed to this suggestion.

SC-04-2017 COMMENTS ON THE GUIDELINES FOR TERMS OF REFERENCE FOR RESEARCH ON LAND USE AND CREE KNOWLEDGE.

Mr. Marcotte distributed a document to the members and participants dated January 2017, entitled "Eelgrass Research Program 2016 - 2019, Study on Cree Knowledge and Land Use in James Bay Coastal Area". A copy was appended to the minutes.

Mr. Dunn said that this revised version of the study includes the comments made by the Crees. He reviewed the document page by page.

Since Mr. Dunn reviewed the document using the electronic version in his computer and shown on the screen of the meeting room, Mr. Courcelles requested that Mr Dunn incorporate the comments directly into the electronic version in his computer and then e-mail the revised version, dated February 2, 2017, to Josée Rousseau so that she can save it an distribute it to the SC members and participants.

Mr. Dunn agreed to make the corrections and send a revised version, dated February 2^r to Ms. Rousseau.

Mr. Dunn asked the Cree community representatives whether they prefer to manage payments for the people to be interviewed, or whether they would rather have the researchers do it.

After discussion, it was agreed that the researchers should manage the payments.

Mr. Tapiatic would like to have a better idea of what the validation process involves.

Ms. Durocher said that we could ask the researcher to submit a detailed procedure in accordance with the requirements set out in the guidelines. The idea is that, at minimum the representative of the concerned community and one or two members of the SC have the opportunity to identify the information that needs to be validated, either because it seems inaccurate or because more details are needed to understand it.

Mr. Cheezo said that regarding the validation process, he prefers to read and validate the interview reports by himself rather than having them discuss in group meetings.

Mr. Tremblay suggested adding a stipulation to the protocol stating that if the study yields significant results, the researcher would be expected to write a scientific article.

Mr. Dunn said that Nadia Saganash recommended a social scientist that had already carried out some work in Cree communities, as a potential researcher for this study.

Ms. Durocher said, due to the scope of the study, one researcher will not be enough and that a team should be recruited to carry out the work.

The meeting paused at 10:10 a.m. and resumed at 10:25 a.m.

Mr. Dunn said that the Crees will come up with a suggestion concerning who the researcher should be. He said that he will be discussing this issue with the Cree leadership and get back to Ms. Durocher on this matter.

Mr. Dunn brought up the possibility of hiring one researcher for the Chisasibi study and another for the other coastal communities.

Mr. Tremblay said that one researcher is better.

Ms. Durocher concluded the discussion by saying that it is important that one of the researchers be in charge and lead the study teams.

SC-05-2017 INTEGRATED SUMMARY OF THE STUDIES

Mr. Tremblay said that the SC should start thinking about how to integrate the results from all the studies. He said that ideally, a summary report should be done. He said that the sooner the researchers are informed of what the SC wants in the summary report the better.

Ms. Durocher said that an annual meeting could be held with all of the researchers to assess the progress of the studies.

Mr. Dunn agreed that an annual meeting would allow all of the researchers to pool their results and present them to the SC.

Ms. Durocher said that, in regard to the summary report to be produced at the end of the three-year research period, one researcher will have to be put in charge of linking all of the studies together and incorporating the results into the report

Mr. Tremblay suggested that the most suitable researcher to integrate all of the research data would be the one in charge of the coastal oceanography study.

Mr. Dunn suggested waiting a year to see which of the researchers stands out and seems to have the best skills for the job. He emphasized that the summary report should not be too academic.

Mr. Courcelles stressed the importance of having the researchers present the results of their studies to the SC first, and then to the Cree communities. He said at the moment, he is not sure that annual presentations of the results from the specific studies should be mandatory in the communities, and that it will be up to the SC to decide. However, he said that the 2019 summary report should definitely be presented to the communities concerned.

Mr. Tapiatic suggested that the chiefs of the Cree communities concerned be invited to attend the proposed annual meetings held by the SC.

SC-06-2017 PROPOSAL FROM CHISASIBI COMMUNITY RESEARCH CENTER

The Chair said that discussion of this item would be deferred to a future meeting, since the person who initially made the proposal had already left and nobody at this meeting knows enough about its content to present it.

SC-07-2017 UPDATE ON MR. SHORT'S 2017 FIELD CAMPAIGN PROPOSAL

Mr. Dunn said that he had not received any information from Mr. Short concerning his 2017 study proposal.

Mr. Courcelles said that the Niskamoon Corporation need the 2017 study proposal in order to sign a contract with him.

Mr. Dunn said that he would contact Mr. Short again.

SC-08-2017 UPDATE ON COASTAL MAPPING, RATES AND ERNIE RABBITSKIN

Mr. Dunn informed the meeting that after discussion with Jean-Philippe Gilbert and Mr. Short, it was decided that coastal mapping is too risky, the data could be unreliable, and it is too costly and time consuming. He said that it would be preferable to use satellite imagery as originally planned, and that approximately 25% of the area covered by the satellite imagery should also be surveyed on the ground.

Mr. Gilbert asked whether a helicopter will be used because 25% of the area is a lot of ground to cover.

Mr. Dunn said that only boats will be used in 2017.

Mr. Dunn said that Ernie Rabbitskin will be hired to coordinate the various Cree teams and ensure that they all use the same methods. He will also be responsible for transporting equipment from team to team, and for overall management of the fieldwork. Mr. Short has agreed to train him.

Mr. Tremblay asked whether we could also use him for the oceanography survey campaign.

Mr. Dunn said that that makes sense and he doesn't see any problem with it.

Mr. Dunn said that he will send Josée Rousseau a revised version of the table of rates for distribution to the SC members and participants.

SC-09-2017 UPDATE ON PRESENTATION TO THE EEYOU MARINE REGION WILDLIFE BOARD ON THE SC'S MANDATE AND ACTIVITIES

Mr. Dunn said that the presentation he gave to the EMRWB in December 2016 went well. The Board had asked whether their wildlife officers from each community could participate in this summer's eelgrass field study as observers.

Mr. Dunn said that he responded that it may be possible if there is room in the boats.

Mr. Dunn also informed the meeting that the EMRWB had sent a request to the Niskamoon Corporation to have their Director Sophie Fillion, attend SC meetings as an observer. Mr. Dunn said that the request will be discussed at the next Niskamoon board meeting scheduled for March 14 and 15, 2017.

SC-10-2017 PROPOSAL TO THE NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA (NSERC)

Mr. Dunn requested that this item be added on the agenda, as he would like to inform the meeting about a telephone conversation he had with Zou Zou Kuzyk from the University of Manitoba.

The members agreed to add this item on the agenda.

- Mr. Dunn said that Ms. Kuzyk had informed him that she is part of a team that is applying for a grant from the NSERC to carry out a research program similar to the one the SC is doing, and had asked him for his comments.
- Mr. Dunn put an undated, untitled document on-screen, which Ms. Kuzyk had sent him and which was a supporting document to their application for NSERC grant. He said that he would send Ms. Kuzyk's document to Ms. Rousseau for distribution to the members and participants of the SC.
- Mr. Dunn said that he had informed Ms. Kuzyk that he had no comments concerning their proposal submission. He informed her of the SC's perspective on the Comprehensive Program it wants to carry out on eelgrass.
- Mr. Tapiatic asked why she had asked for the SC's opinion concerning their submission.
- Mr. Tremblay said that the research program proposed by Ms. Kuzyk focuses on eelgrass and has similar objectives to the one managed by the SC with the exception that it only focuses on the Chisasibi area. He wonders whom the proposal is referring to when it states that they have the support of the Crees.
- Mr. Dunn said that the two studies are very similar and that he will contact the Cree leadership because both studies claim that they are supported by the CNG and other Cree entities. According to him, only one project should be carried out and supported by the CNG.
- Mr. Dunn said that the fact Ms. Kuzyk called him, attests to her good will, and her research team is open to working with the team to be selected by the SC. He said that he would contact the Cree leadership concerning this issue.

SC-11-2017 TO DO LIST

- Mr. Marcotte distributed a document entitled "TO DO LIST." A copy was appended to the minutes.
- Mr. Dunn went over each item in the document and changes were made to the list. Mr. Courcelles will forward a revised, dated version of the list to Ms. Rousseau, who will file and distribute it to the SC members and participants. It was also agreed that in the future, the list will only show actions that have not been completed.

SC-12-2017 NEXT MEETING

The next two meetings will be held in Montréal on March 22 and 23, and June 14 and 15, 2017.

The meeting adjourned at 11:20 a.m.