COASTAL HABITAT RESEARCH PROGRAM

STEERING COMMITTEE

APPROVED MINUTES OF THE 8TH MEETING HELD IN CHISASIBI ON

AUGUST 28, 29 AND 30, 2017

Monday, August 28, 2017, Waastooskuun Inn, Chisasibi

Joint meeting with the researchers

PRESENT:	Alain Tremblay	Hydro-Québec
	Carine Durocher	Hydro-Québec
	Jean-Philippe Gilbert	Hydro-Québec
	Marc Dunn	Niskamoon Corporation
	Merlin Whiskeychan	Waskaganish
	Norman Cheezo	Eastmain
	Nadia Saganash	Cree Nation Government
	Réal Courcelles	Hydro-Québec
	Robbie Tapiatic	Chisasibi
	Simon Marcotte	Hydro-Québec
	William Blackned	Wemindji
GUESTS	Dante Torio	University of New Hampshire
	Ernie Rabbitskin	Chisasibi
	Fred Short	University of New Hampshire
	Huixiang Xie	Université du Québec à Rimouski
	James Bobbish	Cree Nation of Chisasibi
	Jean Rodrigue	Canadian Wildlife Service
	Jens Ehn	University of Manitoba
	Josée Rousseau	Hydro-Québec
	Louie Kanatewat	Chisasibi
	Michel Gosselin	Université du Québec à Rimouski
	Paul del Georgio	Université du Québec à Montréal
	Rémi Costanzo	Université du Québec à Rimouski
	Roderick Pachano	Cree Nation of Chisasibi
	Simon Bélanger	Université du Québec à Rimouski
	Urs Neumeier	Université du Québec à Rimouski
	Zou Zou Kuzyk	University of Manitoba

CHAIR AND SECRETARY

Mr. Dunn chaired the meeting of August 28, 2017. Ms. Rousseau acted as Secretary.

The meeting began at 2:45 p.m.

INTRODUCTION OF THE PARTICIPANTS

Mr. Dunn welcomed all participants and asked them to introduce themselves.

APPROVAL OF THE AGENDA

The Chair reviewed the agenda for the day.

Mr. Dunn said that a dinner with land users from Chisasibi, Eastmain and Waskaganish had been organized for Wednesday, August 30, to allow the researchers to meet with the land users who will be working with them.

OBJECTIVES OF THE MEETING

Mr. Dunn thanked the participants for having made themselves available.

He said the objective of the meeting is to sit and work together and inform the researchers of what the SC expects of them.

Mr. Short asked whether the researchers would have the opportunity to talk to one another about the various issues related to their mandate.

Mr. Dunn confirmed that they would have such opportunities.

COMPREHENSIVE RESEARCH PROGRAM

Mr. Dunn presented a document entitled “Comprehensive Research Program on Coastal Habitat of Eeyou Istchee.” A copy was appended to the minutes.

Mr. Dunn said that this document will be incorporated into the contracts Niskamoon will sign with the researchers.

He corrected point 1 a) of the specific objectives (page 3), saying that “local scale” means “0-5 km” offshore, not “1-5 km.”

Mr. Blackned asked Mr. Dunn where Km 0 is.

Mr. Dunn answered that Km 0 is at the high-tide line.

Mr. Dunn said that he hopes that the Niskamoon Board will agree to extend the program by two years, until 2021. He added that, hopefully, by the end of the research, we will have identified potential remedial measures that can be put into place.

Mr. Short asked who will do the research to document changes related to isostatic uplift in coastal and near-coastal land.

Mr. Dunn answered that the researcher has not yet been identified.

Mr. Short asked who will do the research on Cree traditional knowledge.

Mr. Dunn answered that the researcher has not yet been identified, but the SC is confident that a researcher will be hired in time for the research to begin in 2018.

Mr. Torio said that there are many overlaps between all the different researches. He asked whether there is a mechanism that would make it possible to harmonize all the research results.

Mr. Dunn answered that there is no such mechanism at the moment, and that this aspect should be discussed at some point during this three-day meeting.

Mr. Pachano said that he would like the researchers' annual reports to include any issues related to public health. He added that such issues should be managed by Public Health rather than Hydro-Québec or Niskamoon, and that the Crees must get the right information from the qualified researchers. He referred to the "mercury fiasco," saying that the above-mentioned health issues should not be handled the way the mercury issue was.

Mr. Ehn asked whether the "raw data" in the section on deliverables should be replaced with "quality control data" (i.e., data that has been validated through a quality control process).

Mr. del Giorgio said that it is important to be clear on this issue since "raw data" has a specific meaning.

Mr. Tremblay said that the most important thing is to have data that has been validated or calibrated, as this is the data used in the analysis.

Mr. Bobbish suggested keeping the wording "raw data." Every researcher should have access to the other researchers' data, while bearing in mind that we must be careful with the way we interpret and use it.

Mr. Dunn completed the review of the document, saying that it is a working document that can be updated from time to time.

REVIEW OF 2014 HYDRO-QUÉBEC FOLLOW-UP ON EELGRASS

Mr. Dunn presented a copy the report entitled "Eastmain-1-A and Sarcelle Powerhouses and Rupert Diversion: Follow-up of Eelgrass on Northeast Coast of Baie James (James Bay); Study Report 2014." A copy was appended to the minutes.

Mr. Dunn said that this report incorporates the data from previous years of monitoring, but specified that Hydro-Québec's 2009 report on eelgrass biomass is a different document.

Mr. Dunn said that this report will be sent to all researchers and that it is also available on CD-ROM.

Mr. Bobbish asked that five copies of the 2014 report be sent to the Niskamoon office.

Ms. Saganash suggested that Mr. Gilbert give a brief summary of the 2014 follow-up presented in Chisasibi in November 2015.

The meeting paused at 4:00 p.m. and resumed at 4:10 p.m.

Mr. Gilbert gave a PowerPoint presentation dated November 4, 2015, entitled “Eelgrass Follow-up Program – Eastmain-1-A Sarcelle Powerhouses and Rupert Diversion Project, Presented to the Grand Council of the Crees (Eeyou Istchee), Chisasibi.” A copy was appended to the minutes.

Ms. Kuzyk asked whether Hydro-Québec has identified a link between eelgrass and turbidity, salinity and temperature.

Mr. Gilbert answered that the data collected did not identify any conditions that would adversely affect eelgrass growth.

Ms. Kuzik asked whether the data revealed any levels or thresholds beyond which eelgrass cannot grow.

Mr. Gilbert answered that Hydro-Québec has not found any range of values that would prevent eelgrass from growing.

Mr. Neumeier asked what instrument Hydro-Québec used to measure salinity.

Mr. Gilbert answered that Hydro-Québec used a probe.

Mr. Short asked whether algae had been found during the study.

Mr. Gilbert answered that during the 2014 survey, Hydro-Québec found large patches of algae but less eelgrass.

Mr. del Giorgio asked Mr. Gilbert how long Hydro-Québec has been monitoring eelgrass.

Mr. Gilbert answered that Hydro-Québec has been collecting eelgrass data since the 1970s.

Ms. Durocher said that according to the Ettinger report, some elders from Wemindji had said that in their youth, there was no eelgrass. They said that eelgrass had come to the Wemindji area from the north.

Mr. Gilbert said that no decline in eelgrass was recorded in the 1996 study.

Mr. Short asked what hypothesis had been put forward to explain the cause of the decline.

Mr. Gilbert cited the possible causes as temperature, salinity, ice, the propagation of Labyrinthula and inflows from the Grande Rivière.

Ms. Durocher stated that although eelgrass is recovering in some areas, it is not as dense or as high as before.

Mr. del Giorgio asked how long it would take for eelgrass to come back to what it was before.

Mr. Short answered that it would take two to three years. As an example, he cited what happened in the 1930s, when approximately 90% of the eelgrass on the Atlantic coast disappeared but began to make a comeback three years later.

Mr. Tremblay said that this is not the first time eelgrass has disappeared and subsequently recovered.

Mr. Pachano said that Hydro-Québec only started listening to the Crees' concerns in the 1990s. He said that eelgrass had already started to decline in 1994, but Hydro-Québec thought it was a cycle. He added that everything is relative, that it is wrong to say that eelgrass is making a comeback, and that the information provided in the report must be taken with a grain of salt. He said that geese no longer use the eelgrass beds because they can't feed there. He said that the length of the eelgrass shoots is important and that they are too short now. He recounted that during the flyovers, Hydro-Québec identified the vegetation in some areas as eelgrass but the Crees said it wasn't; however, Hydro-Québec didn't include the Crees' opinion in its report. He said that from the outset, when the SC was created, it was agreed that the studies must complement Cree traditional knowledge, not replace it.

Mr. Bobbish said that the system how the Crees used to hunt geese in the fall is a good indicator. When the geese came from the North to James Bay in the fall, they would feed on the eelgrass in addition to berries. The Cree would let the geese feed on the eelgrass in the bays and inlets of the Bay for several days undisturbed. When the tide and wind conditions were right, the Cree hunters would then hunt in a certain area or bay for that day. That area or bay would then be left alone for a certain period while the geese came back to feed again. Other areas would then be hunted during this time in the same way until the hunting season was over late into the fall. This method of hunting has not been practised for years since eelgrass has disappeared or has been greatly diminished.

Mr. Neumeier asked whether Hydro-Québec carried out a biomass study in 2014.

Mr. Gilbert confirmed that no biomass study was conducted in 2014.

Mr. Dunn said that whether or not the SC members agree with Hydro-Québec's method, we must remember why we are here: to identify the root causes of the changes in the eelgrass beds.

RESEARCH STUDY ON EELGRASS

Mr. Short gave a PowerPoint presentation entitled "Research on the Ecological Health of James Bay in Relation to Cree Natural Resources, Eelgrass Research in James Bay 2016-2017, Fred Short, Dante Torio, Nick Anderson, from U.N.H." A copy was appended to the minutes.

Mr. Pachano asked how much salinity eelgrass can tolerate and how much it can thrive in.

Mr. Short said that eelgrass thrives between 20 and 25 Practical Salinity Unit (PSU). He said that he had not measured the effect of daily variations in salinity on eelgrass.

Mr. Xie asked whether water color is influenced by pH (acidity).

Mr. Short answered that they did not use acidity as a parameter.

Mr. Short said that one of the land users expressed real concern over whether brown water affects eelgrass.

Mr. Pachano suggested that Mr. Short ask the land users in Eastmain whether the diversion has had an impact.

Mr. Bobbish asked whether ice conditions will be addressed. He said that land users have noted that both to the south and north of the Grande Rivière, the ice used to melt at the end of May but now melts as early as April.

Mr. Short answered that ISMER will study this component.

Mr. Xie asked whether there is any interaction between eelgrass and ice.

Mr. Short answered that ice can influence eelgrass growth "when it scrapes the sea floor and uproots the plants."

Mr. del Giorgio asked whether Mr. Short's samples are random and what sampling method he is using.

Mr. Short responded that his sampling is not random and said that this is an issue. He said that the Crees participating in the fieldwork don't want to take their canoes to areas where there are rocks or other obstacles that could damage their equipment. He suggested they ask the Crees to collect data when they are out there.

Mr. del Giorgio asked whether we should adopt a more systematic approach rather than rely on on-the-spot sampling (i.e., samples taken whenever someone happens to be onsite).

Mr. Dunn provided the researchers with instructions concerning the fieldwork planned for the next day.

The meeting adjourned at 5:50 p.m.

Tuesday, August 29, 2017, Cree Nation of Chisasibi

Joint meeting with the researchers (day 2)

The meeting began at 10:45 a.m.

Mr. Dunn explained that today's field visit for the researchers had to be cancelled due to bad weather. The field visit might take place tomorrow, depending on weather conditions.

RESEARCH STUDY ON OCEANOGRAPHY

Mr. Neumeier and Ms. Kuzyk gave a PowerPoint presentation entitled "Coastal Oceanography of Eastern James Bay." A copy was appended to the minutes.

Mr. Pachano asked what "wish of Fred Short" means.

Mr. Neumeier answered that Mr. Short had sent him a document identifying the sectors where he would like the fieldwork to take place. He added that these suggestions would need to be discussed.

Ms. Durocher asked how the pH study sites will be selected.

Mr. Neumeier answered that he does not know at this time and that further discussion is required.

Mr. Pachano asked what kind of nutrients contribute to the growth of algae.

Mr. Short answered that there are different kinds of algae and that he never found any toxic blue-green algae in Baie James (James Bay). He said that there is no evidence of any in the bay. He said that this problem is related to freshwater plumes.

Discussion followed regarding the presence of algae and public health.

Mr. del Giorgio said that presence of algae is natural and does not necessarily indicate a problem.

Mr. Short said that in this case, "the presence of algae" is taken to mean "blue-green algae;" the Crees see the algae, go on the Internet, read that it is toxic and think that what they are seeing in Baie James (James Bay) is toxic. Mr. Short reiterated that the algae in the bay is not toxic.

Mr. Kanatewat asked why there is more algae there now than before.

Mr. Short answered that he doesn't know, but believes we will be able to answer that question once the study is done.

Mr. Dunn noted that the presence of algae is clearly a concern. He resumed the discussion, stating that if any evidence of toxic algae is found, it will need to be reported to the authorities concerned.

Mr. Short said that since they had not found any toxic blue-green algae, there was nothing to report to the authorities.

Mr. Bobbish said that one of the concerns is whether anything is being released with the water that flows through the dam.

Mr. Short said the river study might provide some answers.

Mr. Dunn reiterated that the ISMER researchers and Mr. Short must work together.

Mr. Cheezo said that some fishing skills are being lost. He added that it is important to ensure that people are well informed so that they don't stop using nets.

Discussion followed concerning the precautions to be taken when choosing the wording used to communicate the information. Ms. Durocher said it is important to be cautious with the wording that is being used.

Mr. Dunn said that it will be important to make sure the Crees understand why satellite imagery is being used. He added that the Crees are used to seeing things with their own eyes. He added that it will be important to explain the satellite imagery interpretation process to the Crees.

Mr. Dunn reiterated that if the researchers were to involve the land users as much as possible, the land users would become more specialized. He added that this had been observed in previous studies.

Mr. Bobbish said that researchers should come up with a glossary of the elements and terms they use. The participants agreed.

Mr. Tremblay asked whether digital modeling would show the effect of the freshwater plume from the Grande Rivière.

Mr. Bélanger and Mr. Neumeier said that it will be possible to identify the Grande Rivière plume since the images can be enlarged to a scale of 2 km and the plume is about 10 km long.

Mr. Pachano asked who is doing what.

Mr. Dunn said that the researchers from University of Manitoba and ISMER will collaborate on the oceanography component.

Mr. Pachano asked why the weather information comes from Wemindji Airport.

Ms. Kuzyk said that it is the nearest place they could find the information she needed.

Ms. Kuzyk asked if Hydro-Québec could provide them with weather data.

Mr. Dunn suggested that Ms. Kuzyk check with Chisasibi Airport.

Mr. Pachano said that there is a weather station at Chisasibi Airport, but it belongs to the Band.

Mr. Short asked Ms. Kuzyk if the objectives listed in their presentation will be met by summer 2017. Ms. Kuzyk answered that they are already part-way along.

Mr. Kanatewat shared a story with the participants. He said that one day, he found eelgrass in abundance when he traveled north along the coast. The next morning there

were gusty winds and at the end of the day, he noticed that a lot of eelgrass had been washed out along the shore. He said he noticed that when it's windy, the eelgrass is washed out.

Mr. Tremblay said he had seen numerous sampling sites north of the Grande Rivière. He asked Ms. Kuzyk whether they are planning to set up any more sites north of the river.

Ms. Kuzyk confirmed that they are and that they will have to ask ISMER whether they intend to conduct any sampling south of the Grande Rivière.

Ms. Kuzyk asked Mr. Short whether bigger eelgrass beds mean healthier eelgrass.

Mr. Short answered that it is a positive sign.

RESEARCH STUDY ON RIVER OUTPUT

Paul A. del Giorgio, Université du Québec à Montréal (UQAM), gave a PowerPoint presentation entitled "Riverine Transport of Carbon, Nutrients and Sediments to James Bay." A copy was appended to the minutes.

Mr. Pachano said that he wants to know why there is eelgrass in those specific patches, and whether it can be restored. He added that the one factor missing in the list of indicators that determine eelgrass distribution is algae.

Mr. del Giorgio said that it will be added. He added that the eelgrass may be competing with something else.

Mr. Bobbish asked what water color is and how it can be influenced.

Mr. del Giorgio answered that water color is linked to light, which is essential to the growth of the plant. He added that he will try to find out what is causing the change in color.

Mr. Kanatewat recalled that before the Hydro-Québec project, there was clear ice and we could see the bottom of the river but now, there is turbidity instead.

Mr. del Girogio said that they are trying to analyze all the parameters as a whole to explain these changes.

Mr. Pachano asked Mr. del Giorgio whether he had seen HQ's report on suspended solids. He said that the report states that hundreds of thousands of cubic meters of sediment are being carried into the estuary.

Mr. del Giorgio said that this is something they care about and not only in terms of water color. He added that some rivers are brown but clean. He said they will study these factors to quantify the sediment load.

Mr. Tapiatic recommended that Hydro-Québec continue to monitor erosion along the shore of the Grande Rivière.

Mr. del Giorgio said that continuous erosion can be monitored, but sudden, major erosion events are harder to follow.

Mr. Dunn asked Mr. del Giorgio when they intend to begin their first field survey.

Mr. del Giorgio said it would be either in winter 2017–2018 or spring 2018. He added that the more critical issue for him is how to combine all the research to finalize planning. He added that hopefully, this can be done in the next two days.

Mr. del Giorgio reminded the SC that regarding the sampling work, he wishes to collaborate with the local communities rather than arrive with his whole team.

Mr. del Giorgio stated that the water is turning brown everywhere in the world, and not just in Baie James (James Bay).

The meeting paused for lunch at 1:00 p.m. and resumed at 2:40 p.m.

RESEARCH STUDY ON WATERFOWL POPULATION DYNAMICS

Mr. Gilbert gave a PowerPoint presentation entitled “Canada Geese Collaring Program, Jean-Philippe Gilbert, Hydro-Québec, Chisasibi,” dated August 29, 2017. A copy was appended to the minutes.

Mr. Gilbert said that he will provide the SC with the terms of reference for the waterfowl study.

Mr. Courcelles asked Mr. Gilbert how the collaring team selects the sites. Mr. Gilbert answered that the team conducts flyovers to see where there are geese.

Mr. Gilbert said that they selected this area because the CWS had indicated that this is where geese are found in Cree territory.

Mr. Gilbert said that they are focusing on geese that migrate earlier.

Mr. Gilbert said that once the terms of reference are ready, they will be presented to the SC and, if approved, they can be forwarded to the researchers.

Mr. Cheezo asked whether the geese fitted with transmitters have a high mortality rate due to ice build-up between the collar and neck.

Mr. Gilbert said that he cannot guarantee that there will not be mortality. However, he said that these collars are smaller and better designed to avoid fatalities.

Mr. Cheezo said that he thought fitting geese with collars had been banned.

Mr. Gilbert answered that this is not the case, that the CWS fits geese with collars and foot bands in the south.

Mr. Courcelles asked what could limit the number of geese the CWS can band in a given season.

Mr. Gilbert answered that the CWS is limited by budget. He said that he plans to be in the field for 15 days with a helicopter and will try to band as many geese as possible within that period.

Ms. Durocher asked the Cree participants what they mean by “regular geese”: do they mean the small ones or the long-necks?

Mr. Kanatewat answered that they are referring to the small ones.

Mr. Blackned asked how long the glue used to assemble the collars can last.

Mr. Gilbert answered that it lasts approximately 10 years.

Mr. Cheezo asked what happens if the geese are shot. Mr. Gilbert answered that the data is downloaded whenever possible. He added that if the collar is broken but the device remains intact, the collar can be repaired.

Mr. Dunn said that there is a reward for finding a collar, but the most important thing is getting the collar back.

Mr. Dunn asked whether the collar is reusable.

Mr. Rodrigue confirmed that it is.

RESEARCH STUDY ON CREE COASTAL LAND USE AND TRADITIONAL KNOWLEDGE

Mr. Dunn and Ms. Durocher gave a PowerPoint presentation entitled “Integrating Cree Knowledge.” A copy was appended to the minutes.

Mr. Dunn said that the SC is trying to find a way to complement the studies already done. He said that another aspect of gathering traditional knowledge is the fact that the Crees will share their knowledge with the researchers when they are onsite. We will have to find a way to incorporate the information gathered by the researchers with the data collected during the interviews conducted as part of the land-use study. Mr. Dunn said that the main concern is to avoid collecting the same information over and over. He referred to what is called “research fatigue.”

He added that this affects all research on the program; we have to figure out a way for the researchers to gather this information and complement one another’s programs.

Ms. Durocher explained that initially, the idea was to conduct this research first so that the results could be incorporated into the other research programs, but that this turned out to be impossible.

Mr. Dunn said that he does not know when the researcher will be selected. He added that the SC will talk to the researchers about how they should collect, share and publish Cree knowledge.

Mr. Pachano said that we also have to protect this knowledge. People have to understand that, as this is the basis. He added that this knowledge is not for Hydro-Québec’s benefit, but is meant to be passed on to future generations. He said that this is not the way Cree knowledge is given. He stressed that the researchers have to understand that the information given to them is not for their own purpose, but for this project.

Mr. Pachano said that Crees understand things they can't necessarily express in another language. Many Cree concepts are not easily translated. He suggested to the researchers that if they keep asking the same questions, they should explain to the Crees that it is for their own understanding. He said that past experiences have caused mistrust. Mr. Pachano added that it is important that the Crees know how the information given to the researchers will be used.

Mr. Cheezo told the researchers that when he was young and would ask the elders questions, they would always respond with a parable rather a direct answer, so he had to listen.

Mr. Bobbish explained to the researchers that it is a matter of respect to show that the knowledge belongs to the Crees and not to make it their own.

Ms. Kuzyk expressed concern that there might be a gap between the time when the information is gathered as part of the land-use study and the time when the data on the biophysical parameters is collected.

Ms. Durocher said that reports often say things like "we agree to disagree" when the scientific data doesn't corroborate the traditional knowledge. She said that avoiding such conclusions is sometimes simply a matter of asking more questions or phrasing them differently. She added that the best findings were obtained when traditional knowledge was incorporated into the study results, even when they were contradictory. She said that it is easy to collect traditional knowledge, but not so easy to incorporate it.

Mr. Dunn suggested that when the study results differ from traditional knowledge, the researchers should phrase their questions to the Crees differently and ask them why they understand it this way. He added that although the results often seem to be contradictory, they end up being complementary. It's a matter of building a relationship on trust.

Mr. Bobbish noted that traditional knowledge and science are both based on observations.

Ms. Durocher said that few reports have been produced by anthropologists. She said she considered the best report to be the one Ettinger produced for Wemindji.

Mr. Neumeier questioned the SC about the validation process.

Ms. Durocher answered that, usually, the researcher sends the report to the community representative to enable him or her to check for any misunderstandings. She added that the way the data was recorded is validated first, and then the researcher uses that data and the results are validated by the committee.

Mr. Bobbish stressed the importance of conducting validation as a group so that people don't feel shy about the process.

Mr. Pachano referred to situations where Crees were interviewed but the information they provided never showed up anywhere.

Mr. Dunn suggested that a document be prepared listing the information that has been provided by the Crees but will not be used.

DISCUSSION ON FIELDWORK LOGISTICS

Mr. Dunn reminded the members and participants of Ernie Rabbitskin's role regarding field logistics.

Mr. Dunn said that the Niskamoon office, the storage facilities and the Niskamoon representative for each community are there to address whatever request the field researchers may have, adding that the Cree SC representatives are also there to help them.

Regarding motorboats, Mr. Dunn suggested that the researchers pay the boat owner $200 a day, plus $100 a day for gas.

Mr. Tapiatic said that he would like to receive a list from all researchers indicating when they will be coming and for how long. He added that such a list would be useful to the local coordinator and community representatives. Mr. Dunn suggested that this information be sent to the community representatives.

Ms. Saganash said that the researchers should forward the questions they intend to ask the Crees while they are with them in the field.

Mr. Neumeier asked how long in advance it should be sent.

Mr. Tapiatic suggested it be sent one month in advance, with updates if needed.

Mr. Dunn said that the issue of a temporary lab and lodging is not solved yet, but that Niskamoon is working on it. He said that lodging in communities is always a problem.

Mr. Dunn said that Ms. Durocher and Mr. Gilbert have developed an atlas, which will be provided to the researchers.

Mr. Gilbert showed the atlas on the screen. He said that this tool could be useful to the researchers in terms of logistics, but not for their reports.

Mr. del Giorgio asked the SC about budget limits and said that he would like some form of sampling program to be developed. He asked how the local Crees who will help them with sampling should be hired.

Mr. Dunn answered that the budget was based on the researchers' projections. He added that the local representatives are their main priority but if they wish to develop a participation program, they should contact Ernie Rabbitskin.

Mr. Dunn said that a request to extend the research program will be presented at the next Niskamoon Board meeting in three weeks.

Mr. del Giorgio suggested that the eelgrass monitoring program be done one year earlier, so that the researchers can incorporate the results into their own research. He suggested it be done in early 2018.

Ms. Durocher said that we must be careful to avoid exhausting the communities with too much research all at once. She said it's up to the local representatives.

Mr. Dunn said that this will be discussed tomorrow at the SC meeting.

Mr. Short said he thinks that an annual summary should be produced. Mr. Dunn answered that this is what the SC had in mind. Mr. del Giorgio agreed.

IMPORTANT DATES – 2017–2018 RESEARCH YEAR

Mr. Dunn said that we must work together to set a suitable time for a summary meeting.

Tuesday, August 30, 2017, Niskamoon office, Chisasibi

Steering Committee meeting

PRESENT:	Alain Tremblay	Hydro-Québec
	Carine Durocher	Hydro-Québec
	Jean-Philippe Gilbert	Hydro-Québec
	Marc Dunn	Niskamoon Corporation
	Merlin Whiskeychan	Waskaganish
	Norman Cheezo	Eastmain
	Nadia Saganash	Cree Nation Government
	Robbie Tapiatic	Chisasibi
	Simon Marcotte	Hydro-Québec
	William Blackned	Wemindji
GUESTS:	Fred Short	University of New Hampshire
	James Bobbish	Cree Nation of Chisasibi
	Josée Rousseau	Hydro-Québec
	Louie Kanatewat	Chisasibi
	Rod Pachano	Cree Nation of Chisasibi

CHAIR AND SECRETARY

Mr. Dunn chaired the meeting of August 30, 2017. Ms. Rousseau acted as Secretary.

The meeting began at 9:55 a.m.

APPROVAL OF THE AGENDA

The following items were added to the agenda:

8) Follow-up: original letter from former Grand Chief M. Coon-Come to R. Cacchione
9) Follow-up on eelgrass 2018
10) Goose study
11) Long-term research program – timeline
12) Chisasibi research centre
13) Lodging for researchers
14) Incorporation of Cree knowledge into research program

FEEDBACK FROM PREVIOUS DAY'S MEETING WITH THE RESEARCHERS

Mr. Kanatewat said he found the meeting very interesting. He added that he is sure the people are anxious to know about the SC's progress so far. The local representatives should be able to inform people of what is coming as soon as possible.

Mr. Dunn suggested that a newsletter be produced. Mr. Kanatewat agreed to his suggestion. Mr. Dunn said the newsletter could be prepared by the Niskamoon communication officer and published every 3 months.

Ms. Saganash suggested that the researchers' profiles be presented in the newsletter.

Ms. Durocher suggested that the difference between the types of seagrass be explained.

Mr. Pachano suggested that the radio station be informed that the SC will publish a newsletter.

Mr. Bobbish agreed with Mr. Kanatewat. He said that it would good for people to be aware of the next steps, and that they would be understanding.

Mr. Cheezo said that he has not seen this much emphasis on Cree knowledge in any other research and that it is very good.

Mr. Marcotte said he is a little surprised to see that so little progress has been made since the meeting held in June at the Sheraton. He added that he is happy to see that Mr. del Giorgio has a good understanding and is glad that he is on the research team.

Mr. Tapiatic said that he sees this from a different perspective, as he is the one dealing with all the researchers. He said that the trappers may agree to go out one day, but the next day some of them have an excuse not to go. Mr. Tapiatic said that he wonders how to improve this situation and is working on it. The message has to be passed to the trappers that they should always have a second person on standby.

Mr. Tapiatic said that he is concerned about logistics since he has noted a lack of coordination.

Mr. Dunn said that he agrees and thinks that the Cree representatives will play an important role.

Mr. Tapiatic told Mr. Dunn that he should hire Mr. Rabbitskin full time on this project. He added that there are two research groups and that one of them had said they were waiting for Mr. John Lameboy to supply them with gas. Mr. Tapiatic said that even the research groups are mixed up. In the community, people are confused about who does what. People are interested and anxious to know why the eelgrass has declined.

Mr. Whiskeychan said that coordination and administration are quite difficult and agrees that Mr. Rabbitskin should be hired.

Mr. Kanatewat asked whether it would be possible to offer Mr. Rabbitskin a place to work in Chisasibi.

Mr. Bobbish suggested posting a position and seeing if Mr. Rabbitskin is interested.

Mr. Dunn said that it also depends on the budget.

Mr. Whiskeychan said that he found the meeting with the researchers progressive.

Mr. Blackned said that he also had a problem with the tallymen and land users in Wemindji. Although he informed them of what the procedure would be, they did not want to pay for the gas.

Mr. Cheezo said that he had no problem with the tallymen in Eastmain. He was accompanied by an elder and a youth, who was in charge of the iPad.

Mr. Pachano said he found the joint meeting very informative. He added that he is a bit disappointed that the SC did not get much feedback from the researchers. He wonders if the researchers properly understood what the SC members said to them.

Ms. Durocher said that she thinks it was good and needed to have everybody together. She felt that the progress made at this meeting was about the same as in June. She added that she wished the program were more advanced by now. Regarding the traditional aspect of the research, she felt it was overwhelming for the researchers as they are not social scientists. She regretted the fact that the traditional knowledge component of the research program had lagged behind. She believes that asking the researchers to address this component without providing them with the support they need to handle it places too much stress on them.

Mr. Dunn agreed with Ms. Durocher. He said that he thinks the researchers are beginning to recognize the opportunity the Crees have given them and hopes they'll meet the expectations. He added that it was a good meeting and we learned how much logistical effort is involved; once a year is OK, but any more than that would be a bit of a stretch.

Mr. Gilbert said he can't wait to see how the researchers will work together.

Mr. Tremblay said that it was a good meeting but that he is disappointed the researchers are a bit behind. He added that he is not sure we'll have a summary at the end.

Ms. Saganash said it was a good meeting in general but that she is a bit concerned, as she is not sure the researchers were entirely organized. She added that coordination with the communities needs to happen … and quickly. She added that she is concerned about traditional knowledge and believes the researchers need a tool kit. She suggested sharing the "Indigenous Guardians Tool Kit," which researchers could refer to. She feels there is disagreement between what Mr. del Giorgio and Mr. Short think the research questions and objectives should be.

Mr. Dunn said that Mr. Short feels that it is impossible to reconstruct what happened in the past.

Mr. Bobbish said that Mr. Short told him this morning that they need to clarify the research objectives, or it is going to be a mess.

Ms. Durocher said that Mr. Short must have more quantitative data.

Mr. Dunn said that Mr. del Giorgio suggested we jump into this with Mr. Short right now while he is here.

Ms. Saganash asked who is going to address the link between eelgrass and waterfowl.

Mr. Gilbert said the terms of reference are almost ready; once they are, they will be submitted to the SC, which will then find a researcher to join the research team.

REVIEW OF 2016 REPORT – UNIVERSITY OF NEW HAMPSHIRE

Mr. Short gave a PowerPoint presentation entitled "Research on the Ecological Health of James Bay in Relation to Cree Natural Resources." A copy was appended to the minutes.

Mr. Short hopes the community will provide a location where the researchers can set up a laboratory. He added that Mr. Rabbitskin did a terrific job but doesn't know everybody in Chisasibi, so it always takes a couple of days to figure out how they'll go into the field.

Ms. Durocher asked whether the fact that their satellite imagery dates from 2012–2013 is a challenge in terms of ground truthing.

Mr. Short confirmed that it is.

Mr. Dunn asked what the process to select the right validation point is.

Mr. Short said it is selected at random.

Mr. Short said that there are places where there will be eelgrass, but taking samples in these locations will be impossible because they are either too shallow or too rocky.

Mr. Dunn reiterated that validation will be very important since satellite imagery will be used. He said he wonders what we will do when there is disagreement as to whether it is eelgrass or not. He added that this is a communication issue. He stated that satellite imagery cannot validate Cree knowledge, but Cree knowledge can validate what the satellite imagery is saying. He stressed that we should use satellite imagery because the Crees cannot cover the whole territory.

Mr. Kanatewat and Mr. Cheezo spoke of one occasion when the satellite imagery identified eelgrass but it appeared that it wasn't.

Mr. Short said that they are trying to produce a map of eelgrass distribution. All parties agreed with this idea.

Mr. Cheezo said that what people want to hear is whether conditions will return to what they were when there were lots of geese. He asked what will happen after the research if we only talk about eelgrass.

Mr. Dunn said that the best we can do is improve the habitat, but that does not mean the geese will come back.

Mr. Gilbert said that on the map of eelgrass distribution in 1996 presented by Mr. Short, the sections in yellow indicating the presence of eelgrass are larger than those on the original map. He added that in some areas, it is even covering the land.

Mr. Short said that the thickness of the contour line is probably the reason why.

Mr. Gilbert said that it needs to be changed because it is over-representing the eelgrass coverage.

The meeting paused for lunch at 1:05 p.m. and resumed at 2:30 p.m.

Mr. Dunn said he thinks Mr. Short gave a good rundown of what he is doing. He said it is clearer, but what we need to discuss is whether or not this is the best research we can get.

Ms. Durocher said she agrees that Mr. Short is really good with the community monitoring part. She said she is concerned about using satellite images from 2013 and validating them with the ground truthing carried out in 2017. She stated that, as we know, eelgrass cover can vary a lot from year to year and she thinks this four-year gap could easily be criticized in a peer review. She added that if this is the case, we are wasting our time and money.

Mr. Gilbert said that the only way to have more recent satellite data is to buy it. He added that there are other models available.

Mr. Dunn said his interpretation of what Mr. Short is doing is that he is trying to implement a monitoring program that can continue without him, for years. If the images are too expensive to procure, the monitoring program will not continue because the community will not have the financial means to buy them.

Ms. Durocher said that the community monitoring program is just one aspect of the comprehensive research program, not the main goal. She asked if it is sufficient to have this type of scientific data. She stressed that the SC had asked Mr. Short for the parameters and that although he always said he could, he hasn't included them.

Ms. Saganash said she is wondering what the trappers are learning to do through community monitoring.

Mr. Dunn answered that the trappers are mainly noting the presence or absence of eelgrass.

Ms. Saganash asked whether validation would be carried out by the community as well.

Mr. Dunn said it could, and that validation is not complicated.

Ms. Saganash noticed that there is a gap between what the researchers are doing and what Mr. Short is doing. She added that the SC should be able to tell Mr. Short what we need.

Mr. Tremblay said that he doesn't think the scientific aspect of Mr. Short's work will be able to answer the SC's questions.

Mr. Pachano asked whether it would be scientifically acceptable if people took notes with a GPS map of where there is eelgrass.

Mr. Tremblay said that it would not explain why there is eelgrass there or not.

Mr. Marcotte said that if the SC feels that Mr. Short's results will not fit in with the other researchers' results, the SC should tell them as soon as possible.

Mr. Tremblay said that the researchers are already concerned about this and he believes the researchers have discussed it with Mr. Short.

Mr. Gilbert explained that it is important to obtain quantitative data rather than information relating only to the presence or absence of eelgrass.

Mr. Tremblay agreed and said that with this type of habitat characterization, the Crees will have the information required to reconstruct the best habitat.

Mr. Gilbert said that this comment and request to Mr. Short should come from the SC as a whole, not just from the Hydro-Québec representatives on the SC.

Mr. Dunn said that when the SC inherited this research program, it was not clear what Mr. Short was doing. He added that he believes Mr. Short intends to incorporate this information, but later. He added that if the SC wants this information now, it must say so now.

Ms. Durocher said that she would not mind paying Mr. Short's salary if we got good scientific results.

Mr. Tremblay agreed with Ms. Durocher.

Mr. Tapiatic said he wonders if Mr. Short knows that he has to report to the SC first, before going to the Chief and Council.

Mr. Gilbert suggested the SC give Mr. Short the list of the parameters required to obtain quantitative data.

Mr. Tremblay said that these parameters have to be in line with those of the other researchers.

Mr. Tapiatic said that every time we try to improve his program, Mr. Short talks about more dollars, even though he is the highest paid of all the researchers. He added that he wonders how we can handle this.

Mr. Cheezo said he wonders if the SC is really doing what is asked of it.

Mr. Pachano said he wonders if whether is possible to restore the eelgrass.

A discussion followed regarding the costs associated with the satellite imagery and its proper resolution.

Mr. Gilbert said that he questions how Mr. Short processed the images from 2013 to get to the images seen this morning in his presentation.

Mr. Pachano suggested that Mr. Short be asked for more frequent reports.

Mr. Tremblay said that he believes the idea was to pay him a year at a time, year by year.

Mr. Dunn said that he makes a point of asking Mr. Short what stage he is at with the other researchers, every time he talks to him.

Mr. Dunn reiterated that he always addresses Mr. Short on behalf of the SC.

Mr. Marcotte asked whether the SC is clear on which parameters we want from Mr. Short.

Mr. Gilbert answered that we have given him the water parameters we need, but we also want eelgrass parameters.

The members agreed to meet with Mr. Short again to address their concerns.

The meeting paused at 3:45 p.m. and resumed at 4:00 p.m.

Meeting with Mr. Short

Mr. Pachano told Mr. Short that the SC had held discussions about the eelgrass research. Mr. Pachano said that there are questions we need to answer and that the SC must meet the Crees' expectations and find out why the eelgrass has declined.

Mr. Dunn told Mr. Short that he is doing an excellent job and that his work is in line with the way the SC wants the communities to collaborate. He added that the SC wishes to continue.

Mr. Dunn told Mr. Short that the SC's biggest concern is that he is using images from 2013 and that this might make it difficult to publish the study as well as how we are going to incorporate the information with the other researchers' data.

Mr. Dunn said that the SC is also concerned that Mr. Short is not using quantitative data instead of the presence/absence data. He added that the SC members are committed to giving him a list of the parameters they want measured.

Mr. Dunn said that the SC wants to have quantitative data that can contribute to eelgrass restoration efforts in the coming years.

Mr. Short answered that the SC did not want to pay for quantitative data, but preferred to work with what is available.

Mr. Tremblay asked Mr. Short if he had an idea of what this would cost.

Mr. Short said he did not.

Ms. Durocher asked Mr. Short whether it would be possible to use more recent satellite imagery.

Mr. Short said that they must first look at the resolution and then see what's available. He said that it could cost up to $100,000 for the whole coast.

Mr. Dunn asked Mr. Short if it is necessary to do the whole coast, or if we could select certain areas of it. He added that he understands that Mr. Short's approach is to get people onboard for this first year and ramp up what they are doing next year.

Mr. Short confirmed that it is.

Mr. Bobbish asked Mr. Short if he had any experience with monitoring for restoration purposes.

Mr. Short said that he did not.

Mr. Gilbert asked Mr. Short if, further to yesterday's meeting, there are any parameters the other researchers want measured.

Mr. Short answered that the researchers wanted everything. He added that the cost would be high.
Mr. Dunn asked Mr. Short if he will be able to inform the SC of potential restoration measures that could be put in place.

Mr. Short answered that yes, he will, and at suitable locations.

Mr. Short confirmed that more parameters will be added and measured.

Mr. Short said that incorporating all the research is challenging and complex. He added that the expectations and demands of the oceanography researchers are a bit unrealistic.

Mr. Short said that they could study why the eelgrass has declined, but it would not answer the question that is being asked.

Mr. Short said that although the whole group's main focus is on eelgrass, the researchers don't want to focus exclusively on eelgrass. He added that the other researchers' observations will show whether the habitat is favorable for eelgrass.

Ms. Durocher told Mr. Short that the SC needs more detailed data that goes beyond identifying the presence or absence of eelgrass. She added that she understands that basically, the community workers will do whatever can be done from a boat, such as taking samples of the plant or recording video footage.

Mr. Short confirmed that this is the case.

Mr. Dunn said that the first step is engagement. He added that in the past, he has been pleasantly surprised by the fact that people were asking for more to do and they could do it. He suggested that maybe we could test the limits.

Mr. Short said that sampling methodology can get tricky, and that we want robust sampling.

Mr. Bobbish asked Mr. Short if they will be able to answer why the eelgrass isn't coming back.

Mr. Short answered that this is the intent.

Mr. Dunn told Mr. Short that it is important to keep an open line of communication and not just say: "Trust me; I know what I am doing." He added that he feels it is important to make everyone feel at ease and that no one wants to second guess the work.

Mr. Short suggested he send the Stantec reports to the SC.

Mr. Gilbert said that if these reports were produced for the mandate, the SC should already have them.

Mr. Pachano told Mr. Short that the SC is not a Hydro-Québec committee and that Hydro-Québec specialists on the SC are there to provide support.

Mr. Dunn asked Mr. Short to confirm the parameters agreed upon with the other researchers.
Ms. Durocher suggested that each researcher's annual report be shared with the rest of the researchers.

Mr. Pachano asked Mr. Short if he feels the researchers are comfortable with the idea of taking Cree traditional knowledge into account.

Mr. Short answered that they are not that comfortable with it, but does not feel that this is the biggest issue. He is worried that it will be difficult to make the connection between the eelgrass and oceanography research if we don't know how the water gets to where it goes. He is concerned that there is no physical oceanographer on the ISMER team who understands how the water flows and reaches the eelgrass beds in bays like the Baie of Many Islands.

Messrs. Tremblay, Gilbert and Dunn said they are surprised by this comment, since ISMER's PPT presentation showed that they will conduct physical oceanography and are trying to make that link. Mr. Dunn added that he understands that ISMER's research focus is the same as Mr. Short's and that everything starts with the eelgrass beds.

BUSINESS ARISING FROM THE PREVIOUS MEETING – Letter of request from the Wildlife Board to Ms. Violet Pachano

Mr. Dunn said that he had not had the opportunity to discuss this letter with Ms. Pachano.

Mr. Pachano said that Sophie Filion is resigning. This item was deferred to the next meeting.

BUSINESS ARISING FROM THE PREVIOUS MEETING – Advisory Committee on the Environment/Canadian Geological Survey

Mr. Dunn said that the Canadian Geological Survey wishes to give a presentation on isostatic rebound at an upcoming SC meeting in Montréal. All members agreed.

BUSINESS ARISING FROM THE PREVIOUS MEETING – Fisheries and Oceans: habitat recovery program

This item was deferred.

CHISASIBI RESEARCH CENTRE

Mr. Pachano suggested the SC work with the Chisasibi Research Centre. He added that the Chisasibi Research Centre was incorporated a few months ago.

Mr. Dunn said that he told the Chisasibi Research Centre that they should meet with the SC. He suggested the SC invite them.

LODGING FOR THE RESEARCHERS

Mr. Dunn said that lodging for the researchers is a huge issue. He requested that the community representatives ask the researchers to provide them with their schedules so that they can make lodging arrangements.

NEXT MEETING

The next meeting will be held in Montréal on October 11, 2017.

The meeting adjourned at 5:50 p.m.