

Sahtú Environmental Research and Monitoring Forum
Teleconference Meeting, Thursday October 13th, 2016 1pm – 4pm

1. Introductions and review of agenda

Participants:

- a. Roger Odgaard, NWRRC
- b. Gordon Yakeleya, TRRC
- c. James Caesar , FGHRRC
- d. Patricia Manuel, FGHRRC
- e. Harry Harris, FGHRRC (joined for a time)
- f. Ed Reeves, DRRC
- g. Jimmy Dillon, DRRC (half of call)
- h. Christine Wenman, SERM Forum administrative / technical support (YK)
- i. Frederick Andrew, SRRB
- j. Leon Andrew, SRRB
- k. George Barnaby, SRRB
- l. Joe Hanlon, SRRB
- m. Deborah Simmons, SRRB
- n. Lise Dolan, GNWT-ECE (half of call)
- o. Jennie Vandermeer, GNWT-ENR (NW)
- p. Robert Mulders, GNWT-ENR (YK)
- q. Alana Fletcher, researcher (Ottawa)
- r. Audrey Giles, researcher (Ottawa)
- s. Kim Howland and Heather Clark, DFO (Winnipeg)
- t. Megan Wohlberg, SRRB (YK)
- u. Jenica von Kuster, Husky Energy
- v. Thom Stubbs, ALCES project, Calgary (joined briefly)

2. Research project presentations and/or updates

- a. Alana Fletcher, past and future research updates
 - i. Recently finished dissertation, work was in Dǎlǎnǎ, looked at remediation effort at Port Radium, and how the language people used impacted the cleanup response.
 - ii. Spent summers of 2013 and 2014 in Dǎlǎnǎ, stayed with the Neyelle family, still in touch with people in Dǎlǎnǎ. During that time, Alana started doing some work with Morris Neyelle, co-editing a collection of his father's stories and life history. She and Morris have just recently sent that manuscript to the University of Alberta Press, which has expressed an interest in publishing it.

- iii. Just set up a Sahtú libraries project. Alana will be coordinating the endnote database that Deb has set up with Heidi brown. Alana will be populating it with research from various sources and making it available to various community members and making it user-friendly. Overall objective of the Sahtú libraries project is to make information more easily accessible to community members and research partners so they can access it online from their home or community, rather than needing to travel or find hard copies. They will be contacting researchers and community members who have produced research documents on the Sahtú and importing them.
 - iv. Roger – Great to hear about the work with Délı̨ne and the work on the Sahtú libraries project. Is there a place that we can send information or requests? Alana – Yes, send to info@srrb.nt.ca, I will get access to that. Questions can be sent to afmf38b@gmail.com.
 - v. Deb requests facebook post about the project.
 - vi. Deb asks when thesis will be online. Alana – Dissertation form in 3 years, but manuscript may be available earlier.
- b. Thom Stubbs, ALCES project update
 - i. Current plan is to attend in-person meeting in FGH to discuss the tool and how to use it to show changes to the land and predict future changes to the land from factors like climate change and different types of events in the Sahtú. Right now we've been working on mapping information to have it available to discuss in January. A big topic to discuss in January is how to work with traditional knowledge users about the best process to use TK. We're also talking with caribou officials about information we can bring into the process later.
 - ii. Deb – Suggests Thom contact Heidi Brown because of related work on Sahtú Atlas that Leon and Walter are going to lead that will focus on Ṯḏzı̨ and mountain caribou. Heidi has a lot of data and may be able to share some info. Thom – Great, talked to Heidi a couple months ago, and will reach out again.
 - iii. Deb – For the FGH folks, with respect to that project, this is just phase 1, we're hoping to involve FGH and CL in a phase 2 initiative, so we're trying to scope it down so we can keep the size manageable for the first round.
 - iv. Deb – This work is funded by CIMP, and I was just talking to Julian Kanigan, who is excited about going to FGH, and they would like to figure out creative ways to include community folks in reporting about research projects they fund. So something to keep in mind, Thom.
- c. Audrey Giles, project grants to be submitted next week (water safety research)
 - i. Asking Transport Canada for funds to develop a boating safety program for the Sahtú.

- ii. Course designed with input from every Sahtú community, and drawing on other programs that have been developed elsewhere, and including certifications like PCOC.
- iii. Would then have a pilot program and then eventually roll out across the Sahtú.
- iv. Want to have a TK component including things like stories and safe harbors, and then include this info on website or app. Could partner with other mapping and research activities.
- v. Jimmy – We need something for people who travel out on the lake, like a package that you could open up and you are sailing, or something that if the wave is too big, you need something to cover your whole boat so the water won't get in. Audrey – Great idea, needs to be done, but the grants are only able to be used for certain things. Jimmy – Agreed, just giving an idea. Different seasons matter too – in fall and spring you are dealing with thin ice; what happens, how do you get out of it? We need some kind of equipment that we could use to survive. Audrey – The good thing about the search and rescue application is that it is not just boat safety, it can be water/land/ice and things about ice safety could be in there. Jimmy – Reminding you, that we're in the north, we're not in the south, so I'm talking for the people that live in the north. Audrey – Agree, all the information and products are for and from the people in the north. Jimmy – Sahtu government could support something like this, or make something.
- vi. Fred – Need float suits too, you won't last long without one.
- vii. Roger – I like what Jimmy is talking about and what you are doing. What Jimmy is talking about is a list of tools/supplies you need to go on the land or go in a boat. And there is a lot more on the Dene list than the list down south, and a lot of these tools and supplies should be on the list that we are going to design. Audrey – Part of the boat safety research I did in Délı̄ne created a new list, and it has all the things Jimmy is suggesting – poles, tarp, rifle – so we did an adaptation of the checklist. Making that list for other things, like the land, is good too. Roger – We're talking about developing an app but also paper products? Audrey – Yes, that's what we did last time as well, but we want to try the interactive version as well.
- viii. James – I have George Barnaby who wants to make a comment. George – The people have a lot of traditional knowledge about the land, the water, what to watch for, and how to keep safe. On springtime there are lots of people traveling on the river, hunting geese and things like that, and there are things they have to watch for, even after the ice goes they watch the water to see if the rest of the ice is coming down. So all this knowledge is at the community, and you don't have to do a lot of studying, you just get people together and you'll get everything you want to know.

Audrey – Absolutely, that is what the grant is for. We'll bringing people together to look at maps, and that's exactly what we want to do. George – I'm suggesting the RRC could coordinate, good ways to gather the people, some people have more knowledge about certain areas.

- ix. Harry Harris (FGH RRC) – Comments mentioning industrial proposals, fire management, history of HTA/RRC involvement in fire management, policy centered on values at risk rather than animals. Been noticing a lot fewer animals caught by hunters/trappers due to impact of fire on habitat. Christine – I think you're responding to some correspondence about the research strategy, and your concerns will definitely influence the research strategy, and we will get to that later. Audrey – I'm completely on board with what you're saying, all the money goes through the SRRB, I'm working for free. The problem with boat safety in the past is that it didn't take into account local knowledge, so that's what we're trying to do. Harry – Any research or access to the land really affects us. We eat the fish and animals. We should be involved in any research, any application to the land, right from the start.
 - x. Roger – Harry, your concerns will be addressed in item number five. And I want to say to all the researchers who have and will present today, the number one thing we want to hear in the community is the collaboration, participation, and communication. So please include that today and from now on. We always do, and we'll revisit Harry's concerns in item five, and we need to develop a piece of paper telling researchers how to do this when they come to our land. So we'll work on that together and ask researchers to prioritize the communication, collaboration, and participation. Harry – I'm really glad we're making this attempt because we the people are affected the most. Deb – Thank you to FGH for all these contributions today. Harry – Right now we're in a public meeting in the community and I came over here to talk on the phone to you. In Good Hope we're trying to fix how we live as a people, and what you're doing goes hand in hand with what we're doing, so thank you very much.
 - xi. Audrey – (thanks everyone for the input, has to go, hopes for good news about the grants).
- d. Deborah Simmons, SRRB / Jennie Vandermeer, Calendar
- i. Jennie is working on a calendar project which is a joint project of ENR and SRRB. There is a photo contest that runs until October 31st. Please send her submissions by this date – they may be chosen for the calendar or other communications material.
 - ii. The calendar will also include important dates. If there are important dates that you already know about, please send these to Jennie -- jennie_vandermeer@gov.nt.ca

- iii. If you would like your research or monitoring project features, you can speak to Deb to see if there is an opportunity to do so.
- e. Robert Mulders, ENR, proposed grizzly bear DNA study in the Mackenzie Mountains
 - i. Presenting research proposal (see attachment)
 - ii. ENR is interested in starting to do some baseline research to get a better understanding of how many bears there may be in the Mackenzie Mountains, focusing on the Sahtú but could expand north. Not planning on Nahanni/south.
 - iii. Sampling similar to scat collection – you can use hair, collected at rub sites, to get information on a bear.
 - iv. Plan is to start with a single sample grid, set up tripods, check every 2 weeks.
 - v. Need to use helicopter to limit impact (Fred – lots of calving in May/June)
 - vi. Next summer would be a pilot, learning experience, and then by next fall would have genetic results and discuss findings with communities.
 - vii. Roger – Plans to include FGH? Robert – We want them aware; it's possible that we don't have any of the three grids in the Gwich'in area. Roger/James – FGH area, not Gwich'in area. James – We also have bears on the river and want to know where they are coming from, maybe the mountains? Robert – Plan to start in Tulít'a district and then expand, maybe into FGH and/or Gwich'in. James – Need to be fair in how
 - viii. Roger – Question about DNA in two previous encounters in mountains? Robert – My understanding is that they are two separate males and have not been harvested.
 - ix. Gordon – Tulít'a does hunt at Caribou Flats each year, been seeing more and more bears, this year we shot a bear, so we're a bit afraid now, looking on the river because you can see a lot of poles already there, we saw lots and lots of samples on the way up. We always point out TK, it would be nice to come to Tulít'a and ask about where to gather the information. Robert – I totally agree, did get to spend a week at mile 222 with Ron Doctor, and got his perspective on bears in that area. My earlier comment is that obviously the drainage systems are important habitat for density. One concern we are hearing is that people are seeing more bears, and whether it is habituation of bears to hunting, or increase in number of bears, or older bears being in poorer condition (nutritional stress / attracted to gut piles/human activity). So we're trying to understand better what is going on. Gordon – I guess what I'm saying is it is better to go by jet boat to collect samples, rather than helicopter, so you can minimize the noise.
 - x. Deb – Glad that Robert was planning this work, because our board has identified grizzly bear research as a priority, and outfitters have asked for revisions of grizzly bear harvesting, and the board keeps responding that its not justified in the absence of new info. There is a draft report, maybe finalized by now, on grizzly bear, that has

been done by the SARC that includes the mountain grizzlies as well as grizzlies on the plains. And that report should include both TK and science in balance, and both sides in the Sahtú have been lacking. Robert – Research can contribute science and TK about what's going on across the landscape and how to properly do sampling.

- xi. James / Roger – Interested in expanding into FGH area and looking at bears in valley/along Mackenzie as well. Roger – Agree that we should figure out where these bears are coming from. Robert – As you've heard, there are reports of bears moving north into new areas, into some of the arctic islands, so there are questions about that. Roger – Talks about three types of grizzly bears (barren, mountain, other?).
 - xii. Robert – Northern example in application, Inuvik-Tuk road, Marsha Brannigan, can see some interesting results. So once this info goes on maps and compare how bears are moving between sessions, it really becomes interesting. There are references there and I'm not sure how to get hard copies but I can give you access to some of those reports. James – Debbie or Christine can forward them to us. Robert – I'll pick two or three and share them.
- f. Kim Howland and Heather Clark, DFO. Great Bear Lake research updates.
- i. Been doing fishery research in GBL for a long time; Heather has been leading field crew recently (this summer included), providing info about food web and baseline info about ecosystem and changes, can also provide feedback on potential development.
 - ii. Currently on end of five year research cycle, looking at one of the five basins each year. Spent most of July in Keith arm, had two camps, one at Carcajou and one at Plummer's. Had five local assistants from Délı̨ne. Went really well, aimed to do a total of 26 randomly selected sites. Ran into some issues with wind and boat mechanics, so a few sites were skipped.
 - iii. Attended Cross Cultural Research Camp in August.
 - iv. Have a book that will be ready to go out by the end of the year.
 - v. We also have a very large database and are attempting to make it more accessible and standardized, and are working on this right now so we can do larger scale analyses of the data on the lake.
 - vi. Deb – Thanks for the report, and apologies for long delay on that book project.
 - vii. Roger – Asks about water quality work. Kim – DFO not involved. Jennie – Are you asking about the ENR water monitoring? Roger – No, asking about a lake called Dragon Lake across from Norman Wells, in between 25 mile lake and the Canol Road, right on edge of fracking area, want to make people aware of that and ask if anything is going on. Jennie - Is something going on or are you asking for something to go on? Jennie – Would you ask land department, call it in about that? Roger – was

three weeks ago. Jennie – Monitoring would be done by Lands Dept, maybe try talking to Steve Deschene.

- viii. Jenica von Kuster, Husky Energy – We do have ongoing monitoring on the land. For sheen on water, you'd want to tell the lands department so they can go out and test that water. There are organic sheens that occur globally, but will look like hydrocarbon sheen, very hard to tell apart without testing.
- ix. Frederick – What have you been learning about climate change on the lake? Kim – We are seeing, at least from the water quality data, that things are changing on the lake. It seems to stratify – the upper layers are warming much faster than the lower layers, and it prevents the water from mixing during the summer, and then you have a thermocline or a steep drop in temperature. It used to be, from historical accounts, that the lake generally tended to be all one temperature, which is characteristic of colder arctic lakes (unlike in the south). So that is an indication that it is warming, and/or the season that it can warm in is longer. We're also seeing that the most abundant area for the invertebrates is getting deeper, so maybe the water is warmer/more productive deeper than it used to be. But that data is really preliminary, but it does look like there are some changes there. That matches with some TK documentation that has been done as well. He did some interviews and one of the key concerns/issues was the change in the ice-off, that the ice was clearing a lot earlier, by about 3 weeks. What people are seeing seems to coincide with what we are seeing with the science. And this could have consequences for the fish, particularly the lake trout, who are using the shallow habitat right now but if it warms it may no longer be suitable for them.
- x. Deb – Can you talk about design of next round of research? Kim – Would be good to follow up with Délįnę and SRRB to see what the priorities are.
- xi. Patricia – Regarding herring, did you study that at all? Kim – When I talk about cisco, that's what you would refer to as herring. I have a student who is finishing his MA on what the herring are eating. There are some different types in the lake, that feed on different items than the ones in shallow water, and they feed quite a lot on some of the terrestrial insects that are coming into the water. Patricia – You said this is your last year? Kim – A five year study with CIMP to do this more detailed ecosystem sampling. We'd like to continue at least the fish sampling, for some of the other ecosystem components takes a lot of effort and we may not be able to maintain that over the long term, so we need to do some analysis and see if there are things we want to monitor over the long term. Water quality is a big one that is relatively easy to monitor, particularly near the community.

xii. James Caesar- around FGH, we have been seeing a lot of strangers coming around our water – strange, other fish species around FGH. About a month ago someone caught a fish that almost resembled a piranha. And some of the indigenous species are disappearing – like there aren't any herring anymore on the river. So since, your project has only centered around GBL is there any way to do a similar type of study on the river between FGH and Tulít'a? Kim - Another areas of research that I'm involved in is invasive species – more on the marine side but it is interesting to hear you talk about this because I don't know if anyone is looking at freshwater invasive in the north and how things are changing – this is a real issue with climate change and the area becoming more hospitable for some of these species. Kim will speak to James more to follow-up. Interested and could look to local involvement to keep track of what you are seeing and we could help with identification, for instance if species are kept and sent to us. James – not only fish but air and land animals too. Kim - Kim – involved in the development of the arctic invasive alien species strategy and all of the different arctic states are joining together to figure out how to bring awareness about this issues and it involves land animals and fish and an interest in community based monitoring to monitor changes so that people can understand what is changing in the environment and prepare and adapt. So, perhaps there could be a link to that program.

g. "What are the shared stories about the future of self-government that people in Délı̄ne tell?"
Faun Rice, University of Alberta (To be confirmed)
Christine - Faun couldn't join us for this call and we will try to find another time that works for her.

h. Caribou Atlas project (Walter Bayha and Leon Andrew with partners)

- i. Deb - Workshop planned for Nov 22-24 in Tulít'a
- ii. Weekly calls in preparation for it.

i. Harvest Study Focus group (Deb will update)

- i. Workshop planned for FGH for week of Oct 24
- ii. Already did workshop in Délı̄ne
- iii. Workshops in other communities will follow

3. Research license application updates

a. None this month other than the application that Robert just presented on (Grizzly Bear project)

4. Forum administrative updates – continue to work on the camp reports which will be available soon as drafts.
5. Sahtú ERM Forum initiative updates:
 - a. Sahtú Environmental Research and Monitoring Strategy.
 - b. Sahtú Research Licensing process review
 - c. Sahtú community workshops updates
 - i. We have confirmed a meeting in Fort Good Hope the first week of November and have also invited Colville Lake representation at this meeting. The goal is to broaden the scope of community members contributing to the discussions about the research strategy and also the research licensing review. It is great to have RRC representation but we know that these topics are also important to land corporations and First Nation governments, who have interest in some research topics and are also referral bodies within ARI's research licensing process.
6. Sahtú ERM Forum in-person meeting planning
 - a. Discuss and confirm dates (proposed January 30 to February 3rd)
 - i. Christine - Last meeting was in YK, purpose was to include as many researchers as possible. This year the funders would like the money to be spent in the Sahtú, and try to focus meeting time on research and monitoring strategy and on research licensing process rather than on presentations about research.
 - ii. James – Ledcorp fiberoptic project over the past few years, and the work was not complete north of FGH to the Gwich'in border, and they still need to complete drilling on three major rivers, and that work will still be going on, and they want to start right after freeze-up. So this puts pressure on the community to provide labor and equipment, so it will be a busy time for the community. The first four weeks in January right after freeze-up is when they make all the access roads. So we are looking at January/February....
 - iii. Christine – (some discussion of dates) The proposed date is February 6-10. Any comments on that? Gordon – As long as we stay away from the second week of March. James – We can defer until everyone has their calendar of activities, and get consensus at the next meeting. Gordon – We should at least confirm the place.
 - iv. Deb – Possibilities are week of Jan 17, Jan 30, or Feb 6. SRRB and researchers need to know ASAP to make the necessary arrangements.
 - v. Joe – Week of Feb 6-10 has been suggested. Do we have any problems with that? Chris – How about we set that as a target and people have one week to let us know about any problems. James - Our only concern is that Cindy should be available so we can ask questions about CIMP. Christine – I will make sure that the proposed date works for her.

- vi. **Date set for February 6-10, please check your schedules and alert Christine of any problems by the end of next week.**
- b. Discuss and confirm location - proposed: Fort Good Hope, Norman Wells or Tulit'a
 - i. **FGH RRC Board is in consensus that they can host the meeting.**
- c. Draft agenda discussion
 - i. Christine – More time to scope this out, but hope to have a fairly complete draft of the research strategy to be workshopped, and a draft of the way the research licensing can be improved. Goal is to not pack too much in; may have research presentations but they'd be more of an optional or evening thing.
- d. Other logistics discussions - travel, accommodation, interpretation
 - i. James – Make reservations as soon as possible!
- 7. Youth activities updates
 - a. Boreal Guardians – Megan Wohlberg
 - i. Recent meeting in Ottawa, request for lots of money to fund a bunch of boreal guardians (500m over 5 years to support existing programs and establish additional ones)
 - ii. Potential training includes a program through Dechinta Bush University
 - iii. Research done this summer by a group from Australia who was looking into the two existing programs (Lutselk'e and Dehcho), looking at returns on that investment.
 - iv. Website is www.indigenousguardian.ca
 - v. Website to be launched soon is www.indigenousguardiantoolkit.ca
 - vi. Jennie – highlights strength of having your own people out monitoring, and benefits for government programs because they could draw on those guardians to do work instead of flying people in from YK.
 - vii. Deb – SRRB could consider a letter of support, let us know if there is something we could use as a basis for the letter.
 - viii. (lots more discussion about this topic but your note-taker didn't catch all of it)
 - ix. Deb – A big benefit of the forum is participating in these conversations.
 - x. Christine – ILI supported the Cross Cultural Research Camp with some funding for youth participation, including conversations led by Mandy Bayha. Good connections for Boreal Guardians going forward.
 - b. Further updates will be discussed at the next meeting. For instance, there is work being done to plan for the Sahtú youth network February on-the-land camp and this will be discussed.
- 8. Other items (if any missed)
- 9. Set next meeting date - proposed early December so that focus over next 5-6 weeks is on communications about the research strategy and community workshops.
 - a. **Next Meeting is Monday, November 14 at 1PM**