

Deborah Simmons

Subject: Water and Permafrost - Nę K'ə Dene Ts'ı̄l̄ Forum theme cluster teleconference - REMINDER

Location: Teleconference 1866-969-8429 and code 4950573#

Start: Thu 2017-11-30 1:00 PM

End: Thu 2017-11-30 3:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Required Attendees: Alex_Lynch@gov.nt.ca; Seth_Bohnet@gov.nt.ca; drudolph@uwaterloo.ca; sharon.smith@canada.ca; Steve_Kokelj@gov.nt.ca; Krista_Chin@gov.nt.ca; Jenica.vonKuster@huskyenergy.com; kirsty.gurney@canada.ca; Kimberly.Howland@dfo-mpo.gc.ca; livingstone21@hotmail.com; Isabelle_deGrandpre@gov.nt.ca; kers7130@mylaurier.ca; Chris.Derksen@ec.gc.ca; kmunkittrick@wlu.ca; rconnon@wlu.ca; bparlee@ualberta.ca; Blair_Carter@gov.nt.ca; thom.stubbs@headwatergroup.ca; steve.cumming@sbf.ulaval.ca; mrt@uoguelph.ca; jbaltzer@wlu.ca; Jakub_Olesinski@gov.nt.ca; James_Hodson@gov.nt.ca; alana.fletcher@canada.ca; Andrew_Applejohn@gov.nt.ca; aspring@wlu.ca; agiles@uottawa.ca; bruce_hanna@gov.nt.ca; clmartin@ualberta.ca; christine@planitnorth.ca; cindygilday@hotmail.com; Nihtla321@gmail.com; drrc_manager@gov.deline.ca; director@srrb.nt.ca; faun@ualberta.ca; srrb.frederick.andrew@gmail.com; ndl_manager@yamoga.ca; jennie_vandermeer@gov.nt.ca; rrco@srrb.nt.ca; johnny_lennie@gov.nt.ca; ultralennie21@gmail.com; j_barichello@hotmail.com; lamountaindene@theedge.ca; srrb.leon.andrew@gmail.com; lise_dolen@gov.nt.ca; manéal@shaw.ca; chair@srrb.nt.ca; mknaggs@gmail.com; mratelle@uwaterloo.ca; hope_1966@hotmail.ca; rogerfodgaard@outlook.com; nwrrc@nwlc.ca; sahtu.rrb@gmail.com; stephanie_behrens@gov.nt.ca; faye.deon-eggertson@pc.gc.ca; kcaine@ualberta.ca; sahtuapple@hotmail.com; Tonya_Makletzoff@gov.nt.ca; gillian.donald@appliedecology.ca; srrb.shelby.lennie@gmail.com; sjoerd.wielen@gov.deline.ca; Gary Stern

Optional Attendees: Matt Carlson; Meredith Seabrook; Gila Somers

Meeting Chair
Michael Neyelle

Participants

Tulít'a: Faye D'Eon, Gordon Yakeleya, Jordan Lennie, Deborah Simmons

Fort Good Hope : Norman Pierrot

Déłjñę: Michael Neyelle, Walter Bezha

Norman Alex Lynch, Stephanie Behrens

Yellowknife: Bruce Hanna, Meredith Seabrook, Blair Carter, Gila Summers, Ryan Connon

Waterloo: Dave Rudolph, Andrew Spring

Calgary: Matt Carlson, Thom Stubbs

Saskatchewan: Kirsty Gurney

Regrets

Sjoerd van der Wielen (Déljñę Got'jñę Government)

Blair Carter, Meredith Seabrook, Dave Rudolph

Background

This meeting was recommended by the group as a follow-up to the meeting on this theme on June 14. The group was aware that over the following months there was a lot of field research planned, as well as funding proposals that might be successful, Water Strategy meetings, permafrost modelling, discussions about infrastructure (eg. Déljñę winter road) etc. The idea was for those who were involved in this work to report back to the group and discuss plans for coordination and follow-up work.

Suggested agenda items

Information about some activities obtained from the CIMP (NWT Cumulative Impact Monitoring Program) Sahtú Region 2017 Summary, available online at

http://www.enr.gov.nt.ca/sites/enr/files/resources/2017_nwt_cimp_regional_summary_sheet_sahtu_press.pdf.

- Opening prayer (Michael Neyelle)
- Introductions
- NWT Water Strategy update (Blair Carter): about 75 water partners attended a Water Strategy in Dettah this month. Topics included 2016-2017 progress review summary (action items and performance indicators) – available online; discussions of specific projects; updated Water Strategy, mainly updating on changes since devolution; the first report on the NWT-Alberta transboundary agreement was released recently. www.nwtwaterstewardship.ca.
- Community-Based Monitoring program (Alex Lynch and Gila Sommers)
<http://www.nwtwaterstewardship.ca/communitymonitoring>: Alex helped to coordinate the program on the ground. A plain language summary is being prepared for the technical report on the community-based monitoring report. A program evaluation was completed. Looking to do another engagement with communities – share results and learn about current concerns. All communities except Déljñę have been involved. Is the water healthy? Can we drink the water? Are there any impacts from the oil sands? Still some work to do to understand water quality standards – NWT and federal. One of the best things about the project is that the community fieldworkers are collecting real data that can be used in legal systems if needed; also, good news that the water in Mackenzie River is very clean.
 - Gordon affirmed that talking with the communities will be important.
 - The mouth of the Bear River is sampled – Gordon and Michael noted that people drink the water; Michael talked about testing
 - The program is about water quality, and there is a depth sample taken only at the time of sampling; there are also grab samples, buoys and passive samples.
 - Gordon noted that water depth and channels are changing; is it possible to test the depth of the water in winter – this is the ABoVe program.
 - Andrew noted that the Northern Water Futures program will try to make data available to communities.
 - ENR and Environment and Climate Change Canada is sampling water levels; there are sites on Great Bear Lake, and several near Fort Good Hope and Norman Wells.
 - There is Mackenzie River Basin Board website, Mackenzie Data Stream, and Environment and Climate Change Canada all have websites that provide information about monitoring that's being done.
 - Leon Turo and Leon Turo Jr., Joe Horassi and brother were monitors.
- Baseline Hydrogeological Evaluation of Central Mackenzie Valley Oil and Gas Exploration Areas – Environmental Studies Research Fund (David Rudolph) – info about Dr. Rudolph at <https://uwaterloo.ca/earth-environmental-sciences/people-profiles/david-rudolph>. Visit to Husky Energy lease with Husky representatives (Jenica von Kuster and Ken Hansen), Joe Hanlon, Jennie Vandermeer etc. The tour was very useful and a lot was learned. Now building GIS maps of the area where the majority of interactions between groundwater and surface water is occurring, etc. It's early stages and look forward to more discussions about upcoming work at the in-person meeting in the new year.
 - Gordon: communities want to learn about the research and ensure the safety and success of the projects.

- Deb: Gordon is pointing out a great feature of the Forum, that there is a small group of community members who are becoming specialists in research and can help to bridge research with communities.
- Dave Rudolph: It's important to work with people who are knowledgeable about the land, and to merge knowledges.
- The Husky Road provides access into the interior – it's a very substantial road.
- Michael: This is an area with a lot of socio-ecological importance – fish lakes, fox dens, wolf dens etc.
- Dave: in areas that cross waterways, culverts were put in. It might be possible to examine what the impacts are of building a road like that.
- Gordon: the families know the names of the creeks, and have used that area for hunting and trapping, but now since construction of the road they're shying away from that area. There's a lot of traditional knowledge about that area.
- Dave: hopefully there can be some traditional knowledge discussions about the research area at the upcoming meeting.
- Establishing a watershed framework for assessing cumulative impacts of development (Meredith Seabrook, on behalf of Krista Chin – a CIMP project (Meredith Seabrook) – link to research summary above. Krista Chin has been working on invertebrates (bugs). Jules Blais has been taking core samples under the water. Krista Chin did a lot of the kind of community engagement work that Gordon is recommending. She held a focus group to define the study sites in Tulít'a beforehand, attended two Cross-Cultural Research Camps, and did activities with Norman Wells and Tulít'a schools. Understanding changes in aquatic ecosystem health and water quality in the Fort Good Hope – Ramparts area (Norm Pierrot and Kirsty Gurney) – a CIMP project (link to summary above). John Tobac and Danny Masuzumi provided field assistance. Good news that trace metals are so low that the testing tools are not even picking them up. Now planning for next year – there was difficulty with access up the Ramparts River, and extending to wetlands that may have been changed by roads. The Sahtú Land and Water Board has said that understanding road impacts is very important. A very positive experience was a field activity with Chief Ts'eleie School.
 - Michael: is it possible to find out about the impact of the fiber optic line on water quality? This is an issue of great interest to the communities of Fort Good Hope and Tulít'a alike.
 - Kirsty: The fieldwork and learning about the nature of the Ramparts River wetland was a great learning experience.
- Northern Water Futures (Ryan Connon and Andrew Spring) <https://www.wlu.ca/academics/research/northern-research/northern-water-futures.html>. There's a strong linkage with the work that Dave Rudolph is doing. There are a lot of different funding sources that are being pulled together to make projects possible.
- Permafrost modelling (Thom Stubbs, Matt Carlson and Steve Kokelj) – part of a CIMP project (see link to summary above, Sahtú regional environmental monitoring and decision-support tool set) – climate variables are being used in a map-based decision-support tool called ALCES; this can be used to see overlap between permafrost degradation and other things like infrastructure.
 - Gordon talked about the importance of research on permafrost with respect to buildings.
- In-person meeting in the new year (Bruce and Deb) – opportunity to bring together researchers and community members on key themes
 - Overall landscape disturbance focus
 - Key themes: fire, land birds, caribou, climate change, permafrost/water.
- Projects referenced:
 - Decolonizing Water (Josh Barichello and possibly a collaborator) – research getting started on Guardianship in Shúhtaot'Iné Néné <http://decolonizingwater.ca>
 - Tracking Change fish camp, Tek'aocho (Leon Andrew, Chelsea Martin and Brenda Parlee) – information about this program at <http://www.trackingchange.ca/river-basins/mackenzie-river-basin/>.
 - Long-term monitoring of Great Bear Lake fisheries and the aquatic ecosystem (Kim Howland) – a CIMP project (link to summary above)
 - Loche liver monitoring program in partnership with Fort Good Hope - Temporal Trend Studies of Trace Metals and Halogenated Organic Contaminants (HOCs), Including New and Emerging Persistent Compounds, in Mackenzie River Burbot (Gary Stern) – Northern Contaminants Program
 - Establishing a watershed framework for assessing cumulative impacts of development (Meredith Seabrook, on behalf of Krista Chin – a CIMP project (link to summary above)

- Northern Water Futures - the funding proposal that we supported was successful! (Jenn Baltzer, Andrew Spring and others) <https://researchcentres.wlu.ca/northern-water-futures/index.html>.
- Discussion of coordinating water/permafrost activities moving forward.