

Sahtú Environmental Research and Monitoring Forum
2013-2015 Update Report

Prepared for the Sahtú Renewable Resource Board
By Christine Wenman
PlanIt North, B.Sc. M.Sc.
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Introduction and background

The Sahtú Environmental Research and Monitoring Forum was initiated in 2013 to support environmental research and monitoring by providing a venue for discussing plans and accommodating the priorities and traditional knowledge of Sahtú communities. Through fostering communications between forum members, which include community, regional, territorial and federal government representatives as well as industry representation, forum members hope to ensure that “environmental monitoring and research programs and projects in the Sahtú are coordinated and conducted in ways that reflect regional and community priorities, engage communities, value both western science and traditional knowledge, and support wise decision-making.”¹

The forum’s objectives are to:

- Identify regional priorities and research gaps
- Build cross-cultural understanding
- Support and protect traditional knowledge processes
- Support regional and regulatory decision-making
- Identify opportunities for: collaborative research involving communities; communication; information-sharing; and cross-cultural interpretation of research results.

NWT’s Sahtú region has the potential for substantial oil production from shale resources held within the Canol shale play of the Central Mackenzie Valley. From 2012-2014, three companies were actively exploring in the region – MGM, Husky and Conoco Phillips. With recent downturns in oil prices, exploration activities appear to be on hold; however challenges encountered during the short exploration *boom* highlight the need for proactive planning to ensure that research is coordinated, communications are effective, community members are prepared to benefit from economic spin-offs, and environmental and social concerns are addressed. The forum presents a venue through which Sahtú Beneficiaries can collaborate with government, industry and academics to pursue effective planning and communications.

Forum members include two youth delegates, an SSI delegate and five community delegates – one from each Sahtú community. The forum provides an opportunity for Sahtú representatives to meet with government, academic and industry representatives responsible for various aspects of environmental research and monitoring in the region in order to share knowledge and to plan for future projects. Though initiated within only the last two years, the Sahtú Environmental Research and Monitoring Forum has been productive since its inception. The forum has

¹ Sahtú Environmental Research and Monitoring Forum Terms of Reference

initiated and participated in a number of projects and workshops, including the following initiatives summarized here.

Achievements to Date

Description of specific initiatives

Environmental Research and Monitoring Coordination Workshop

Tulít'a, November 5-7, 2013

Forty-five participants gathered in Tulít'a to begin to find better ways to do research and monitoring in the region. The 45 participants included representatives from all five Sahtú communities, the Sahtú Renewable Resources Board, federal government agencies, territorial government agencies, Aurora College, and industry. The objectives of the workshop were: to build relationships, to share information, to figure out the best ways to coordinate environmental research and monitoring in the region, considering ideas like a working group; to outline goals, funding needs, and timelines for coordination of environmental research and monitoring; and to identify Sahtú individuals and organizations who are interested and motivated to take a lead on coordinating environmental research and monitoring. The workshop was an effective opportunity for participants to clarify and communicate their roles and responsibilities.

Research Results workshop - It's about our Survival *Keeping the Food and Water Safe in the Sahtú Region*

Tulít'a, November 27-28, 2013

The three day workshop provided opportunities for forum members to understand some of the key research projects that are happening in the Sahtú region and to learn about key research programs that are run by federal and territorial government departments such as the Cumulative Impacts Monitoring Program and the Northern Contaminants Program as well as research and monitoring programs run by the Department of Fisheries and Oceans and GNWT – Environment and Natural Resources. In addition, a number of researchers explained projects exploring caribou genetic diversity and wildlife health. Through the three days of presentations and dialogue, forum participants were able to make recommendations for what should be studied, how research should be done and how resources can best be used to support good research. The presentations and the recommendations are summarized in the resulting report.

Best of Both Worlds
Sahtú Gonéne T'áadets'enı to
Depending on the Land in the Sahtú Region
Volume I – Discussion Document

Best of Both Worlds is a two-phase project to develop an Action Plan for promoting workforce readiness to support a healthy mixed economy. Phase 1 involved a literature review, a workshop, a focus group and interviews through which participants discussed their current realities and future visions with regards to having a strong mixed economy. Dialogue focused on recognizing aspects that support a strong mixed economy or that, conversely, present barriers. Participants further explored strengths and challenges in education and training for the mixed economy. In the phase 1 report, a number of recommended actions were identified for program development, education and training.

Staying Strong – Sahtú Youth and Elders Building Healthy Communities in the face of climate change
September, 2013 to May, 2014

Youth and elders explored aspects of their changing environment due to climate change and considered in a context of broader cumulative effects. A focus of the project was the development of youth leadership skills and core strengths, developed through on the land activities and opportunities to learn from their elders. The project was initiated with a planning workshop in September, 2103. In October, some Sahtú youth were able to attend the PowerShift BC conference held in Victoria BC, at which youth from across the country gather to build their knowledge, networks and leadership skills. The project also contained a substantial on-the-land component, with youth joining a fall hunt at Piet'ánejo (Caribou Flats), and a community spring hunt at K'áalq Túé (Willow Lake). The Climate Change and Community Health workshop was held in Tulít'a, November 5-7, 2013, with 10 elders and 12 youth from all five Sahtú communities, In addition, Eugene Boulanger, worked with Sahtú youth at the Sahtú Environmental Research Results Workshop in Tulít'a, Nov 27-28, 2013, focusing on youth engagement, facilitation and skill building, At this workshop and other project activities, youth frequently outlined a need for greater and more consistent engagement of youth at meetings. Encouraging their involvement and creating consistent, safe spaces for youth leadership development has consistently been identified as a priority for the forum.

Sahtú Environmental Monitoring and Research Forum results workshop & annual meeting
Yellowknife, January 9, 10, 2014

Forum members and a number of support people met to recap the results from the research and monitoring coordination workshop and to explore some research themes more deeply. Discussions included a facilitated dialogue about how risk is framed, assessed and communicated. Further discussions explored opportunities to support Dene youth in developing leadership skills and becoming prepared for their future role in self-government and community administration. Guest speakers presented about research that is being done in NWT to monitor mercury in fish and other wildlife.

Environmental Monitor Training Program Tets'ehxe (Drum Lake), Sahtú

March 14 – 29, 2014

Blyth & Bathe were contracted to carry out the delivery of the BEAHR Environmental Monitor Training Program (EMTP). The program ran from March 14th to March 29th 2014 at Tets'ehxe (Drum Lake) and provided an intensive, condensed EMTP training to students from the Sahtú Region. Two Students were from Colville Lake, five from Tulít'a, one from Norman Wells and three from Fort Good Hope. Students were selected through an abnormally stringent selection process, which was carried out by a selection committee from the Aurora College Campus in Norman Wells.

Conducting the EMTP training entirely on the land was an innovative approach that proved to be unique and successful with the trainers suggesting that the format be a guiding model in the future.

At Home on the Land The Sahtú Cross-Cultural Research Camp

July 12-19, 2014, Taalá Túé (Stewart Lake)

The Sahtú Cross-Cultural Research Camp, held at Taalá Túé (Stewart Lake) from July 12-19, 2014, was a forum for Dene/Métis knowledge holders and scientists to learn about each other's research questions and ways of learning about and monitoring wildlife, habitat, harvesting and water. The Camp served several purposes related to both knowledge sharing and knowledge gathering, including a contribution to the certification of local environmental monitors, and collection of baseline data in an area near the shale oil exploration play. Camp activities were centred around two Environmental Studies Research Fund programs – "Wildlife, Habitat and Harvesting", and "Surface Water and Groundwater" research.

The research camp provided opportunities for experiential learning in monitoring approaches and participants facilitated scientists in field research including conducting stream sampling and identifying songbirds and waterfowl. Participants included youth who had just completed an Environmental Monitoring Training

Program certification at Drum Lake, which provided a unique opportunity for immediate follow-up and continued education. The camp was extraordinarily well-received by all participants providing a venue through which shared understandings could be developed overcoming differences in cultural perceptions and language. The cross-cultural research camp will be held again in summer, 2015.

Sahtú Wildlife Cumulative Effects Monitoring Workshop

Summary Report

September 2-4, 2014

Sahtú Environmental Research and Monitoring Forum members met to review an existing list of 34 research questions that had been identified at previous SERM meetings. The questions were reviewed to identify whether progress had been made in addressing them and to ensure that they were still relevant questions. In addition, additional priorities were identified, creating a total of 62 research questions. Through facilitated dialogue and by identifying a number of criteria through which the research questions could be evaluated, the questions were prioritized in order to provide guidance for future research endeavors.

Annual Sahtú Environmental Research and Monitoring Forum meeting

Yellowknife, March 24-26, 2015

A full forum delegation came together for a three day in-person meeting in March 2015. As the meetings were situated in Yellowknife, it provided an opportunity for substantial guest participation and forum members received updates from several sources and were able to contribute perspectives to the development of some research projects. Research discussed and/or presented included archaeological research in the Sahtú mountains by Tom Andrews, GNWT Species-at-risk updates, Environment Canada's landbird monitoring project (Samuel Hache), a monitoring and research update from Diavik mine, and an update on the mercury research synthesis work conducted with NCP funding by Shelagh Montgomery. A full day was dedicated to understanding and discussing caribou management planning and associated research with presentations from GNWT. Constructive discussions were had with GNWT- ENR communications and education staff exploring regional priorities.

Other activities

The Sahtú Environmental Research and Monitoring Forum has met consistently by phone (nine times since its inception). These regular meetings provide an opportunity for forum members to stay up to date about regional research activities and strengthen relationships among academics working in the region and community members. For instance, the forum provides an opportunity for researchers seeking to develop research projects to discuss their approaches with

forum members prior to submitting research applications, therefore providing more genuine opportunities for iterative dialogue to build stronger research approaches with more community collaboration.

<i>Date</i>	<i>Summary or selection of topics covered</i>
September 4, 2015	Upcoming
June 4, 2015	
May 8, 2015	
January 8, 2015	Brian Laird (University of Waterloo) and Shelagh Montgomery (SENES Consultants) discussed a mercury biomonitoring project and Cindy Gilday provided updates about Gary Stern's Fort Good Hope Loche Monitoring project funded by the Northern Contaminants Program.
June 5, 2014	Various member updates, review of draft forum budget, discussion of ESRF funding and cross-cultural camp planning, SRRB intern introduction
May 8, 2014	James Hodson (GWNT) discussion planning for wildlife cumulative effects workshop
April 24, 2014	Tom Stubbs discussed the Central Mackenzie Valley Shale Oil Partnership; review of forum's annual work plan
Feb 25, 2014	Received planning advice for Fort Nelson speaking tour, updates on research proposal submitted to ENR for funding including caribou genetics research (J. Polfus), caribou and moose parasite research (S. Kutz), Sahtú biodiversity monitoring framework, harvest monitoring.
Dec 6, 2013	Discussed terms of reference, recapped research and monitoring workshop objectives
November 18, 2013	Debrief on the ERM Workshop in Tulit'a, November 5-7, Support Committee update, Review of Working Group membership, next steps

The forum has also developed a document repository and is in the process of developing a public web-page that will be housed within that of the Sahtú Renewable Resources Board's site. Such initiatives will build the profile of the forum both within the Sahtú region and more broadly in the NWT.

Future directions

Themes and directions

The model has proven to be effective in working towards the forum's stated objectives. Through on-going discussions, forum members have completed substantial work in identifying regional priorities and are making progress in understanding to which degree those priorities are being addressed by current projects and programs or to which degree gaps persist.

Through opportunities for in-person meetings and one-on-one dialogue, both the forum participants and the support group are better able to understand one another's perspectives and approaches. In addition to building understanding, knowledge, relationships and networks, the forum's work to date has also provided direction for future endeavors. The following directions have been identified from a thorough review of the recommendations that have emerged from the various forum initiatives to date and are presented according to the objectives specified in the forum's terms of reference.

Objective – Identify Regional Research Priorities and Research Gaps

- Continue the on-going work that has sought to list, thematize and prioritize research questions so as to inform future directions. On-going work is needed to ensure a comprehensive understanding of existing projects and programs so that a gaps analysis can be completed. The forum will work with government departments and academic partners to review the framework completed to date so as to identify which research priorities are already being addressed or partially addressed through past, present or planned research. Outstanding gaps will be highlighted.
- Develop a well-informed and clear perspective on regional study approaches that can be concisely communicated and advocated for by the forum
 - Clarify roles and responsibilities in initiating, funding, and overseeing a regional study
 - Better understand various types of regional studies including strategic environmental assessments in order to identify which approach best addresses the research needs identified by the Forum
 - Find and analyze examples of regional studies elsewhere that could inform work in the Sahtú
 - Identify mechanism for regional study work to inform policy, regulation, and decision-making
 - Identify potential partners and resources to support a regional study
- Develop a more robust socio-economic and socio-cultural research agenda that builds from traditional knowledge and addresses themes beyond the natural sciences.

Objective - Build cross-cultural understanding

- Continue to provide opportunities for dialogue between forum members and researchers for government and industry. Opportunities for semi-structured in-person discussions have proven invaluable in bridging understanding, developing shared language and strengthening partnerships.

Objective - Support and protect traditional knowledge processes

- Based on the research priorities identified and the gap analysis conducted, develop approaches to traditional knowledge research and identify appropriate sources of funding.
- Maintain an emphasis on-the-land experiential learning with intergenerational participation and teaching, building on the success of the first cross-cultural camp.
- Further support environmental monitors in on-going training opportunities and in connecting them to diverse and meaningful work opportunities.
- Develop additional on-the-land learning for youth with elders. These opportunities build confidence, leadership skills, and connection with elders and cultural identity.
- Continue to involve youth in forum activities. Additionally, provide parallel environments through which youth can build leadership in safe, encouraging and youth-directed environments.

Objective - Support regional and regulatory decision-making

Objective - Identify opportunities for: collaborative research involving communities; communication; information-sharing; and cross-cultural interpretation of research results.

- Build on the existing role of the Forum as a mechanism of communication between researchers and community members, in particular the Renewable Resource Councils (RRCs). Identify additional methods to facilitate RRCs in reviewing research licenses in a meaningful and efficient way so as to encourage better research approaches and so as to optimize available resources.
- Strengthen the focus on communications. Forum representatives have identified challenges in communicating what they are learning to their Renewable Resource Councils and broader communities. In addition, challenges are still evident in ensuring that research approaches and results are broadly communicated to those interested.
- Review the current process of research license referral and reviews so as to identify opportunities to increase community engagement while reducing the administrative burden to referral bodies.

Approach

In order to address the emerging themes and recommendations, the will continue to meet and to develop initiatives throughout the 2015-2016 year. Forum members are striving to meet approximately monthly by phone and have begun the fiscal year with two teleconference meetings already; approximately ten meetings are anticipated throughout the year.

Two in-person meetings are also planned as these provide the best venue to involve all participants in discussion and planning and to build relationships between Forum members and their research and monitoring partners. It is anticipated that one meeting will be held in a Sahtú community while another will be held in Yellowknife. Meeting in the Sahtú provides an opportunity for greater visibility and communications with Sahtú community members, while Yellowknife meetings ensure that the Forum can access the knowledge of many research partners.

In addition to the two Forum meetings, which provide an opportunity for continued education for Forum members and their support network as well as opportunities to plan for effective research and monitoring, support for Forum members to participate in two related workshops or training opportunities is being sought. For example, these external events may include one of the following or another identified learning and networking opportunity:

- Cumulative Impacts Monitoring Program annual research results workshop
- Regional Sahtú results workshop
- Cross Cultural on-the-land field research camp

As per its terms of reference, the Forum membership consists of 2 delegates, an SSI delegate and 5 community delegates. Requested support would cover their participation in Forum activities as well as their travel costs. In addition, the Forum is seeking funds to cover the costs of hiring additional support in rapporteur and reporting services for Forum meetings.

Objective	Task	Goal/why	Desired outcome / product	Achievement to date	Next steps (2015-2016)
Identify research priorities and research gaps	Review plans for the Sahtú ESRF Wildlife, Habitat and Harvesting	Promote Forum Research Priorities for future work to be funded by the new NWT version of ESRF.	Participate in the Experts Workshop	?	
Identify research priorities and research gaps	Assist in developing the Sahtú Monitoring Framework document. This is an SRRB initiative advised by the Sahtu Forum support group.	Promote Forum Research Priorities.	Participate in the Monitoring	Research lists and subsequent priorities were generated through two workshops.	Existing list (draft framework) needs to be compared past, current and planned research initiatives to identify gaps.
Identify research priorities and research gaps	Review and compile list of industry monitoring programs in the Sahtu Region.	To examine if and how Forum Research Priorities are being addressed.	Identify gaps between industry monitoring programs and	?	Surface and groundwater programs to be examined in more detail to make recommendations for future industry monitoring
Identify research priorities and research gaps	Provide input on approach to boreal caribou range planning.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Document link between range planning and Forum Objectives.		
Identify research priorities and research gaps	Review progress on 2011-2015 Barren-Ground Caribou strategy.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Document link between Barren-Ground Caribou Strategy, identify gaps (in relation to Forum Research Priorities) and establish a list of opportunities related		

			to the Strategy.		
Identify research priorities and research gaps	Review Sahtú Harvest Survey results.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Recommended approach for future harvest monitoring.		
Identify research priorities and research gaps	Review ʔehdzo Got'ıne Gots'ę Nákedı (Sahtú Renewable Resources Board) Research Agenda.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Make recommendations for research that will meet the Forum's Research Priorities and provide opportunities for collaboration.		
Identify research priorities and research gaps	Review plans for the Sahtú ESRF Surface Water and Groundwater program.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities. Put forward priorities for future work to be funded by the new NWT version of ESRF.	Participate in the Experts Workshop		
Identify research priorities and research gaps	Review NWT Water Stewardship Strategy and Action Plan Activities, such as Community-Based Monitoring in the Sahtu.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Identify opportunities for collaboration.		
Identify research priorities and research gaps	Review DFO research agenda and activities in the Sahtu.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Identify opportunities for collaboration.		
Identify research	Review ENR draft	Maintain awareness,	Identify opportunities		

priorities and research gaps	multi-scale Cumulative Effects Monitoring Program for wildlife.	gather information and promote Forum Objectives and Research Priorities.	for collaboration.		
Identify research priorities and research gaps	Provide input on cumulative effects assessment and monitoring approach, including: Boreal Caribou Blueprint; Cumulative Impacts Monitoring Program (CIMP) Strategic Plan.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Identify opportunities for collaboration.		
Identify research priorities and research gaps	Review Sahtú-based CIMP and ENR Letters of Intent and proposals	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Identify opportunities for collaboration.	Achieved	Task repeated for 2015-2016
Build cross-cultural understanding	Participate in Cross-Cultural Research Camp planned as part of the ESRF Wildlife, Habitat and Harvesting program.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Refine Forum Research	Cross-cultural camp was very well attended with rave reviews. Plans unfolding for summer 2015 2 nd cross-cultural camp.	2015 summer cross cultural camp
Build cross-cultural understanding	Provide support and guidance for the new Sahtú Youth Network (Health and Climate Change project sponsored by the ʔehdzo Got'ıneḡ Gots'ė Nákedı)	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Refine Forum Research	Youth network participated in cross-cultural camp and a number of on-the-land hunts with elders as well as working groups and focus groups.	Further youth network participation in forum activities but an emphasis on youth-led independent activities and

					leadership strengthening opportunities
Build cross-cultural understanding	Engage in cross-cultural dialogue to support balancing of cultural approaches to the research and monitoring agendas identified under Objective 1.	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Refine Forum Research Priority List and activities.	Forum communications (cross-cultural camp, teleconferences and in-person meetings are proving to provide substantial opportunities to build bridges in cross-cultural understanding	Four in-person meetings planned for 2015-2016 including a results workshop, a forum annual meeting, summer cross-cultural camp and forum participation in other research or education initiatives
Support and protect traditional knowledge processes	Participate in Traditional Knowledge Guidelines Workshop	Maintain awareness, gather information and promote Forum Objectives and Research Priorities.	Participate in development of Sahtú Traditional Knowledge Guidelines.	?	
Support regional and regulatory decision-making	Participate in Research Results Workshop for 2014-2015.		Refine Forum Research Priority	Priority list achieved.	Gaps to be analyzed.
Support regional and regulatory decision-making	Present and discuss results of activities related to Objectives 1-3 at regional decision-making forums, including: Sahtú Secretariat Inc. Assembly; Sahtú Dene Council	Promote Forum and seek input to guide research priorities.	Refine Forum Research	?	

	Assembly; ?ehdzo Got'ine Gots'é Nákedí meeting; Sahtú Partnership meeting; Sahtú Land and Water Board information sessions.				
Support regional and regulatory decision-making	Monitor Sahtu Land and Water Board Public Registry. Monitor changes in environmental legislation.	Stay up to date on Land Use Permit and Water Licence applications and activities and regulatory decision-making processes.	Information will be considered in Forum's activities.	?	
Identify opportunities for: collaborative research involving communities; communication; information-sharing; and cross-cultural interpretation of research results.	Present and discuss results of activities related to Objectives 1-3 at community forums, including ?ehdzo Got'ine meetings and Land Corporation meetings.	Promote Forum and seek input to guide research priorities.	Refine Forum Research	?	
Identify opportunities for: collaborative research involving communities; communication; information-sharing; and cross-cultural interpretation of research results.	Information Management.	Identify what we know.	Compile list of previous and current research in the Sahtu Region that falls within the Forum's Objective	?	Development of forum website hosted within SRRB website. Website will act both as repository of information, portal to research and on-going communication tool. Forum has also been

