

## **Sahtu Land Use Planning Board**







## Sahtu Land Use Plan DRAFT 3

**July 2010** 

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#### **ACRONYMS**

CCME Canadian Council of Ministers of the Environment

CEAMF Cumulative Effects Assessment and Management Framework

CEPA Canadian Environmental Protection Act
CIMP Cumulative Impact Monitoring Program

COSEWIC Committee on the Status of Endangered Wildlife in Canada

CR Conformity Requirement
CWS Canadian Wildlife Service
CZ Conservation Zone

DFO Department of Fisheries and Oceans (now Fisheries and Oceans Canada)

ENR Department of Environment and Natural Resources (GNWT)

ESF Environmental Stewardship Framework

FN First Nation
GBL Great Bear Lake

GBLW Great Bear Lake Watershed

GBLWMP Great Bear Lake Watershed Management Plan

GIS Geographic Information System

GNWT Government of the Northwest Territories

GUZ General Use Zone

IBP International Biological Programme
INAC Indian and Northern Affairs Canada

ITI Department of Industry, Tourism and Investment (GNWT)

NEB National Energy Board

MVEIRB Mackenzie Valley Environmental Impact Review Board

MVLURMackenzie Valley Land Use RegulationsMVLWBMackenzie Valley Land and Water BoardMVRMAMackenzie Valley Resource Management Act

NWT Northwest Territories

NWTWR Northwest Territories Waters Regulations

PAS Protected Areas Strategy

PCI Proposed Conservation Initiative RRC Renewable Resources Council

SDMCLCA Sahtu Dene and Métis Comprehensive Land Claim Agreement

SLCSA Sahtu Dene and Métis Land Claim Settlement Act

SLUP Sahtu Land Use Plan

SLUPB Sahtu Land Use Planning Board SLWB Sahtu Land and Water Board SMZ Special Management Zone

SRRB Sahtu Renewable Resources Board

SSA Sahtu Settlement Area

SSI Sahtu Secretariat Incorporated TCI Tulita Conservation Initiative

TK Traditional Knowledge

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#### **DEFINITIONS**

"Action" means a requirement of this Plan that is to be implemented outside of the regulatory process, and outside the granting of leases, interests in land, and consents to the use of land.

"applicant" means an individual, company or organization applying for an authorization relating to the use of land.

"approving parties" means the Sahtu Secretariat Incorporated (SSI), and the territorial and federal Ministers who are responsible for approving the Plan.

"aquaculture" means the farming of aquatic organisms (fish, shellfish and aquatic plants) in marine or fresh water. 1

"authorization" includes a licence, permit or other authorization relating to the use of land, issuable under any federal or territorial law.

"Board" means the Sahtu Land Use Planning Board unless the context implies otherwise.

"bulk water removal" means any water transferred out of a river basin in any individual container greater than 40 litres in volume, or removal by any means that involves permanent out-of-basin transfer, whether it is by diversion (including pipeline, canal, tunnel, aqueduct or channel), tanker or other mechanism. Bulk water removal does not include "bottled water" in containers of 40 litres or less."<sup>2</sup>

"commercial forestry" means the commercial harvesting of trees within the meaning of Chapter 14 of the *SDMCLCA*. For clarity, it does not include the harvesting of trees that is a right of participants under S. 14.1.2 of the *SDMCLCA*.

"community boundaries" means local government boundaries, and, in particular, does not include the portion of any block land transfer that lies outside local government boundaries.

"condition" means a Conformity Requirement setting out a condition under which a permissible land use may be carried out.

"Conformity Requirement" means a requirement of this Plan that is to be implemented in the regulatory process, and in the granting of leases, interests in land, and consents to use the land.

"domestic species or subspecies" means a species or subspecies of vertebrates that has been domesticated by humans so as to live and breed in a tame condition and depend on humankind for survival.<sup>3</sup>

"ecological integrity" refers to an ecosystem that it is characteristic for its natural region, including the composition and abundance of native species and biological communities, rates of change and supporting processes. Ecosystems have integrity when they have their native

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<sup>&</sup>lt;sup>1</sup> Aquaculture Policy Framework, DFO, Oct 28/08, <a href="http://www.dfo-mpo.gc.ca/aquaculture/ref/APF-PAM-eng.htm">http://www.dfo-mpo.gc.ca/aquaculture/ref/APF-PAM-eng.htm</a>

<sup>&</sup>lt;sup>2</sup> A Policy Respecting the Prohibition of Bulk Water Removal from Major Drainage Basins in the Northwest Territories, INAC, 2003. Available at

http://www.collectionscanada.gc.ca/webarchives/20071122002026/http://www.aincinac.gc.ca/ps/nap/wat/polprohnwt\_e.html

<sup>&</sup>lt;sup>3</sup> From National Parks of Canada Domestic Animals Regulations, SOR/98-177

components (plants, animals and other organisms) and processes (such as growth and reproduction) intact.<sup>4</sup>

"existing use" means a land use activity that is exempted from the application of the zoning prohibitions in the Plan under section 2.3.2 (A).

"fish farming" means raising fish commercially in tanks or enclosures, usually for food. <sup>5</sup> Fish farming is a form of aquaculture.

"harvesting" means gathering, hunting, trapping or fishing.

"karst topography" is landscape found on carbonate bedrock (limestone, dolomite, marble) with closed surface depressions, well-developed underground drainage systems, including disappearing streams, springs and sinkholes.

"land use activity" means a physical activity that is a component of a land use.

"land use" means any use of land and includes any deposit of waste.

"land" includes, in accordance with S. 41(2) of the MVRMA, land, waters and other resources.

"local government" means any local government established under the laws of the Northwest Territories, including a city, town, village, hamlet, charter community, or settlement, and includes the territorial government acting in the place of a local government pursuant to those laws.

"mineral exploration and development" includes prospecting for minerals, staking a claim, surveying, exploratory work, representation work, removal or processing of a mineral, and developing or operating a mine, within the meaning of the *Northwest Territories and Nunavut Mining Regulations*, except government funded geological research for the purpose of determining the geological potential of the area. This includes work done in constructing and operating roads or airstrips to provide access to mineral exploration or mineral development sites.

"oil and gas exploration and development" means any land-based activities involved in the exploration and drilling for and the production, conservation, processing and transportation of oil and gas within the meaning of the *Canada Oil and Gas Operations Act* and its regulations, but does not include government funded geological research for the purpose of determining the geological potential of the region.

"participant" means a person enrolled in the Enrolment Register pursuant to Chapter 4 of the SDMCLCA.

"planning partners" means residents, communities, designated Sahtu organizations, departments and agencies of the territorial and federal government, co-management boards, industry, businesses, non-government organizations and members of the general public who are affected by or interested in participating in the planning process.

"power development" means the construction, installation and operation of infrastructure, equipment or facilities outside of community boundaries to harvest or generate electricity in excess of one hundred kilowatts (100 KW), whether from diesel, gas, water, wind, solar, thermal or biomass energy.

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<sup>&</sup>lt;sup>4</sup> Definition from Report of the Panel on the Ecological Integrity of Canada's National Parks, Parks Canada, <a href="http://www.pc.gc.ca/eng/docs/pc/rpts/ie-ei/report-rapport\_1.aspx">http://www.pc.gc.ca/eng/docs/pc/rpts/ie-ei/report-rapport\_1.aspx</a>

<sup>&</sup>lt;sup>5</sup> http://www.answers.com/topic/fish-farm

"quarrying" means the extraction of limestone, granite, slate, marble, gypsum, loam, marl, gravel, sand, clay, volcanic ash or stone as described in the *Territorial Quarrying Regulations*.

"regulator" means a body having authority under any federal or territorial law to issue an authorization, whether or not the body is a "designated regulatory agency" under Part 5 of the MVRMA.

"regulatory process" means the process of determining whether or on what terms an authorization will be issued.

"responsible authority" means the Sahtu First Nation within the meaning of the MVRMA, and departments and agencies of the federal and territorial governments, when carrying out powers outside the regulatory process, and outside the granting of leases, interest in land or consents to use the land, and includes a regulator that is carrying out such powers.

"Sahtu Settlement Area" means the area within the Northwest Territories described in Appendix A of the *SDMCLCA*.

"settlement lands" means Sahtu lands within the Sahtu Settlement Area outside local government boundaries granted pursuant to S.19.1.2 of the *SDMCLCA* and as set out in schedules I and III, appendix E of the *SDMCLCA*.

"traditional environmental knowledge" means knowledge and experience that aboriginal people have acquired through living on the land. This knowledge has evolved over the years and is current.<sup>6</sup>

"traditional knowledge" means knowledge and values, which have been acquired through experience, observation, from the land or from spiritual teachings, and handed down from one generation to another.<sup>7</sup>

"transportation corridor and infrastructure development" means the construction, maintenance and operation of roads, railways, pipelines, electrical transmission lines, communications cables, navigational aids, barge landings, airstrips, fuel caches, storage buildings and other similar works or structures.

"wildlife" means all ferae naturae in a wild state including fish, mammals and birds.

"zone" means a Conformity Requirement identifying an area in which specified land uses are prohibited.

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<sup>&</sup>lt;sup>6</sup> Draft Traditional Environmental Knowledge Policy, SLWB, Dec. 16/03

<sup>&</sup>lt;sup>7</sup> Traditional Knowledge Policy, GNWT, March 10/05

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## Chapter 1 – Introduction

# 1.1 MANDATE FOR LAND USE PLANNING IN THE SAHTU SETTLEMENT AREA

The Sahtu Dene and Métis Comprehensive Land Claim Agreement (SDMCLCA) is a modern treaty between the Sahtu Dene and Métis and the Crown in right of Canada. The treaty rights of the Sahtu Dene and Métis under the SDMCLCA are recognized and affirmed under Canada's Constitution.

It is a stated objective of the *SDMCLCA* "to provide the Sahtu Dene and Métis the right to participate in decision making concerning the use, management, and conservation of land, water and resources." Accordingly, among other related provisions, the *SDMCLCA* mandates:

- establishment of a Sahtu Land Use Planning Board (SLUPB or "the Board") consisting
  of equal numbers of Sahtu First Nation and government nominees with the
  jurisdiction to develop and adopt a land use plan, subject to the approval of the
  federal and territorial governments and the First Nations of the settlement area;
- 2) development of a land use plan for the Sahtu Settlement Area (SSA); and
- 3) introduction of federal implementation legislation.

The *SDMCLCA* is given public law effect by an act of Parliament, *the Sahtu Dene and Métis Land Claim Settlement Act (SLCSA)*. Under the *SLCSA*, the land claim agreement binds third parties and imposes duties on public bodies, including governments, their departments, and government agencies. In the event of a conflict, the provisions of the *SDMCLCA* and *SLCSA* prevail over those of any other law.

The Mackenzie Valley Resource Management Act (MVRMA) implements the SDMCLCA's land use planning provisions. Part 2 of the MVRMA establishes the Sahtu Land Use Planning Board (Board) as an institution of public government and details the mandate for land use planning in the settlement area.

Under the *MVRMA*, the Board is established "within an integrated and coordinated system of land and water management in the Mackenzie Valley" "for the purpose" - along with the other boards established - "of regulating all land and water uses, including deposits of waste, in the settlement areas for which they are established..." <sup>8</sup>

Land use planning under the *SDMCLCA* is guided by the following principles:

- (a) "the purpose of land use planning is to protect and promote the existing and future wellbeing of the residents and communities of the settlement area having regard to the interests of all Canadians;
- (b) special attention shall be devoted to

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<sup>&</sup>lt;sup>8</sup> MVRMA Preamble

- i) Protecting and promoting the existing and future social, cultural and economic well-being of the participants;
- ii) Lands used by participants for harvesting and other uses of resources; and
- iii) the rights of participants under [their] agreement;
- (c) water resources planning is an integral part of land use planning;
- (d) land use planning shall directly involve communities and designated Sahtu organizations; and
- (e) the plan developed through the planning process shall provide for the conservation, development and utilization of land, resources and waters." 9

#### The plan may include

- (a) "maps, diagrams and other graphic materials;
- (b) written statements, policies, guidelines and forecasts;
- (c) descriptions of permitted and prohibited uses of land, waters and resources;
- (d) authority for the planning board to make exceptions to the plan and the manner of exercising that authority; and
- (e) any other information that the planning board considers appropriate." 10

#### On adoption and approval of the plan

"The ...Sahtu First Nations, departments and agencies of the federal and territorial governments, and every body having authority under any federal or territorial law to issue licences, permits or other authorizations relating to the use of land or waters or the deposit of waste, shall carry out their powers in accordance with the land use plan..." 11

The Board is required to carry out a comprehensive review of the Plan every five years after the Plan takes effect or at other times agreed to by the approving parties. Further information on the requirements of the *MVRMA* relating to Plan implementation is contained in Chapter 7.

# 1.2 PLANNING AND THE OTHER COMPONENTS OF THE LAND AND WATER MANAGEMENT SYSTEM

Land use planning is the first of four components in the *MVRMA*'s integrated management system. The others are preliminary screening, environmental assessment, land and water authorization, and environmental monitoring. In the Sahtu Settlement Area, the Mackenzie Valley Environmental Impact Review Board (MVEIRB) assesses the environmental impact of

<sup>9</sup> SLCA S. 25.2.4

<sup>&</sup>lt;sup>10</sup> *MVRMA* S. 41(3)

<sup>&</sup>lt;sup>11</sup> *MVRMA* S. 46(1)

development proposals, and the Sahtu Land and Water Board issues land use permits and water licences. Each of these boards is also comprised of First Nations and government nominees, reflecting the Dene/Métis right to participate in resource decisions.

The *MVRMA* requires that, once adopted by the responsible Ministers, MVEIRB's environmental review recommendations be implemented by most regulators having jurisdiction. <sup>12</sup> MVEIRB may recommend rejecting a development proposal, or that the development should proceed subject to any mitigative or remedial measures or follow-up program. <sup>13</sup>

Regulators required to implement plan requirements or MVEIRB recommendations – including, but not limited to, the land and water board - may attach more stringent terms and conditions in their licences and permits, but they may not authorize a land user to act contrary to an approved plan or adopted MVEIRB recommendation.

A unique character of land use plans in the system is that plans are developed and approved independently of the review of any particular land use activity. Plan requirements are tailored to specific types of land use and specific types of concern, but, unless an SLUPB exception is provided for and granted, plan requirements cannot be waived or varied in the process of implementation. This character, together with their function to establish "policies", "guidelines", and "permitted and prohibited uses", gives land use plans a guiding role in the regulatory process.

## 1.3 GUIDING PRINCIPLES

In addition to the principles noted above, the following objectives of the *SDMCLCA* apply to land use planning in the Sahtu Settlement Area:

- 1. To recognize and encourage the Sahtu way of life which is based on the cultural and economic relationship between the Sahtu and the land (1.1.1.c);
- 2. To encourage the self-sufficiency of the Sahtu and to enhance their ability to participate fully in all aspects of the economy (1.1.1.d);
- 3. To integrate planning and management of wildlife and wildlife habitat with the planning and management of all types of land and water use in order to protect wildlife and wildlife habitat (13.1.1.f); and
- 4. To protect and conserve the wildlife and environment of the settlement area for present and future generations (1.1.1.h).

The Sahtu Land Use Plan provides a unique opportunity to reconcile the different world views and systems of laws and beliefs of the Sahtu Dene and Métis, government and other stakeholders. Plan development brings First Nations (FN) and government together in a

<sup>&</sup>lt;sup>12</sup> MVRMA, S. 136(2). An exception in the environmental review context is the National Energy Board (NEB), which is only required to implement MVEIRB recommendations that the NEB has adopted: s. 137(3). The MVRMA does not make a similar exception in the land use plan implementation context: see s. 46(1), quoted in text above.

<sup>&</sup>lt;sup>13</sup> *MVRMA*, S. 134(2).

collaborative decision-making process to integrate their different values into one plan that guides land use for the region. The Great Bear Lake Working Group called this concept "One Law"; it is illustrated in Figure 1<sup>14</sup>. The Plan's mandate implies the need to integrate communities' values into the decision making process at the most fundamental level. The Plan's guiding role in the regulatory process and its mandatory effect can ensure that the collective decisions reflected in the plan will promote community well-being. The collaborative spirit of Plan development is captured in the following Elders' Story.

**ELDERS' STORY:** A group of people comes upon a huge stone. They must somehow move the stone. It blocks their way utterly. They are unable to go around it, over it or under it. Nor are they able to move it working individually or in small groups. They will only be able to move the stone if they all work together, each according to his or her role in the larger task. Only the truth, discovered by all people working together, can move the stone and establish a "road for all humanity". <sup>15</sup>

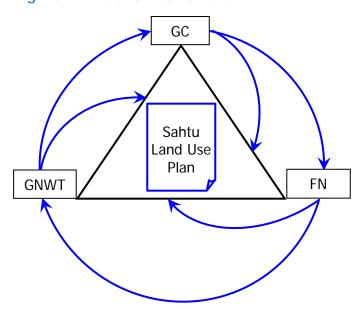


Figure 1. The SLUP as "One Law".

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<sup>&</sup>lt;sup>14</sup> Modified from Charlie Neyelle, Deline, February 5/10

<sup>&</sup>lt;sup>15</sup> Morris Neyelle, personal communication (December 16/02), supplemented by Charlie Neyelle, personal communication (January 7/05) In Great Bear Lake Watershed Management Plan (2005).

#### 1.4 THE SAHTU LAND USE PLANNING BOARD

The Sahtu Land Use Planning Board was formally established in 1998 when Part 2 of the *MVRMA* came into force. Work was initiated before this by the Sahtu Land Use Planning Working Group. Board members are nominated by either the Sahtu Secretariat Incorporated (SSI), Government of the Northwest Territories (GNWT), or Indian and Northern Affairs Canada (INAC) and are appointed by the Minister of INAC for 3 year terms. Appendix 6 lists all individuals who have served as Board members or worked for the Sahtu Land Use Planning Board. All have contributed to the success of the Plan. Of special note are the contributions of staff from the Sahtu GIS Project who provided GIS (Geographic Information System) support to the Board during development of the Plan from the Preliminary Draft to Draft 2.

Based on the *SDMCLCA* and the *MVRMA*, the Board developed the following goal, purpose and mission statement.

#### 1.4.1 Goal

Land is conserved, utilized and developed in a way that protects and promotes the present and future well-being of beneficiaries, residents and all Canadians.

### 1.4.2 Purpose

- To prepare a draft land use plan;
- To facilitate people's understanding of land use planning;
- To ensure that the interests of all parties are taken into consideration; and
- To build strong, supportive, and effective partnerships with other agencies.

#### 1.4.3 Mission Statement

To produce a land use plan that respects the unique character and values of the land, resources and inhabitants of the Sahtu for the benefit of past, present and future generations of Canadians.

### 1.5 THE SAHTU LAND USE PLAN

The Sahtu Land Use Plan (the Plan) provides broad direction to responsible authorities and regulators and informs land users how land (including water and other resources) will be conserved, developed and used within the Sahtu Settlement Area (SSA). The Plan outlines what land uses are appropriate, where, and under what conditions.

The Plan outlines a vision and goals for the conservation, development and use of land within the SSA. It provides direction to achieve the vision and goals in the form of Conformity

Requirements (zones and conditions) and Actions, and also makes related Recommendations. The Board has considered social, cultural, economic and ecological aspects of land use in the development of the Plan.

The Plan provides direction on a range of land uses and land use issues. It does <u>not</u> restrict or provide direction on subsistence use or harvesting activities of the Sahtu Dene and Métis.

#### 1.6 TARGET READERS

The Plan is written for a wide variety of users. It is primarily targeted at applicants (those proposing to carry out the land use activities being addressed in the Plan), the Sahtu First Nations, departments and agencies of the federal and territorial government, and regulators (bodies having authority under any federal or territorial law to issue licences, permits or other authorizations). It may also assist MVEIRB by identifying key considerations for environmental assessments within the SSA.

The Plan addresses a range of social, cultural, economic and ecological values, which may be of interest to a wider readership. The Plan and associated Background Report includes a significant amount of information about the Sahtu Settlement Area, its values and resources, and the future needs and interests of residents and communities. It should be an excellent resource for anyone interested in learning about the Sahtu region and its people.

### 1.7 WHAT IS LAND USE PLANNING?

Land use planning is a decision-making process where people make choices about the best use of resources among competing uses to achieve specified goals for the future.

Planning is future-focused. While we often look to the present or past to determine what is important, planning is meant to answer the question, "How do we want the land used in the future?" To answer that we need to consider a range of questions:

- How far in the future are we planning for?
- What goals do we want to achieve? What are the issues or obstacles to achieving those goals?
- How is the land currently used? How has it been used in the past?
- What opportunities exist (e.g. where are the resources, markets)?
- What are the constraints or limits on land uses (e.g. resource availability, costs)?
- What uses are compatible? Which are not? What are the specific issues?
- What options exist to resolve competing uses?
- What is the best solution?

A standard planning process is a cycle as shown in Figure 2. The first step is to define the issues, vision and goals for the planning area. Information is collected for each issue, and different options considered to address them. Developing multiple drafts of a plan is essentially a process of considering and refining options. Eventually, one option is chosen as the Plan.

The Plan is implemented and monitored to see if it is achieving the desired goals. After a period of time, the Plan is reviewed to determine if the vision, goals and issues are still appropriate, and the process begins again. A plan is a living document that needs to be continually updated.

Land use planning involves making choices about how the land, water and resources are used. It requires balancing conservation and development objectives to ensure that important ecological and cultural values are protected while providing for sustainable economic development to provide jobs and revenues needed to achieve other goals. This is illustrated in Figure 3.



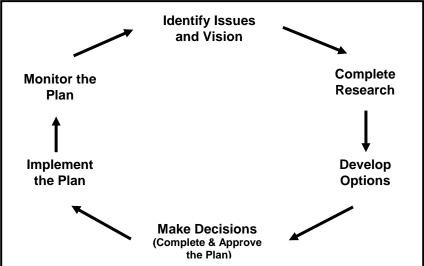
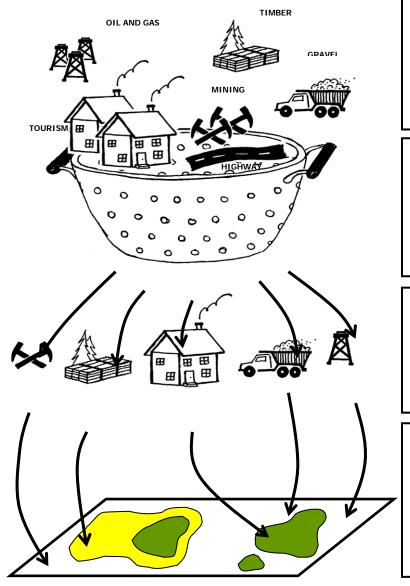


Figure 3. Land Use Planning Concept



#### POSSIBLE DEVELOPMENT PROJECTS

Activities that require permits, licenses, or authorizations

Applicants must apply for the appropriate land use permits, water licenses, or other authorizations.

- · Sahtu Land and Water Board
- Indian and Northern Affairs Canada
- Department of Fisheries and Oceans
- Government of the Northwest Territories
- Others

#### **LAND USE POLICIES**

What the landscape should look like now and in the future

Land use plans are descriptions of a society's goals and objectives for their land base. All activities should therefore fit within this vision. This "vision for community development" is based on the social, cultural, and economic interests of Sahtu beneficiaries, residents, and all Canadians. Both scientific and traditional knowledge contribute to the development of the plan.

#### **DECISIONS**

What development/activities are appropriate?

If the project conforms to the Land Use Plan, development can proceed, subject to any plan conditions that apply.

Under this Plan, if the project doesn't conform, the applicant has the option to apply to the Board for an exception to the plan.

### **LAND USE ZONES**

Where development is permitted?

GUZ	Permitted, subject to any general Plan conditions, and to permit/license restrictions set by regulators.		
SMZ	Permitted, subject to special conditions for land use in these areas; e.g. avoiding special harvesting areas.		
CZ	Not permitted. Development would conflict with other land uses that are given priority or would harm the landscape.		

#### 1.8 METHODS AND ANALYSIS

The Board has worked with communities, governments, industry and other stakeholders to:

- 1. create a vision for the Sahtu Settlement Area;
- 2. collect information about land, resources, and people of the Settlement Area; and
- 3. develop a land use plan that provides for the conservation, development and use of land, waters and other resources.

The Board initially worked with communities, industry and other stakeholders to define their vision, goals and land use issues. Meetings, open houses, workshops and household interviews were held with over 700 people from Sahtu communities, government, industry and non-government organizations.

The Board developed a comprehensive library and a Geographic Information System (GIS) (through the Sahtu GIS Project) that describes the biophysical and cultural values of the Sahtu Settlement Area. Both traditional and scientific knowledge were used in developing the plan. Various mapping projects identified trails and types of land use. People were generous in providing detailed information, including identifying harvesting and cultural areas, and providing traditional names and stories about their land use.

The plan evolved through a cyclical process of research, comments, meetings and revisions. A Preliminary Draft was released early in 2003, which identified preliminary zoning and policies. Draft 1 was completed in February 2007 and prompted written comments from 23 organizations. The Board revised the zoning and Plan requirements based on the comments and presented a partial document called "Working Draft 2 - Section 1" in August 2007 to communities, INAC and the GNWT to determine if revisions were proceeding in the right direction. Following further work and consultations, Draft 2 was released in May 2009. The Board received 30 written submissions on Draft 2, and consulted extensively with communities and planning partners to prepare Draft 3. It is anticipated that one final draft will be produced before the Board is ready to adopt a plan for submission to the approving parties.

Owing to several changes and gaps in Board members and staff, the process has taken longer than initially anticipated. Since much of the information was gathered in the early years of Plan development, the Board updated much of its information between Draft 2 and 3 and revised the Plan based on this new information and comments received since Draft 2. This resulted in changes to many zone boundaries, and to the zone designation in some cases to ensure that the zones accurately capture the values they are intended to protect, and provide that protection in the most appropriate manner. Similarly, the Board revised the Conformity Requirements, Actions, and Recommendations to ensure they provide the most appropriate type of guidance and level of detail, are clear and implementable, and apply to the appropriate zones.

Also between Draft 2 and Draft 3, the Board met with Déline, SSI, the GNWT and INAC to decide how to integrate the Great Bear Lake Watershed Management Plan into the Sahtu Land Use Plan. Draft 3 changed substantially as a result of this integration work.

In Draft 3, the Board has endeavoured to strike the right balance between conservation, development and use of land that fulfills the Board's *MVRMA* mandate and meets the shared expectations of the three approving parties. It is likely that there will be some outstanding issues. The Board will consult on Draft 3, and then hold a public hearing to bring all planning partners together to hear final comments on the Plan. Following the hearing, the Board will make any final changes it deems appropriate (Draft 4). This is the Final Draft that the Board will adopt and recommend to SSI, the GNWT and Canada for approval.

A list of meetings, workshops and consultations held during the course of plan development is provided in Appendix 7.

### 1.8.1 Objectives and Other Factors

The SLUPB is required to consult with the federal Minister, the territorial Minister and SSI before determining the objectives to be considered and the other factors to be taken into account in the preparation of the Sahtu Land Use Plan. <sup>16</sup> Following extensive consultations and workshops with communities, government and other planning partners on visioning, the Board held meetings with the approving parties in fulfillment of this requirement in June and July 2000. The Board considers the written input received by the Parties since then to present a gradual refinement of their interests in the contents of the Plan. Key feedback from SSI, the GNWT and INAC regarding expectations for the Plan and key issues and land uses to be considered in the process is summarized below.

#### **Overall Expectations:**

#### The Plan should:

- be consistent with the *SDMCLCA* and the *MVRMA*, and specifically S. 35 of the *MVRMA* and S. 25.2.4 of the *SDMCLCA*;
- have a clear and transparent fit within the NWT land and water management system;
- provide clear, guidance for those agencies and authorities who will implement it, and for developers seeking to plan and submit applications for projects in accordance with the approved plan;
- balance conservation and development interests; and
- contain only those sections necessary to implement the Plan. All other supporting documentation should be removed and provided in supplemental reports.

#### Conformity Requirements should:

- avoid unnecessary duplication with other regulatory boards;
- be clearly written so that conformity checks can be carried out quickly and transparently;
- clearly state prohibited and permitted uses for each zone designation; and
- where any Conformity Requirement incorporates or reflects specific provisions of federal statutes or regulations, be consistent with that legislation and use the same definitions.

<sup>16</sup> *MVRMA*, S. 40

#### **Specific Issues or Land Uses to be Considered:**

- Integration of the GBLWMP into the Sahtu Land Use Plan so there is a single plan with consistent language and approach throughout the SSA;
- Integration of land use planning and Protected Areas Strategy (PAS) processes, including processes for dealing with lands removed from final protected area boundaries;
- Cumulative Effects Management;
- Grandfathering existing uses, including consistency with provisions of the *SDMCLCA* regarding administration of interests on Sahtu lands (S. 19.5.2(a)), commercial access to existing interests (S. 21.4) and provision for the transfer and progression of rights;
- Mackenzie Gas Project specifically how the Plan will affect it should the plan be approved first.
- Transboundary issues;
- Sustainable development;
- Ecological integrity;
- Wise management of land and resources;
- Public water supply, diversion and waste management;
- Community and social development;
- Maintaining culture and archaeological remains;
- Economic development;
- Oil and gas exploration and development.
- Mineral exploration and development
- Energy development;
- Quarry and gravel excavation;
- Transportation development;
- Tourism, outfitting, lodges; and
- Forestry.

# 1.9 THE SAHTU LAND USE PLAN AND OTHER PLANNING INITIATIVES

There are other planning initiatives occurring within and around the Sahtu Settlement Area with different mandates. In order to fulfill its regional purpose under the *MVRMA*, the Sahtu Land Use Plan (SLUP) must integrate with these other initiatives. The relationship and application of the SLUP to other planning initiatives is described below.

## 1.9.1 Planning within Community Boundaries

In accordance with section 34 of the *MVRMA*, the Plan does not apply within community boundaries. Community governments prepare and administer community plans. The Board works with community organizations in the development of the Sahtu Land Use Plan to coordinate on issues of common interest between community and regional plans.

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## 1.9.2 Plans for Settlement Lands (The Great Bear Lake Watershed Management Plan)

Under S. 41 (4) of the *MVRMA*, a planning board shall take into consideration a land use plan proposed by the first nation for its settlement lands in the settlement area, and may incorporate that plan into the land use plan for the settlement area. Although it also addresses other lands, the Great Bear Lake Watershed Management Plan (GBLWMP) is an example of a plan developed by a first nation (the Dél<sub>line</sub> Land Corporation, Dél<sub>line</sub> First Nation and Dél<sub>line</sub> Renewable Resources Council) for its settlement lands.

The GBLWMP was directed by the Great Bear Lake Working Group (Working Group) which developed the GBLWMP by consensus. The Working Group was a coalition of community organizations, government, co-management boards and other organizations created in 2002. The Working Group consisted of:

- Déline members: Déline elders, representatives of the Déline Dene Band, Déline Land Corporation, Déline Renewable Resources Council, Déline Self-Government team, and Déline Uranium Team;
- Federal Government: Environment Canada, Fisheries and Oceans, and Indian Affairs and Northern Development;
- Territorial Government: Environment and Natural Resources;
- Co-Management Boards: the Sahtu Land Use Planning Board, the Sahtu Renewable Resource Board, the Mackenzie Valley Environmental Impact Review Board, and the Sahtu Land and Water Board (observer only); and
- The Canadian Parks and Wilderness Society NWT Chapter.

The GBLWMP was completed in 2005 and submitted to the SLUPB for consideration and inclusion in the Sahtu Land Use Plan. The GBLWMP does not have legal force on its own and can only be implemented through the Sahtu Land Use Plan. The SLUPB has worked diligently to capture and integrate the spirit, intent, goals and substance of the GBLWMP in the Sahtu Land Use Plan. The cultural values and stories have been captured verbatim. The terms and conditions have been included in the plan to the greatest extent possible to respect the work and wisdom that went into that Plan.

The Great Bear Lake Watershed Management Plan was central to defining the management direction of the Sahtu Land Use Plan, especially for the Déline district. The GBLWMP provided a wealth of information about Déline's vision for the management of their land which greatly simplified the Planning Board's work. Regional planning is most successful when communities have the opportunity to do their own internal planning first, to decide for themselves how they want their lands, waters and other resources conserved, developed and used. The Board welcomes further work by the districts to advance planning for their settlement lands.

## 1.9.3 Protected Areas Planning

Within the Sahtu Settlement Area (SSA), there are existing protected areas and various protected area initiatives underway. The *SDMCLCA* describes the conditions under which a

protected area can be established under Chapter 16 (National Parks) and Chapter 17 (Protected Areas). Kelly Lake, for example, was given surface protection under Chapter 17 (Protected Areas). Various federal and territorial statutes provide for the establishment of different types of protected areas with varying degrees of protection. In the NWT, establishment of protected areas is coordinated through the Protected Areas Strategy (PAS).

Land can also be protected through Conservation Zones under the land use plan. Conservation Zones and protected areas both protect land but in different ways as described in Table 1.

**Table 1. Comparison of Protected Areas and SLUP Conservation Zones** 

Characteristics	Protected Areas	SLUP Conservation Zones (CZ)
Time-frame	Long-term protection; boundaries difficult to change.	Flexible protection: The SLUPB reviews the Plan every 5 years during which CZ boundaries and designations can be maintained or amended.
Type of protection	Varying degrees of protection depending on the sponsoring agency and legislation. May be either surface only, or both surface and subsurface.	CZs provide both surface and subsurface protection.
Ownership/ Administration	In some cases, the land is transferred to the sponsoring agency.	The land is not transferred.
Responsible agency	<ul><li>Parks Canada</li><li>Canadian Wildlife Service</li><li>GNWT (ITI or ENR)</li></ul>	The area is managed by the land owner and regulators according to existing mandates.
Assessments conducted	Detailed socio-cultural, economic and non-renewable resource assessments are conducted and considered in setting the final boundaries of the protected area.	The SLUPB is not funded to carry out detailed studies. The SLUPB gathers community TK and regional scale information, which provide the basis for protection.
Management responsibility	The sponsoring agency collaborates with communities to develop and implement a management plan for the area.	First Nations, regulators and all government departments and agencies must carry out their activities in accordance with the Plan. The SLUPB works with communities and government to monitor implementation of the Plan.

Under the *MVRMA*, it is the role of the Plan to guide initiatives related to the conservation, development and use of land. There are a number of sites at different stages in the NWT PAS process, including some that have been granted protection under federal legislation, or that are protected under the land claim. S. 2.1.1 of the Plan describes how the Plan applies to protected areas during and following establishment. Additional information about the Protected Areas Strategy is provided below.

#### The NWT Protected Areas Strategy

The process for establishing Protected Areas in the NWT was agreed to between the Territorial and Federal Governments in 1999 when they signed the NWT Protected Areas Strategy (PAS). The PAS is a balanced conservation planning approach that allows communities to protect significant areas and to benefit from economic development. The goals of the PAS are to identify and protect special natural and cultural areas in the NWT and core areas that represent each of the 42 different ecoregions in the NWT. Development may be allowed in special natural and cultural protected areas if the activities are compatible with the values being protected. Core representative areas include healthy samples of each of the NWT's ecoregions. In most cases, industrial activities are not permitted.

The PAS was developed and is implemented by federal, territorial and regional governments/organizations, environmental non-governmental organizations (ENGOs), and industry. The NWT PAS conforms to all land claim agreements, Aboriginal/inherent and treaty rights, and self-government agreements. A Sahtu Secretariat Incorporated representative sits on the PAS Steering Committee. The NWT PAS process is community-focused and requires that all values (cultural, economic, ecological) of an area be evaluated (see Table 2).

Types of protected areas that could be established in the Sahtu Settlement Area include:

- National Parks and Park Reserves,
- National Wildlife Areas,
- National Historic Sites.
- Migratory Bird Sanctuaries,
- Critical Wildlife Areas.
- Wilderness Conservation Areas,
- Heritage Parks,
- Natural Environment Parks,
- Cultural Conservation Areas, and
- Areas protected through land claim agreements.

More details on the PAS are available at www.nwtpas.ca.

Table 2. NWT PAS Establishment Process 17

Protected Areas Strategy Establishment Steps	Actions
Step 1: Identify areas to protect	Map an area of interest for protection. Traditional knowledge and scientific information on the values to protect should be documented.
Step 2: Get regional support	Obtain support from regional Aboriginal organizations and co- management boards. Gather existing traditional and scientific information on ecological, cultural and economic values.
Step 3: Get sponsoring agency support	Secure support from a sponsoring agency that has legislation to manage the land on a long-term basis. Once sponsor accepts the proposal the area becomes a "candidate protected area".
Step 4: Apply for interim protection, if needed	Where needed, apply to the federal government for interim protection (short-term). Once approved, new land sales, leases or rights cannot be granted in the candidate protected area.
Step 5: Recommend boundaries, designation and management	Collect more traditional and scientific information to assess all values in an area. Consultation with communities and affected parties. The Candidate Area Working Group uses this information to recommend a final boundary and long-term vision for the area.
Step 6: Apply for permanent protection	Formally request the site be designated a permanently protected area.
Step 7: Approve and set up the protected area	Government approves and sets up the permanently protected area.
Step 8: Manage and monitor the area	Protected area is designated based on formal government approval.

## 1.9.4 Transboundary Planning

Under S. 45 of the *MVRMA*, the Board may cooperate with any body responsible for land use planning in any other area, either within or outside the Northwest Territories that is adjacent to the settlement area. It may also prepare a joint land use plan covering both the SSA and an adjacent area in conjunction with the adjacent planning body. The portion of a joint plan within the SSA is subject to Part 2 of the *MVRMA*.

The Sahtu region is surrounded by 6 other regions:

#### Nunavut

Land use planning in Nunavut is carried out by the Nunavut Planning Commission (NPC). The Nunavut Planning Commission is working on a single Nunavut Land Use Plan for the whole territory. A first draft is expected in the fall of 2010. NPC has assembled a "Priority Areas Map"

<sup>&</sup>lt;sup>17</sup> NWT PAS 2008-2009 Annual Report: http://www.nwtpas.ca/documents/annualreport-2008-09.pdf

that it is currently seeking input on. 18 An area of community interest is adjacent to and overlaps with the SSA.

#### **Tlicho Settlement Region**

The Tlicho Agreement allows for various options for land use planning:

- 1) The preparation of a land use plan on Crown lands only (s. 22.5.1);
- 2) Consultations between Government, the Tlicho Government and community governments to harmonize their respective planning processes (s. 22.5.2); or
- 3) The establishment of a process for a single plan that will apply to all lands other than national parks (s. 22.5.3)

At this time, a Tlicho Land Use Planning Working Group has been established to develop a land use plan for Tlicho lands and plan development is underway.

#### **Dehcho territory**

The Dehcho Land Use Planning Committee completed a Final Draft Land Use Plan in June 2006. It was approved by the Dehcho First Nations in June 2006 but not the federal or territorial governments. Committee members were changed and the Committee was given a new Terms of Reference in April 2007 to negotiate revisions acceptable to DFN, the GNWT and Canada. Revisions are ongoing. 19 Zoning along the SSA boundary is mostly General Use or Special Development Zones. Naats'ihch'oh in the SSA connects with Nahanni National Park Reserve established in the Dehcho territory.

#### Yukon

Planning in the Yukon is carried out by the Yukon Planning Council. It is divided into 8 planning regions. Separate planning commissions are developed for each region and supported by the main planning council. The Sahtu Settlement Area shares its border with the Kaska, Northern Tutchone, and a small sliver of the Peel Watershed planning regions. The Peel Watershed Planning Commission released a Final Recommended Plan on December 3, 2009, which is awaiting approval.<sup>20</sup> The other two regions do not have active planning commissions at this time.

#### **Gwich'in Settlement Area**

The Gwich'in Land Use Plan was approved in 2003. It is the only approved land use plan in the Mackenzie Valley. The Gwich'in Land Use Planning Board released a draft of their 5-year review in May 2010 and are requesting comments on it before finalizing their recommendations for an amended Plan.<sup>21</sup> Zoning adjacent to the SSA is mostly General Use, with a Special Management Zone around the Arctic Red River headwaters (which lies adjacent to Ts'ude niline Tu'eyeta in the SSA), and a Special Management Zone along the Mackenzie River, which is continued in this Plan.

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http://www.nunavut.ca/files/NLUP\_Priority\_Areas\_Map.pdf
 http://www.dehcholands.org/docs\_presentations.htm

http://www.peel.planyukon.ca/downloads/RLUP.html

<sup>&</sup>lt;sup>21</sup> http://www.gwichinplanning.nt.ca/publications.html

#### **Inuvialuit Settlement Region**

Land use planning in the Inuvialuit Settlement Region is carried out at the community level in the form of Community Conservation Plans. The Paulatuk, Inuvik, Aklavik and Tuktoyaktuk Community Conservation Plans all define planning areas adjacent to the Sahtu Settlement Area. The Tuktoyaktuk, Inuvik and Aklavik Plans all identify lands immediately adjacent to the SSA as Category "B" lands. The Paulatuk Plan identifies most adjacent lands as Category "C", with a buffer around the Horton River identified as Category "D", and Tuktut Nogait National Park identified as Category "E". The categories are defined as follows:

- "B" Lands and waters where there are cultural or renewable resources of some significance and sensitivity but where terms and conditions associated with permits and leases shall assure the conservation of these resources
- "C" Lands and waters where cultural or renewable resources are of particular significance and sensitivity during specific times of the year. These lands and waters shall be managed so as to eliminate, to the greatest extent possible, potential damage and disruption.
- "D" Lands and waters where cultural or renewable resources are of particular significance and sensitivity throughout the year. As with Category C, these areas shall be managed so as to eliminate, to the greatest extent possible, potential damage and disruption.
- "E" Lands and waters where cultural or renewable resources are of extreme significance and sensitivity. There shall be no development on these areas. These lands and waters shall be managed to eliminate, to the greatest extent possible, potential damage and disruption. This category recommends the highest degree of protection possible.

The Sahtu Land Use Planning Board maintains general communications with planning bodies from surrounding jurisdictions to keep apprised of their work and discuss shared issues.

## 1.10 SUPPORTING DOCUMENTS FOR THE PLAN

Three additional documents were developed to support and accompany Draft 3:

- 1) **Background Report** All background information not essential to the interpretation or implementation of the Plan has been placed in a separate Background Report. This includes information on the people and communities of the SSA, extensive mapping on the biophysical and economic values and features, and information on the regulatory environment.
- 2) **Draft Implementation Guide** Contains preliminary descriptions of how each of the Plan's Conformity Requirements will be implemented. The Board expects to refine this work over the final year of Plan development.

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<sup>&</sup>lt;sup>22</sup> http://www.screeningcommittee.ca/resources/inuvialuit.html

3) **Table of Comments and Responses** - The Board compiled all comments received on Draft 2, both oral and written, into a table that describes how the Board addressed the input it received.

Readers are referred to these supporting documents to broaden their understanding of the Sahtu Land Use Plan.

## Chapter 2 – Application and Effect

#### 2.1 AREA OF APPLICATION

The Plan applies throughout the Sahtu Settlement Area<sup>23</sup> as shown in Map 1 except:

- a) National Parks established under the Canada National Parks Act;
- b) lands acquired under the Historical Sites and Monuments Act; and
- c) lands within the boundaries of a local government.<sup>24</sup>

For clarity, if a National Park, historic site, or local government boundary in the SSA is expanded, the Plan will cease to apply in the area of the expansion.

Community boundaries (lands with the boundaries of a local government) are shown on Map 1. The larger Block Land Transfers shown around Tulita and Norman Wells are outside of community boundaries and the Plan applies to these lands.

The application of the Plan to protected areas is expanded on below.

## 2.1.1 Application of the Plan to Protected Areas

As noted under 2.1 above, the *MVRMA* exempts historic sites, monuments and parks managed by Parks Canada from the Plan after they are established. The Plan has a role only in the establishment of new protected areas of those types.<sup>25</sup> The *MVRMA* does not grant a similar exemption for other types of protected areas. Therefore, both the establishment of other protected areas, and management of land use within them, are subject to the Plan. This requires that the development, review and amendment of the Plan be coordinated with the work of those bodies involved in the establishment and management of such protected areas to ensure integration.

In the NWT, establishment of protected areas is coordinated through the Protected Areas Strategy (PAS). There are a number of sites at different stages in the NWT PAS process, including some that have been granted protection under federal legislation, or that are protected under the land claim. The status and the application of the Plan to these areas are summarized in Table 3.

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<sup>&</sup>lt;sup>23</sup> MVRMA S. 40; s. 41(2).

<sup>&</sup>lt;sup>24</sup> MVRRMA, S.34.

<sup>&</sup>lt;sup>25</sup> MVRMA S. 46(2).

## Map 1. Sahtu Settlement Area

**Table 3. Protected Areas and Other Conservation Initiatives** 

Area	Type of Protected Area	Status
Kelly Lake	Surface protection via SDMCLCA	Subsurface protection to be provided through the Plan's Conservation Zone. The Plan applies to this area.
Tuktut Nogait National Park	National Park – Parks Canada	The Plan does not apply within this area.
Saoyú and ?ehdacho National Historic Site	National Historic Site – Parks Canada	The Plan does not apply within this area.
Naats'ihch'oh	Proposed National Park Reserve – Parks Canada	Land withdrawal until March 31/12. The Plan currently applies to the area. Upon establishment, the Plan will not apply.
The Déline Fishery and Fort Franklin National Historic Site	National Historic Site - Parks Canada	The site was designated in 1996 but the lands pertaining to this site have not yet been identified and acquired. The Plan currently applies to this site. Once the lands are acquired pursuant to the <i>Historical Sites and Monuments Act</i> , the Plan will not apply to this site.
Port Radium	National Historic Event – Mining, Parks Canada	Port Radium was designated a National Historic Event in 1973. There are no lands attached to this designation. The Plan applies to this site. <sup>27</sup>
Canol Trail and Dodo Canyon/ Doi T'oh	Territorial Park Reserve - to be established as a Territorial Park	A park management plan was approved in 2007. The park cannot be established until the site is remediated by INAC and lands are transferred to the GNWT. The Plan applies to this area.
Ts'ude niline Tu'eyeta	Candidate National Wildlife Area sponsored by CWS	Currently in Step 5 of the PAS process. Under land withdrawal until October 31, 2011. The Plan applies to this area.
Shúhtagot'ine Néné	Candidate National Wildlife Area sponsored by CWS	Currently in Step 4 of the PAS process. The Plan applies to this area.
Edajįla	Area of Interest, no sponsoring agency yet.	Step 3 of the PAS process. The Plan applies to this area.
Tulita Conservation Initiative (TCI) (The Smokes, Kelly Lake, Bear Rock, Red Dog Mountain, Mahoney Massacre Site, Willow Lake)	In 2005 the Tulita Land Corporation identified several sites for NWT PAS consideration. In Jan/10 the community decided to withdraw them from the PAS process and designated them as Conservation Zones (CZ) in the Plan.	<ul> <li>The Smokes is located within the Tulita community boundary and is not subject to the Plan.</li> <li>Kelly Lake - The surface is protected under S.17.4.1 of the SDMCLCA. The subsurface will be protected through a CZ in the Plan. The Plan applies to this area.</li> <li>Bear Rock, Red Dog Mountain, Mahoney Massacre Site and Willow Lake are now CZs under the Plan.</li> </ul>

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<sup>&</sup>lt;sup>26</sup> Ibid.
<sup>27</sup> Henry Cary, Parks Canada, Personal Communication, January 5/10

As candidate areas progress through the Protected Areas Strategy (PAS) process, the final boundaries are likely to change. As the process nears completion, the sponsoring agency and/or protected area working group will need to work with the SLUPB to:

- Harmonize the boundaries between the land use plan and the final protected area;
- Identify the most appropriate zone designation(s) under the land use plan for areas excised from the proposed protected area based on the reasons they were excluded and the values known to exist there; and
- Determine how the Plan will apply to the protected area upon its formal establishment under the sponsoring agency's legislation.

The approach of the Plan is to zone the locations of protected areas initiatives - including initiatives to establish National Parks, Historic Sites and Monuments— as Proposed Conservation Initiatives, having the same status as Conservation Zones under the Plan until each protected area is fully established. Once a National Park or Historic Site is established, the zoning will cease to apply by operation of the *MVRMA*. When a protected area of another type is established, the Plan depends upon the sponsoring agency to assess and report whether it can manage land use within the protected area without further zoning direction from the Plan. It is intended that the Plan will be amended to reflect any new status of the area and any revised boundaries. Depending on the agency's report, it is intended that the Plan's zoning direction in that area be removed. Where the sponsoring agency does not have sufficient authority to manage land use in accordance with the goals for the protected area, the sponsoring agency may request that the Plan maintain the area as a Conservation Zone, in addition to its protected area status. The Board will work with the sponsoring agency to integrate the management direction between the Sahtu Land Use Plan and any protected area management plan.

A change in a protected area boundary established in accordance with the Plan, or a change to the requirements of the Plan in a protected area, requires a Plan amendment as per the process described in Chapter 7, including approval by SSI, the GNWT and Canada. This can take considerable time. Where Plan amendments are anticipated, discussions with the SLUPB should be started as early as possible so that approval of any Plan amendment can be considered at the same time as the protected area.

### 2.2 LAND OWNERSHIP

Application of the Sahtu Land Use Plan is not affected by land ownership. The Plan applies equally to activities carried out on Crown Land, Commissioner's Land and Sahtu Settlement Lands.

## 2.3 APPLICATION TO USES AND USERS

Except where a land use is exempted under section 2.3.2, the Plan applies to any land use activity that requires an authorization under any federal or territorial legislation<sup>28</sup> or that may be authorized by a disposition of an interest in land from government or a First Nation.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> *MVRMA* S. 46(1)

Chapter 7 contains a draft list of typical authorizations and dispositions relating to land use in the SSA, for illustration only.

Land uses that are not specifically mentioned are still subject to the Plan and must conform to all applicable Conformity Requirements (most CRs set out in Chapter 4 apply to any land use activity; some apply only to specific activities).

Activities that do not require an authorization or disposition are not subject to the Plan. For example, this includes hiking, canoeing, and subsistence harvesting activities (the right to gather, hunt, trap and fish throughout the Sahtu Settlement Area at all seasons of the year provided to Sahtu Dene and Métis participants under the *SDMCLCA*).

The Plan does not distinguish between land uses proposed by private individuals and companies, government, or a First Nation.

# 2.3.1 Uses Authorized Before the Plan is Approved

The MVRMA and SDMCLCA provide for land use plans to be implemented by authorizations and dispositions, and do not give land use plans retroactive effect.

Accordingly, a land use that has been authorized when the Plan is approved may be undertaken or continued despite any nonconformity with the Plan until the authorization or disposition on which it depends expires or becomes eligible for renewal or amendment. From that date forward the Plan applies to the use, unless the use qualifies for an exemption (see 2.3.2 below).

# 2.3.2 Exempt Uses

The land uses identified below are exempt on an ongoing basis from most requirements of this Plan (D. and E. below), or from the zoning prohibitions of this Plan (A., B., and C. below), despite any requirement for an authorization or disposition.

# A. Existing Uses that Would be Prohibited by Zoning Requirements

It is fair that the Plan allow a previously authorized land use to proceed where a zone established by the Plan would prohibit the use otherwise. It is also fair, however, to expect the manner of carrying out such existing uses to be upgraded in the process of renewing and amending authorizations, so that all activities contribute to achieving the Plan's vision and goals for the region and operate under similar rules.

Accordingly, a land use is exempt from the zoning prohibitions of the Plan (CR#1) if, on the date of Plan approval,

<sup>29</sup> SLCA, ss. 25.2.9

- i) the use was fully authorized (whether or not it was being carried out); or
- ii) the use was a matter of bona fide entitlement received from the Crown or a First Nation under
  - A. a mineral claim:
  - B. a mineral lease;
  - C. an oil or gas exploration licence;
  - D. a significant discovery licence;
  - E. a production licence;
  - F. a coal lease:
  - G. a quarrying lease;
  - H. a timber lease;
  - I. a surface land lease, easement or reserve, or licence of occupation for a purpose related to the use; or
  - J. an interest in land granted by a First Nation that is equivalent to any of these interests or instruments.

(This includes entitlements transferred to the current holder after the date of Plan approval.)

This exemption extends to a land use proposed after the Plan is approved where the proponent becomes entitled to receive a successor interest of one of the types referred to in ii) above by satisfying related requirements. (For example, if certain mineral exploration is exempt from the mining prohibition in a Conservation Zone under the Plan because a mineral claim entitled the holder to explore for minerals when the Plan was approved, mine development also will be exempt if and when the proponent becomes entitled to obtain a mineral lease after the Plan is approved by satisfying the associated performance and financial requirements.)

This exemption also extends to quarrying - which is subject to a zoning prohibition under the Plan (CR#1) - that is necessary in order to carry out another use that qualifies for this exemption as an existing use. (For example, quarrying that was not authorized when the Plan was approved but is required in order to build a mine that was authorized before the Plan was approved is exempt from the zoning prohibitions of the Plan.)

This exemption is subject to the following limits:

- a) a land use that was exempt from a zoning prohibition because the use was authorized when the Plan was approved will cease to be exempt if its authorization expires and the use is not resumed lawfully and to a substantial extent within one year;
- b) this exemption does not apply to any significant alteration to a land use unless the alteration is covered by a successor interest referred to above. (For example, the construction of a mine based on a successor mineral lease would be exempt. The extension of a seismic program in a location not covered by the existing land use permit or exploration licence would not be exempt.)

For illustrative purposes, Map 2 identifies the location of key existing land interests.

# **Map 2. Existing Land Interests**

For clarity, an existing land use that is exempt from the zoning prohibitions of the Plan is not, for that reason, exempt from any other Conformity Requirements of the Plan. Chapter 7 addresses cases in which the Board may consider making an exception to the application of Conformity Requirements other than zoning prohibitions based on evidence that a Conformity Requirement may prevent the continuation of an existing lawful land use.

The Board intends this exemption to meet or exceed any consideration of vested rights in a land use plan that is required under the *SDMCLCA*.<sup>30</sup>

# B. Community Infrastructure that Would be Prohibited by Zoning Requirements

Lands immediately adjacent to community boundaries provide a variety of services for communities including access, granular resources, power (e.g. wind or hydro), existing and future infrastructure (airports, water, sewage facilities, telecommunications), and land for future community expansion. It is important that the Plan provide for the future growth of communities and their access, infrastructure and service needs.

Accordingly, the following land uses are exempt from the zoning prohibitions of the Plan (for example, they are exempt from the prohibitions on quarrying, power development, and forestry in Conservation Zones):

- a) new community infrastructure outside of existing community boundaries; and
- b) the removal of quarry material outside of community boundaries, as needed for community operations and the construction of community infrastructure.

# C. Cleanup and Reclamation Activities

Activities related to the cleanup and reclamation of contaminated sites or historic industrial sites are exempt from the zoning prohibitions of this Plan. Existing contaminated sites are shown in Map 3 and listed in Table 4.

The Plan is also based on the following reading of the relevant provisions of S. 21.4:

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<sup>&</sup>lt;sup>30</sup> In particular, this Plan is based on the following reading of section 19.5.2 (a) of the SLCA: the receipt of title to mines and minerals by First Nations under the SLCA respecting certain settlement lands does not alter government's responsibility or authority to continue to administer mineral interests that existed prior to the transfer in accordance with applicable legislation, as long as such interests exist.

<sup>1)</sup> The transfer of title to settlement lands to a designated Sahtu organization under the SLCA does not diminish any rights, benefits or privileges that a person held at the date of transfer under either an authorization or interest in land, provided that government's discretion to grant or refuse a renewal, replacement, extension of term or transfer of any such right or privilege is not diminished by this provision.

<sup>2)</sup> In addition, title to settlement lands does not give the designated Sahtu organization any right or authority to deny a person the rights of use and access to settlement lands that are specified in S. 21.4.

# **Map 3. Contaminated Sites**

Table 4. Contaminated Sites in the SSA 31

#	Name	#	Name
	AIRPORT CREEK	41	MACKENZIE RIVER SHORELINE # 16
2	ANDERSON RIVER/BLUENOSE LAKE A	42	MACKENZIE RIVER SHORELINE # 17
3	BEAR ROCK /MIRROR LAKE #1	43	MACKENZIE RIVER SHORELINE # 18
4	BLUEBERRY CRK/BEAR ROCK #4	44	MACKENZIE RIVER SHORELINE # 19
5	BLUEFISH CRK/BEAR ROCK #3	45	MCCLURE LAKE (2 OF 7 LAKES)
6	Canol - Mile 76	46	MIRROR LAKE/BEAR ROCK PROJECT
7	Canol - Mile 108	47	MOOSE LAKE
8	Canol - Mile 80	48	MOUNTAIN LAKE (1 OF 7 LAKES)
9	COLVILLE LAKE # 08	49	
10	COLVILLE LAKE # 09	50	SLIDE LAKE (6 OF 7 LAKES)
11	COPPERMINE TRAIL	51	SVEN LAKE (4 OF 7 LAKES)
12	SANS SAULT / EAST MOUNTAIN AREA	52	UNNAMED LAKE/COLVILLE LAKE (3
13	ESTABROOK LAKE/COLVILLE LAKE (	53	UNNAMED LAKE/COLVILLE LAKE (4
14	FLORENCE LAKE	54	WINDY ISLAND B - 53/BEAR ROCK
15	FORT GOOD HOPE AREA (2 SITES)	55	YELLOW LAKE
16	GASSEND LAKE/COLVILLE LAKE (5	56	CLOUD DOH (GREAT BEAR LAKE)
17	GUBER LAKE (5 OF 7 LAKES)	57	GOOD HOPE BAY/GREAT BEAR LAKE
18	HORTON LAKE # 1	58	GREAT BEAR L # 1/GREAT BEAR R.
19	HORTON LAKE # 2	59	NORMAN WELLS/40 KM NORTH
20	HORTON LAKE # 3	60	SHEZAL CANYON
21	HUME RIVER/TRIAD BP ARCO CC HU	61	POINT LAKE
22	LAC BELOT # 1/COLVILLE LAKE (	62	PORT RADIUM MINE/ELDORADO MINE
23	LAC BELOT # 1/COLVILLE LAKE	63	SAWMILL BAY/GREAT BEAR LAKE
24	LAC CHARRUE/LITTLE CHICAGO	64	SILVERBEAR / TERRA # 1
25	LAC MAUNOIR/COLVILLE LAKE	65	SILVERBEAR / TERRA # 2
26	LITTLE CHICAGO # 1	66	SILVERBEAR / TERRA # 3
27	LITTLE CHICAGO # 2	67	SILVERBEAR / TERRA # 4
28	MACKENZIE RIVER SHORELINE # 01	68	BIG DAL LAKE (4 OF 4 SITES)
29	MACKENZIE RIVER SHORELINE # 03	69	DIVIDE LAKE (2 OF 4 SITES)
30	MACKENZIE RIVER SHORELINE # 04		DRILL LAKE (2 SITES)
31	MACKENZIE RIVER SHORELINE # 05	71	GODLIN LAKE
32	MACKENZIE RIVER SHORELINE # 06	72	JUNE LAKE (LOWER)
33	MACKENZIE RIVER SHORELINE # 07	73	JUNE LAKE (UPPER)
34	MACKENZIE RIVER SHORELINE # 09	74	KEELE RIVER AIRSTRIP
35	MACKENZIE RIVER SHORELINE # 10	75	NATLA LAKE (1 OF 4 SITES)
36	MACKENZIE RIVER SHORELINE # 11	76	SHELL CLOVERLEAF I-46
37	MACKENZIE RIVER SHORELINE # 12	77	CONTACT LAKE MINE
38	MACKENZIE RIVER SHORELINE # 13	78	EL BONANZA MINE
39	MACKENZIE RIVER SHORELINE # 14	79	FORT CONFIDENCE
40	MACKENZIE RIVER SHORELINE # 15	80	DAHADINNI RIVER M-43 A

<sup>&</sup>lt;sup>31</sup> From Federal Contaminated Sites Inventory

# **D. Emergency Activities**

Any land use activity that must be carried out in order to deal with an emergency that threatens life or property is exempt from all requirements of this Plan except Action #12 (Chapter 6). Action #12 requires those carrying out such an emergency activity to report on their activity to the Board.

# E. Sahtu Dene and Métis Harvesting Rights

The following land use activities are exempt from any requirement of this Plan:

- any harvesting of wildlife or trees that a participant may engage in as of right under the SDMCLCA, and
- ii) any activity included in an associated right of access under the SDMCLCA.

# 2.4 EFFECT OF THE PLAN

Once the Plan is approved, the *MVRMA* requires that "every body having authority under any federal or territorial law to issue licences, permits, or other authorizations" - referred to in this Plan as "regulators" – "shall carry out their powers in accordance with the land use plan". The Plan provides direction to regulators (and the land users regulated) through "Conformity Requirements," to be implemented in the process of authorizing land uses.

The MVRMA also requires that "the Sahtu First Nations" and "departments and agencies of the federal and territorial governments" – referred to in the Plan as "responsible authorities" - "shall carry out their powers in accordance with the land use plan". The Plan provides direction to responsible authorities through "Actions," to be implemented by means of measures undertaken outside the regulatory process. 4

In addition, the Plan provides a series of non-binding recommendations for the consideration of land use applicants, regulators and responsible authorities.

The Plan's Conformity Requirements take into account existing legislation, policy and practice in addressing the issues raised in the planning process. In the absence of a Plan, regulators have had to establish policies and practices by means of their discretionary authorities, to address land use issues. The fact that a policy or practice is currently being followed on a discretionary basis does not diminish the value of providing Plan direction on the issue. It may be important to communities that such processes be used consistently. The Plan can provide that assurance

<sup>&</sup>lt;sup>32</sup> MVRMA, S.46(1).

<sup>&</sup>lt;sup>33</sup> MVRMA, S.46(1). With respect to the Sahtu Land and Water Board, see also S. 61(1).

<sup>&</sup>lt;sup>34</sup> Regulators, which are government departments or agencies, also qualify as "responsible authorities" when acting outside the regulatory process.

to communities, and at the same time streamline decision-making on the issue. For these reasons, some Conformity Requirements of this Plan incorporate policies or practices that are currently being implemented by means of discretionary authorizations. In such cases, Plan approval by the First Nations and responsible Ministers will make the policy or practice mandatory for the first time under the *MVRMA*.

The responsibility of regulators under the *MVRMA* to act in accordance with land use plans includes the responsibility to withhold authorizations for non-conforming land uses unless an exception to the plan is available under the plan and has been granted by the Board.

Where a proposed land use activity conforms to the Plan, regulators may issue authorizations, provided that the authorizations implement applicable Plan requirements and that the *MVRMA*'s environmental assessment and other requirements have been met. As noted in Chapter 1, regulators may attach terms and conditions to their authorizations that are more stringent than either Plan requirements or adopted MVEIRB recommendations for mitigative or remedial measures or follow-up programs. For clarity, conformity with the Plan does not imply approval or consent for any use of land, water or other resource by regulators or First Nations.

Further detail on the implementation implications of plan approval is contained in Chapter 7.

# Chapter 3 – Vision & Goals

This chapter describes the vision and goals for the Sahtu Settlement Area as identified by communities and participants in the planning process. The Dene and Métis people's vision and goals are holistic, covering all aspects of their future aspirations. Not all of these can or will be addressed by the Plan through conditions for land use (e.g. educational vision and goals). The Board respectfully submits this holistic vision and goals for the Sahtu Settlement Area for the consideration of other organizations, departments and agencies as they carry out their respective mandates.

# 3.1 VISION

Considerable work was completed with Sahtu communities and planning partners early in the planning process to identify a vision for the Sahtu Settlement Area. Participants were asked to identify their vision for the land, five years and 100 years in the future. The results of this work were compiled in a SLUPB report called "Building a Vision for the Land" <sup>35</sup>.

Between 2002 and 2005 a working group was established to develop a management plan for the Great Bear Lake watershed, with extensive participation from Délıne, relevant federal and territorial government departments and the co-management Boards. A vision and goals was developed for each aspect of the Great Bear Lake Watershed Management Plan (GBLWMP) to guide their planning (e.g. for each of the zone types, communications, culture and education, research and monitoring, enforcement, contaminated site remediation). The vision below reflects input from both the SLUPB's visioning work and the GBLWMP.

#### Sahtu Vision

The region has cultural integrity. People use the land as they always have for hunting, trapping, fishing, gathering, spiritual renewal and healing. Elders are respected and play a central role in passing down the language, traditional skills, knowledge, stories and importance of the land to community leaders and the youth, strengthening cultural and spiritual connections to the land. Elders work with teachers to teach both traditional and modern skills in schools, which equip the youth to thrive and adapt in a changing environment.

The ecological integrity of the region is maintained. The land, water and natural resources on which people depend are clean, healthy and abundant. There is a balance of industrial development and vast wilderness areas, a model of development hand in hand with environmental protection. Conservation Zones and legislated protected areas protect the most important places and values for future generations, while careful management allows sustainable development to proceed in all other areas.

<sup>&</sup>lt;sup>35</sup> Building a Vision for the Land, SLUPB, November 2000, <a href="http://www.sahtulanduseplan.org/website/web-content/documents/presentations\_updates/BuildingVision-02-2001.pdf">http://www.sahtulanduseplan.org/website/web-content/documents/presentations\_updates/BuildingVision-02-2001.pdf</a>

Long-term economic planning has resulted in strong renewable and non-renewable industries, providing economic self-sufficiency and stability, and employment diversity for the region. Residents are able to find work in their communities and on the land. Good access and infrastructure in the region reduces the cost of power, goods and services. A strong emphasis on training has created a skilled workforce to maximize employment and business opportunities.

Communities have sufficient authority, capacity and involvement in managing and monitoring land use to work in true partnership with land and resource managers, comanagement Boards, and regulators. Together, they provide a clear, efficient regulatory system that promotes sustainable development. Land use activities are designed, regulated and implemented with consideration for the specific values and characteristics of the people and the region. Land use decisions respect and integrate Sahtu Dene and Métis traditional laws, beliefs and management practices with scientific and regulatory frameworks. There is trust and respect amongst all participants in land and resource management.

# 3.2 GOALS

Goals have been developed based on the vision and issues identified in this planning process. They identify targets or actions needed to achieve the vision.

- 1. Maintain the ecological integrity of the Sahtu Settlement Area.
  - a. Protect environmentally significant areas and ecologically representative areas.
  - b. Water quality, quantity and ecological productivity will not be degraded and will be restored and enhanced where degradation has occurred.
  - c. Consider and mitigate long-term cumulative impacts to land and water from land use activities.
  - d. Remediate current contaminated and waste sites.
  - e. Maintain or increase the populations of wildlife on which people depend, including but not limited to woodland and barren ground caribou, moose, Dall's sheep, furbearers, waterfowl and fish.
  - f. Consider impacts of, and adaptations to, climate change in decisions affecting land, water and other resources.
  - g. Build on the Cumulative Impact Monitoring Program (CIMP) to develop a research and monitoring program necessary to understand and monitor the ecological and cultural integrity of the Sahtu Settlement Area
  - h. Manage transboundary issues in cooperation with organizations from adjacent regions.

- 2. Maintain or enhance the cultural integrity of the Sahtu Settlement Area.
  - a. Protect places of significant cultural or spiritual value.
  - b. Enhance protection of heritage sites, and important subsistence use and harvesting areas.
  - c. Document the cultural heritage of the SSA, including the names and locations of important places, trails, burial sites, archaeological sites, and undocumented stories associated with particular places and meanings.
  - d. Document traditional ecological knowledge and protocols of the Sahtu Dene and Métis and integrate this knowledge into all aspects of land and resource management, including research and monitoring.
  - e. Increase opportunities for residents to spend time on the land.
  - f. Increase use and transfer of cultural skills, values, practices and language among residents, especially from Elders to the youth.
- 3. Increase the economic self-sufficiency of the region through sustainable development.
  - a. Address barriers to industry investment and increase non-renewable resource development in the region.
  - b. Develop renewable resource industries, including commercial hunting, fishing, forestry and tourism.
  - c. Address community and industry needs for access and infrastructure development.
  - d. Maximize benefits to Sahtu residents and communities from development.
  - e. Establish long-term training programs for residents and communities in all aspects of renewable and non-renewable resource development, business, and financial management.
- 4. Increase community capacity and decision-making authority in land and resource management.
  - a. Increase community capacity and engagement in regulatory processes, resource management, monitoring and enforcement.
  - b. Improve communication and coordination between community organizations, regulators, resource managers, and enforcement personnel.
  - c. Improve clarity, consistency and efficiency of the regulatory environment in conjunction with current regulatory improvement efforts of the federal government and other regulators.
  - d. Advance and complete self-government negotiations.

# Chapter 4 – Zoning and Conditions for Development

The Plan provides direction to applicants and responsible authorities on what land uses are appropriate, where, and under what conditions to achieve the vision and goals identified for the Sahtu Settlement Area. Direction is provided through Conformity Requirements; the rules under which land use may take place. Conformity Requirements, or CRs, are requirements that are to be implemented in the regulatory process, and in the disposition of interests in land. CRs consist of land use zones and conditions for development. Zones identify where key land uses may and may not take place, and provides a spatial framework for managing different values and competing interests through the conditions that are applied to those zones. Some conditions apply to all zones, or all zones of a similar type; others apply only to particular zones. The context and rationale for each CR is provided immediately below the requirement.

All applications for the use of land (which includes water and other resources) must conform to all of the Conformity Requirements applicable to the zone(s) in which the activity takes place. The implementation of each conformity requirement may vary according to the scale and nature of the land use proposed. Further information on the implementation of Conformity Requirements is provided in Chapter 7.

The Plan's direction for land use does not relieve users from obligations to comply with laws of general application or with requirements set by regulators in the process of authorizing land uses. Activities related to existing uses are exempted from zoning prohibitions (CR#1) in accordance with S. 2.3.2 of the Plan, but are subject to all other CRs.

This chapter also contains some recommendations that are relevant to project-specific applications. Recommendations are advisory in nature (not mandatory) and should be considered by regulators and applicants as appropriate.

All Conformity Requirements are reproduced in Appendix 1 for ease of reference.

# 4.1 INTRODUCTION TO LAND USE ZONING

Land use zones provide flexibility to land and resource management by allowing different rules to be applied to different areas according to need. This plan establishes four types of land use zones.

**General Use Zones (GUZ)** allow all land use except bulk water removal, subject to the general conditions outlined in this Plan.

**Special Management Zones (SMZ)** allow all types of land use other than bulk water removal, subject to the general use and special management conditions outlined in this Plan to

protect cultural and ecological values present in those zones. Special management conditions may differ between special management zones.

**Conservation Zones (CZ)** are significant traditional, cultural, heritage and ecological areas in which specified land uses are prohibited. Permitted land uses are subject to the general use and special management conditions outlined in this Plan.

**Proposed Conservation Initiatives (PCI)** are areas for which formal legislated protection is being sought through either the Protected Areas Strategy, or under Parks Canada's legislation (*Canada National Parks Act*, or *Historical Sites and Monuments Act*). They have the same status as Conservation Zones in the Plan until they are protected under other legislation. S. 2.1.1 of the Plan describes the application of the Plan during the establishment, and following designation of legislated protected areas.

The land use zones were established through extensive consultations with communities, and refined based on available information and consultation with other planning partners. The communities' first priority is for the protection of their important cultural and ecological areas and the system of zoning reflects that priority. Conservation Zones and Proposed Conservation Initiatives protect the most important areas for the communities. Special Management Zones are designated in areas important to the communities where careful management can protect their values while allowing development to proceed. The remaining areas are designated as General Use Zones. This "conservation first" approach is common to northern land use planning.

Each of the zone types serves a purpose. General Use and Special Management Zones are the economic engines of the region, promoting sustainable development, generating revenues and providing jobs. Conservation Zones and Proposed Conservation Initiatives protect significant community areas for future generations, contribute to ecological representation goals and may provide locations for the establishment of ecological benchmarks for the long term maintenance and monitoring of ecological integrity.<sup>36</sup>

Table 5 provides a summary of zone allocations for the Sahtu Settlement Area.

Table 5. Overview of Land Use Zones

Zone Type	# of Zones	% of SSA	Total Area (km²)
General Use Zones	Not Numbered	30.8	87,585
Special Management Zones	17	41.5	118,044
Conservation Zones	37	4.4	12,510
Proposed Conservation Initiatives	5	20.4	58,066
National Park/Historic Site	(2)	2.6	7,477
Community Boundaries	(5)	0.2	460
Total	59 Zones	100.0	284,142

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<sup>&</sup>lt;sup>36</sup> Submission on Ecological Benchmarks by PAS Science Team, dated Mar 12/08

# CR #1: Land Use Zoning

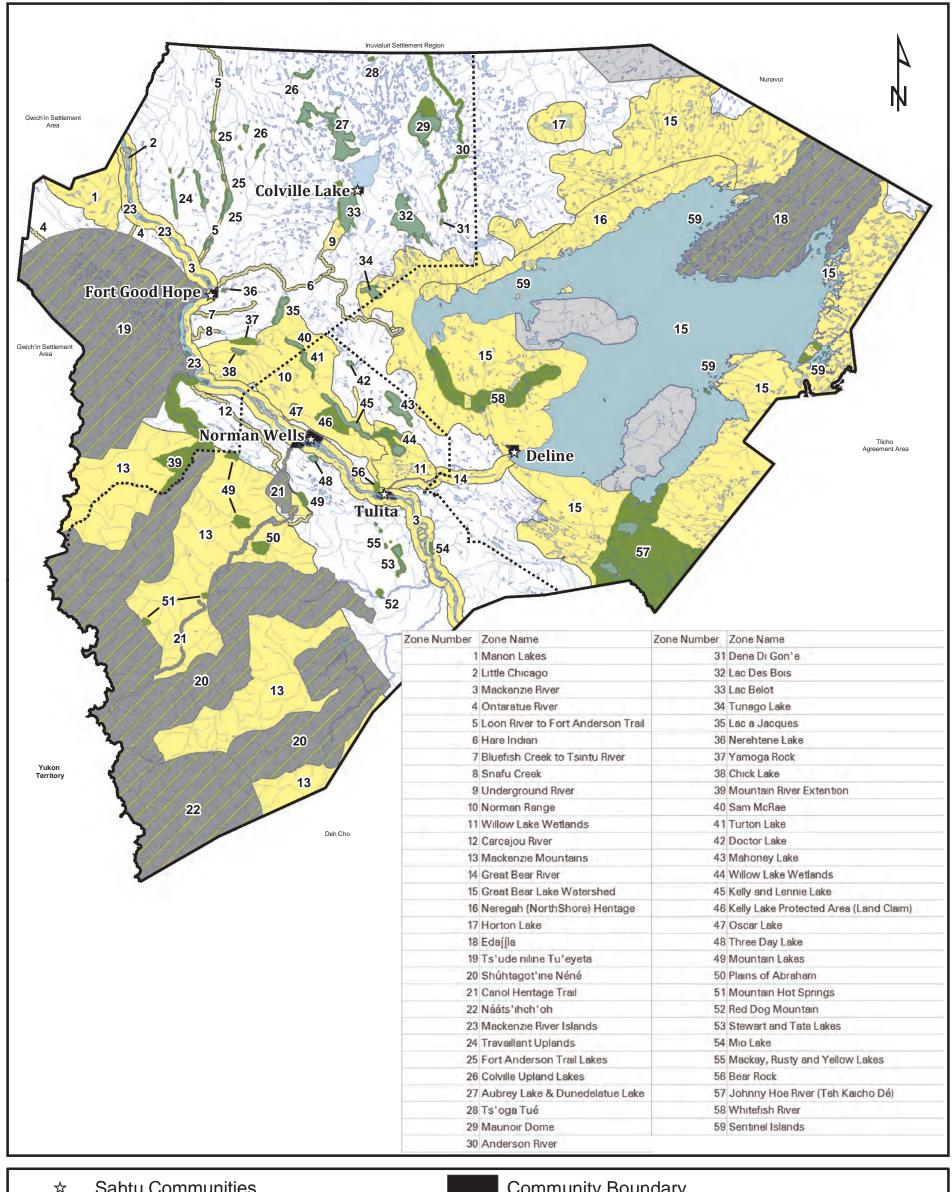
- 1) Land must be used in accordance with the land use zones shown in Map 4 and Table 6. The zone types consist of General Use, Special Management, Conservation, and Proposed Conservation Initiatives. Map 4 and Chapter 5 Zone Descriptions identify the location of each zone. Bulk water removal is a prohibited land use in all zone types. The prohibited land uses in Conservation Zones and Proposed Conservation Initiatives are mineral exploration and development, oil and gas exploration and development, quarrying, power development, and commercial forestry. Any land use not prohibited in a zone is permitted, subject to the conditions of this Plan.
- 2) Despite the land use prohibitions that apply in Conservation Zones and Proposed Conservation Initiatives, quarrying, transportation and infrastructure development that would be prohibited, or any water use other than a bulk water removal that would be prohibited is permitted in such zones if and to the extent that it is demonstrated that:
  - a) such activity is necessary in order to carry out a permitted land use outside the zone, and the user will be authorized to conduct the land use outside the zone (for example, subject to other applicable Plan conditions, water may be taken from a Conservation Zone to the extent necessary to carry out authorized oil and gas activities in an adjacent Special Management Zone, and a pipeline may be built in a Conservation Zone in order to transport gas lawfully produced in an adjacent Special Management Zone or to connect authorized pipelines in adjacent zones);
  - b) no feasible alternative to carrying out the activity in the Conservation Zone or Proposed Conservation Initiative exists;
  - c) the activity takes place outside known or suspected significant ecological and cultural areas as identified in the Zone Descriptions (Chapter 5), Background Report or by community organizations (First Nation, charter community, renewable resource council or land corporation); and
  - d) its location, project design, construction, operation and maintenance minimize any foreseeable adverse impacts on the ecological and cultural values identified for the zone, including subsistence use, either by avoiding such impacts or mitigating them to the extent possible.

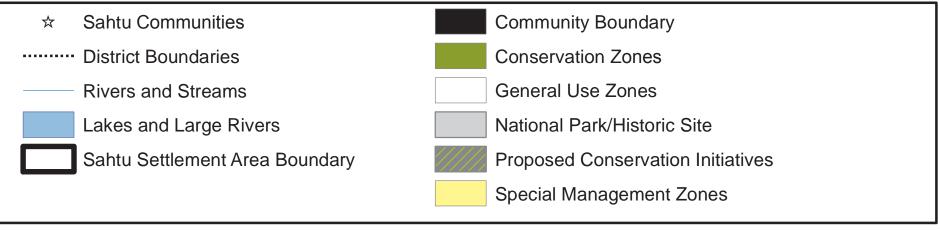
Where a land use is prohibited, no surface or subsurface rights or interests in land, water or resources associated with the prohibited land use may be granted or disposed of, including but not limited to: timber cutting licences, timber cutting permits, prospecting permits, mineral claims, mineral leases, exploration licences, significant discovery licences, production licences, permits or leases under the *Territorial Quarrying Regulations*, or surface leases, unless these are associated with a right existing on the day the Plan is approved.

A description of each zone is provided in Chapter 5. A description and rationale for each of the land use restrictions follows.

# Sahtu Land Use Plan - Draft 3

# **Map 4: Land Use Zones**





**Table 6. Zone Prohibitions and Applicable Conditions** 

Zone #	Zone Name	Area	% of	F	roh	ibite	Prohibited Uses*					Cor	Conditions							
		(km²) Canada Equal Areas Projection	SSA	Bulk Water Removal	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	General Conditions	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20				
Genera	l Use Zones																			
	Total	87,585	30.82	X						1										
Special	Management Zones	6																		
1	Marion Lakes	1,780	0.63	х						1	1									
2	Little Chicago	116	0.04	X						V	1									
3	Mackenzie River	6,335	2.23	X						1	1									
4	Ontaratue River	66	0.02	X						1	1									
5	Loon River to Fort Anderson Trail	329	0.12	x						<b>V</b>	<b>√</b>									
6	Hare Indian	501	0.18	х						1	1									
7	Bluefish Creek to Tsintu River	121	0.04	х						1	1									
8	Snafu Creek	74	0.03	X						1	V									
9	Underground River	308	0.11	X						1	1									
10	Norman Range	6,134	2.16	х						1	1									
11	Willow Lake Wetlands	1,347	0.47	х						<b>V</b>	<b>V</b>									
12	Carcajou River	369	0.13	X						1	1									
13	Mackenzie Mountains	23,639	8.32	x						1	<b>V</b>									
14	Great Bear River	910	0.32	X																
15	Great Bear Lake Watershed	70,045	24.65	X						1	<b>V</b>	1	1	1						
16	Neregah (NorthShore)	4,792	1.69	x						1	<b>V</b>	1	1							
17	Horton Lake	1,178	0.41	X						1										
	Total	118,044	41.54																	
Propos	ed Conservation Ini	tiative <u>s</u>																		
18	Edaįį́la	8,840	3.11	X	X	X	X	X	X	1	1	1	1							
	Ts'ude niline																			
19	Tu'eyeta	15,136	5.33	X	X	X	X	X	X	1	1									
20	Shúhtagot'ine Néné	25,574	9.00	X	X	X	X	X	X	1	√,									
21	Canol Heritage Trail	940	0.33	X	X	X	X	X	X	1	1									
22	Nááts'ihch'oh	7,576	2.67	X	X	X	X	X	X	1	1									
	Total	58,066	20.44																	

Zone #	Zone Name	Area	% of	Prohibited Uses*				Conditions								
		(km²) Canada Equal Areas Projection	SSA	Bulk Water Removal	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	General Conditions	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20
Conserv	vation Zones															
	Mackenzie River									,	,					
23	Islands	57	0.02	X	X	X	X	X	X	1	1					<u> </u>
24	Travaillant Uplands	187	0.07	X	X	X	X	X	X	1	√					<u> </u>
	Fort Anderson Trail									,	,					
25	Lakes	218	0.08	X	X	X	X	X	X	1	1					<u> </u>
26	Colville Upland Lakes	113	0.04	X	X	X	X	X	X	1	1					<u> </u>
	Aubrey Lake &									,	,					
27	Dunedelatue Lake	611	0.21	X	X	X	X	X	X	1	1					<u> </u>
28	Ts'oga Tué	13	0.00	X	X	X	X	X	X	1	√,					<u> </u>
29	Maunoir Dome	563	0.20	X	X	X	X	X	X	1	1					<u> </u>
30	Anderson River	415	0.15	X	X	X	X	X	X	1	1					
31	Dene Di Gon'e	11	0.00	X	X	X	X	X	X	1	1					
32	Lac Des Bois	520	0.18	X	X	X	X	X	X	1						
33	Lac Belot	406	0.14	X	X	X	X	X	X							
34	Tunago Lake	108	0.04	X	X	X	X	X	X							
35	Lac a Jacques	123	0.04	X	X	X	X	X	X							
36	Nerehtene Lake	12	0.00	X	X	X	X	X	X	$\checkmark$						
37	Yamoga Rock	92	0.03	X	X	X	X	X	X	1						
38	Chick Lake	36	0.01	X	X	X	X	X	X	1	1					
	Mountain River															
39	Extension	1,393	0.49	X	X	X	X	X	X	1						
40	Sam McRae	59	0.02	X	X	X	X	X	X		1					
41	Turton Lake	79	0.03	X	X	X	X	X	X							
42	Doctor Lake	21	0.01	X	X	X	X	X	X	$\checkmark$						
43	Mahoney Lake	232	0.08	X	X	X	X	X	X	1						
	Willow Lake															
44	Wetlands	245	0.09	X	X	X	X	X	X	1	1					
45	Kelly and Lennie Lake	205	0.07	X	X	X	X	X	X							
	Kelly Lake Protected									,	,					
46	Area (Land Claim)	273	0.10	X	X	X	X	X	X	1	1					<u> </u>
47	Oscar Lake	67	0.02	X	X	X	X	X	X	1	√,					<u> </u>
48	Three Day Lake	32	0.01	X	X	X	X	X	X	1	√					<u> </u>
49	Mountain Lakes	210	0.07	X	X	X	X	X	X	1	1					<u> </u>
50	Plains of Abraham	105	0.04	X	X	X	X	X	X							
	Mountain Hot									,	- 1					
51	Springs	45	0.02	X	X	X	X	X	X	1	1					<u> </u>
52	Red Dog Mountain	27	0.01	X	X	X	X	X	X	1	√,		<u> </u>			<u> </u>
53	Stewart and Tate	121	0.04	X	X	X	X	X	X		1					$\checkmark$

Zone #	Zone Name	Area % of		Prohibited Uses*						Conditions						
		(km²) Canada Equal Areas Projection	SSA	Bulk Water Removal	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	General Conditions	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20
	Lakes															
54	Mio Lake	19	0.01	X	X	X	X	X	X							
55	Mackay, Rusty and Yellow Lakes	18	0.01	X	X	x	X	x	X	1	1					
56	Bear Rock	33	0.01	X	X	X	X	X	X							
57	Johnny Hoe River (Teh Kaicho Dé)	4,184	1.47	X	x	X	X	X	X	1	1	1	<b>√</b>			
58	Whitefish River	1,443	0.51	X	X	X	X	X	X							
59	Sentinel Islands	211	0.07	X	X	X	X	X	X		1		1		1	
	Total	12,510	4.40													
Nation	al Park/Historic Site			Sa	htu	Land	lUse	Plai	n Do	es N	ot A <sub>l</sub>	nnlv	In Th	nese	Area	as
	Tuktut Nogait National Park Saoyú-?ehdacho National Historic Site	1,869 5,608	0.66													
	Total	7,477	2.63													
Commi	unity Boundaries			Sa	htu	land	Hee	Dla	a Do	oc N	ot A	anly	In Th	2050	Aro	26
Commit	Colville Lake	40	0.01	J6	THE C	-territe	USE	a a Gl	- 50	->- N	SIG FA	SPIA		iesë	AIR	.63
	Déline	69	0.02													T
	Fort Good Hope	56	0.02													T
	Norman Wells	218	0.08													
	Tulita	77	0.03													
	Total	460	0.16					_						_	_	_
	Total Area of SSA	284,142	100.00													

water uses, where necessary to support adjacent permitted uses (See CR #1, S.2)

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#### **Bulk Water Removal**

#### Definition

"Bulk water removal is defined as any water transferred out of a river basin in any individual container greater than 40 litres in volume, or removal by any means that involves permanent out-of-basin transfer, whether it is by diversion (including pipeline, canal, tunnel, aqueduct or channel), tanker or other mechanism. For greater certainty, bulk water does not include "bottled water" in containers of 40 litres or less. ... Removal of freshwater out of a drainage basin is allowed for water required: to meet short-term health and safety needs (such as firefighting); for human or animal consumption during travel and water needed to carry foodstuffs; for road construction and maintenance; and other such local uses, in so far as these are consistent with water resource management objectives and environmental considerations." <sup>37</sup>

For clarity, the Plan's prohibition on bulk water removal does not prohibit the use of water for other uses, including consumption, travel, road building, industrial purposes or hydro-electricity generation.

#### **Context and Rationale**

Protection of water is one of the most important issues for communities and residents. It is a giver of life. The Great Bear Lake, for which the region is named, is known as the Water Heart, for it sustains the entire watershed. The *SDMCLCA* S. 20.1.8 provides participants the right to have waters which are on or flow through or are adjacent to Sahtu lands remain substantially unaltered as to quality, quantity and rate of flow.

Canada is the largest single owner of fresh water resources in the world.<sup>38</sup> Many Canadians are concerned about the bulk removal of water from major drainage basins. Canada's Federal Water Policy (1987) states that Canada will "take all possible measures within the limits of its constitutional authority to prohibit the export of Canadian water by interbasin diversions, and strengthen federal legislation to the extent necessary to fully implement this policy." In 2003, INAC developed a consistent policy prohibiting bulk water removals from major drainage basins in the NWT, such as the Mackenzie River. Policies are discretionary, not legally binding. By including the prohibition of bulk water removal in the Plan, this discretionary policy becomes a mandatory prohibition.

http://www.collectionscanada.gc.ca/webarchives/20071122002026/http://www.aincinac.gc.ca/ps/nap/wat/polprohnwt\_e.html

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<sup>&</sup>lt;sup>37</sup> A Policy Respecting the Prohibition of Bulk Water Removal from Major Drainage Basins in the Northwest Territories, INAC, 2003. Available at

<sup>&</sup>lt;sup>38</sup> Water Exports and NAFTA, Johansen, 1999

<sup>&</sup>lt;sup>39</sup> Federal Water Policy, Government of Canada, 1987, Available at: http://www.ec.gc.ca/Water/en/info/pubs/fedpol/e\_fedpol.htm

<sup>40</sup> Supra Note 15

# **Mineral Exploration and Development**

#### Definition

Mineral exploration and development includes prospecting for minerals, staking a claim, surveying, exploratory work, representation work, removal or processing of a mineral, and developing or operating a mine, within the meaning of the *Northwest Territories and Nunavut Mining Regulations*, except government funded geological research for the purpose of determining the geological potential of the area. This includes work done in constructing and operating roads or airstrips to provide access to mineral exploration or mineral development sites.

For clarity, the prohibition on mineral exploration and development within Conservation Zones and Proposed Conservation Initiatives extends to transportation of minerals, but access across Conservation Zones and Proposed Conservation Initiatives to carry out permitted uses in adjacent zones is managed through CR #1, S.2.

#### **Context and Rationale**

Mineral exploration and development in the Sahtu Settlement Area is administered by the *Northwest Territories and Nunavut Mining Regulations*. It follows a system known as Free Entry, whereby anyone 18 years of age can obtain a prospector's licence, enter onto land and stake a mineral claim. Once the claim is recorded by the Mining Recorder, it gives the holder of a recorded mineral claim the exclusive right to prospect on, remove minerals from, or develop a mine on land within the boundaries of a recorded claim. A Prospecting Permit does not confer mineral rights, but gives the permit holder the exclusive right to explore and stake claims (i.e. acquire mineral rights) in the area covered by the permit.

Conservation Zones and Proposed Conservation Initiatives are established to protect significant ecological and cultural areas. While prospecting is a low impact activity, the later stages of exploration and mine development are not compatible land use activities for these zone types. Because of the progression of rights, all phases of exploration and development must be prohibited. The issuance of new mineral rights, including prospecting permits, mineral claims or leases, and the issuance of licences, permits or other authorizations for land use activities related to the exercise of such rights are prohibited within Conservation Zones and Proposed Conservation Initiatives unless these are related to existing uses and exempted as per S. 2.3.2.

# Oil and Gas Exploration and Development

#### Definition

Oil and gas exploration and development means any land-based activities involved in the exploration and drilling for and the production, conservation, processing and transportation of oil and gas within the meaning of the *Canada Oil and Gas Operations Act* and its regulations, but does not include government funded geological research for the purpose of determining the geological potential of the region.

For clarity, the prohibition on oil and gas exploration and development within Conservation Zones and Proposed Conservation Initiatives extends to the transportation of oil and gas, but

access across Conservation Zones and Proposed Conservation Initiatives to carry out permitted uses in adjacent zones is managed through CR #1, S.2.

#### **Context and Rationale**

Oil and gas exploration has the potential to disturb and fragment large areas because of the need for access roads and seismic lines. Depending on the width, nature and density of seismic lines, the area of impact for species like boreal woodland caribou, that are sensitive to linear development, can be quite significant. Oil and gas development requires extensive infrastructure to gather, process and transport the resources to market. These activities are not compatible with the protection of significant ecological and cultural areas for which Conservation Zones and Proposed Conservation Initiatives are established. The issuance of new Oil and Gas Rights through Exploration Licences, Significant Discovery Licences and Production Licences, and the issuance of permits, licences or other authorizations related to the exercise of such rights are prohibited within Conservation Zones and Proposed Conservation Initiatives unless these relate to existing uses and are exempted as per S. 2.3.2.

# **Power Development**

#### Definition

Power development means the construction of infrastructure, equipment or facilities outside of community boundaries to harvest or generate electricity in excess of one hundred kilowatts (100 KW)<sup>41</sup>, whether from diesel, gas, water, wind, solar, thermal or biomass energy.

#### **Context and Rationale**

Power development may involve the alteration of land, and construction of buildings, infrastructure, transmission lines, access roads, and in the case of hydro-electric development, the impoundment of water. All of these activities have the potential to adversely impact the ecological and cultural values to be protected by Conservation Zones and Proposed Conservation Initiatives, making this an incompatible land use. Micro-generation projects to provide electricity to cabins, small tourism establishments and other such operations that are permitted in Conservation Zones have limited impacts and are generally constrained to the immediate area of operations. Therefore, activities associated with new power generation projects, other than micro-generation of 100kw or less, are prohibited within Conservation Zones and Proposed Conservation Initiatives unless these relate to existing uses and are exempted as per S. 2.3.2.

# **Commercial Forestry**

#### Definition

Commercial Forestry means the commercial harvesting of trees within the meaning of Chapter 14 of the *SDMCLCA*. For clarity, it does not include participants' right to harvest trees for the purposes set out in S. 14.1.2 of the *SDMCLCA*.

<sup>&</sup>lt;sup>41</sup> This minimum threshold is sufficient to exclude micro-generation of electricity by cabin owners or small scale tourism establishments for their own use. Personal communication, Wade Carpenter, Alternative Energy Specialist, GNWT, May 7/10

#### **Context and Rationale**

Commercial forestry involves cutting trees and may include processing and transportation of trees or forest products resulting in habitat disturbances at the harvest site, mill site and access roads between these. These are not compatible uses with Conservation Zones and Proposed Conservation Initiatives. No new Timber Cutting Licences or Timber Cutting Permits will be issued within these zone types unless these relate to existing uses or are required for community use as defined in S. 2.3.2.

# Quarrying

#### Definition

Quarrying means the extraction of limestone, granite, slate, marble, gypsum, loam, marl, gravel, sand, clay, volcanic ash or stone as described in the *Territorial Quarrying Regulations*.

#### **Context and Rationale**

Any construction project requires a supply of such materials in close proximity to proceed. The *SDMCLCA* ensures that access to such materials is maintained, even on Sahtu lands. However, extraction of these materials disturbs the environment at the excavation site, and requires the construction of access roads between the source of these materials and the construction site. This land use is incompatible with the intent and objectives of Conservation Zones and Proposed Conservation Initiatives and must be restricted to the greatest extent possible. As a result, no permits or leases may be issued under the *Territorial Quarrying Regulations* within Conservation Zones and Proposed Conservation Initiatives except in accordance with the provisions outlined in CR #1, S.2, or these relate to an existing use or community use and are exempted as per S. 2.3.2.

# **Transportation Corridor and Infrastructure Development**

#### Definition

Transportation corridor and infrastructure development means the construction, maintenance and operation of roads, railways, pipelines, electrical transmission lines, communications cables, navigational aids, barge landings, airstrips, fuel caches, storage buildings and other similar works or structures.

#### **Context and Rationale**

Transportation corridor and infrastructure development are important considerations in the development of a land use plan. They are essential to the development of a region, allowing essential goods and services to be transported efficiently, providing access to power and communications, and lowering costs for communities, government and land users. Those exploring for and developing renewable and non-renewable resources need to be able to transport supplies and resources to and from their development sites as economically and efficiently as possible.

However, the development of transportation corridors and infrastructure may negatively impact cultural and ecological values by disturbing land, altering wildlife habitat, and increasing access. This is not compatible with the intent of Conservation Zones and Proposed Conservation Initiatives. Transportation corridors and infrastructure are better suited to General Use and

Special Management Zones, but this is not always possible or economically feasible. It may be necessary to build a road, pipeline or infrastructure within or across Conservation Zones or PCIs in order to get resources out. The Plan prohibits the development of transportation corridors and infrastructure related to oil and gas and mineral exploration and development within Conservation Zones and Proposed Conservation Initiatives but allows for such development on a restricted basis in accordance with CR #1, S.2 and in relation to activities exempted as per S. 2.3.2.

# 4.2 APPLICATION OF OTHER CONFORMITY REQUIREMENTS

The remaining Conformity Requirements (outside CR#1), describe the conditions under which land use is permitted. Different conditions apply to different zone types as shown in general in Table 7, and specifically in Table 6. General Conditions are applicable in all zones within the Plan area. Special Management Conditions are applicable to Special Management Zones to protect values present within those zones while allowing for a variety of land use activities. Some Special Management Conditions are only applicable to specific zones and these are identified as such. There are no additional conditions for Conservation Zones or Proposed Conservation Initiatives, but existing land uses that are exempt from the zoning prohibitions in these zone types as per S. 2.3.2 must still adhere to the General Conditions and Special Management Conditions.

**Table 7. Application of Conformity Requirements to Zone Types** 

Applicable Conformity Requirements	GUZ	SMZ	CZ/PCI
General Conditions	√	√	√
Special Management Conditions		√	√

#### 4.2.1 General Conditions

The following CRs apply to all land use zones in the Sahtu Settlement Area.

# CR #2 - Community Engagement and Traditional Knowledge

- 1) Before any land use activity is authorized, Regulators shall ensure that relevant community organizations (land corporation(s), first nation and/or community council, renewable resources council) and potentially affected community members have had the opportunity to meet with the applicant in person to:
  - a) discuss the proposed activities,
  - b) identify specific locations and issues of concern, and
  - c) provide traditional knowledge that is relevant to the location, scope and nature of the proposed activities.

2) Regulators shall ensure that a land use activity is designed and carried out in a manner that addresses community concerns and incorporates relevant traditional knowledge.

#### **Context and Rationale**

Land use planning is intended to integrate community values into land use decisions. While the SLUPB has collected considerable information from communities with which to make broad land use decisions, it is by no means exhaustive, nor is it of the scale required for project-specific decision-making. It is imperative that communities are engaged in all stages of land use decisions to be able to bring their information and values forward.

Many land uses for which authorizations are required are technical. This type of information is best explained to community members in person with visual aids, plain language documents and translation to assist with understanding. Similarly, the information that communities need to share about the proposed land use includes mapping sites to avoid. For these reasons, inperson meetings are essential.

The collection of traditional knowledge is a critical component of community engagement. Communities have first-hand knowledge of the local environment based on their close cultural relationship with the land. They can assist applicants in identifying suitable areas to work, and areas that must be avoided because of cultural significance or regular use for recreation or harvesting, as well as providing insight into local environmental conditions and trends.

The importance of community engagement and traditional knowledge has been recognized for some time by regulators. The SLWB requires applications to describe community consultation activities, including actions taken as a result of consultation, and to include traditional environmental knowledge. The MVLWB and MVEIRB include similar provisions in their guidelines. The Plan includes these requirements to reinforce the importance of early and ongoing involvement of communities and the integration of traditional knowledge into land use decisions.

# CR #3 - Community Benefits

Before any land use activity is authorized, Regulators shall ensure that communities will benefit from the proposed land use.

#### **Context and Rationale**

The objectives of the *SDMCLCA* include: 1) encouraging the way of life of the Sahtu Dene and Métis which is based on the cultural and economic relationship between them and the land and 2) encouraging economic self-sufficiency of the Sahtu Dene and Métis and enhancing their ability to participate in all aspects of the economy.

The purpose of land use planning is to protect and promote the existing and future social, cultural and economic well-being of the residents and communities of the settlement area having regard to the interests of all Canadians.

<sup>&</sup>lt;sup>42</sup> SLWB Land Use Permit Process (Draft), May 19, 2004

The objective of the Sahtu Land and Water Board is to regulate the use of land and waters and the deposit of waste so as to provide for the conservation, development and utilization of land and water resources in a manner that will provide the optimum benefit for residents of the Sahtu Settlement Area and for all Canadians.

The guiding principles for the Mackenzie Valley Environmental Impact Review Board include the protection of the social, cultural and economic well-being of residents and communities in the Mackenzie Valley.

In short, every stage of the regulatory process must ensure that the land use that is being proposed will promote the well-being of residents and communities. It is imperative that those who are most affected by the land use should also benefit the most from it. Through their discussions with affected communities, applicants should identify for communities and regulators how the proposed land use will benefit the affected communities. Benefits may include economic benefits, community data collection and knowledge transfer, access and infrastructure improvements as a result of the proposed land use, etc. This information will assist regulatory decision-making.

# CR #4 - Archaeological Sites, Historic Sites and Burial Sites

A land use activity shall not take place within 500 m of suspected or known burial sites, historical sites or archaeological sites.

#### **Context and Rationale**

The *Mackenzie Valley Land Use Regulations (MVLUR)* protect known monuments and known or suspected historical and archaeological sites and burial grounds throughout the Sahtu Settlement Area by requiring a 30 m setback. The *Northwest Territories Archaeological Sites Regulations* require Class 1 or Class 2 permits to be issued before sites can be surveyed or disturbed, respectively. In addition the Sahtu Land and Water Board may include conditions for the assessment and avoidance of such sites in its land use permits. <sup>43</sup> Due to the sensitive nature of these sites, a 500 m setback is proposed to better protect these sites from potential impacts. New sites discovered in the course of land use activities will be managed in accordance with requirements under the *MVLUR* and the *Northwest Territories Archaeological Sites Regulations*.

Map 5 identifies the generalized locations of some known sites to give a broad indication of where such sites exist. Due to the confidential nature of this data, applicants are directed to work with communities and the Prince of Wales Northern Heritage Centre to identify exact locations of known sites.

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<sup>&</sup>lt;sup>43</sup> From SLWB Master List of Land Use Permit Conditions: "The permittee shall not operate any machinery or equipment within 150 metres of any known Historical or Archaeological Site or Burial Ground."

# **Map 5. Culturally Significant Areas**

# **CR #5 - Watershed Management**

Before a land use activity is authorized anywhere within a regional watershed containing an SMZ, CZ or PCI, Regulators shall consider the effects of the proposed activity in combination with other past, present and anticipated future land use activities, and ensure that it will not substantially alter the water quality, quantity and rate of flow within a SMZ, CZ or PCI.

#### **Context and Rationale**

Water is a fundamental requirement of life. Lakes and rivers provide drinking water for communities, habitat for fish and wildlife, and act as travel and shipping routes. Water is necessary for the development of roads, infrastructure and resource development. Many lakes and rivers, and water in general, have spiritual significance to the Sahtu Dene and Métis.

At any one time, there are multiple uses of water occurring within a watershed, all with the potential to impact water. Project-specific decisions must be made within a larger context that takes into account all uses within a watershed.

In 2007, the 15<sup>th</sup> Legislative Assembly of the NWT passed Motion 20-15(5) declaring the right to water in which the Legislative Assembly:

- recognizes that all peoples have a fundamental human right to water, that this right
  includes access to water bodies for purposes of harvesting, travel and navigation, and
  that this right takes precedence over the use of water for industrial and commercial
  purposes;
- endorses the application of the precautionary approach in all management decisions or actions that may affect the quality, quantity or natural rate of flow of water; and
- urges all parties to complete and implement comprehensive watershed management and land use plans as soon as possible in order to safeguard water sources and maintain ecosystem integrity across the basin.<sup>44</sup>

The GNWT has developed a Draft NWT Water Stewardship Strategy with a vision to ensure the waters of the NWT remain clean, abundant and productive for all time. The strategy states that improved water stewardship in the NWT will require:

- Applying integrated watershed management and ecosystem-based management practices;
- Applying concepts of water valuation and sustainability accounting;
- Using decision-making processes that consider the effects of all past, present and future activities on the watershed and all interests in the water resource;
- Using the best available scientific, traditional and local knowledge to make decisions that may affect water; and
- Increasing interaction among water partners.<sup>45</sup>

The majority of lakes and rivers within the SSA that hold special significance to the Sahtu Dene and Métis are captured within Special Management Zones, Conservation Zones or Proposed Conservation Initiatives. The *SDMCLCA* gives participants the right to have waters which are on or flow through or are adjacent to Sahtu lands remain substantially unaltered as to quality,

<sup>&</sup>lt;sup>44</sup> Northern Voices, Northern Waters, NWT Water Stewardship Strategy, Draft, November 2009.

<sup>45</sup> Ibid

quantity and rate of flow when such waters are on or flow through or are adjacent to Sahtu lands (S. 20.1.8 (a)). Many Special Management Zones, Conservation Zones and Proposed Conservation Initiatives include Sahtu Settlement Lands to which this requirement applies.

The Canadian Council of Ministers for the Environment (CCME) Water Quality Guidelines for the Protection of Aquatic Life includes a nondegradation policy which states that for waters of superior quality or that support valuable biological resources, the degradation of water quality should always be avoided. Given the relatively low level of development that has occurred within the Sahtu Settlement Area and the importance of the lakes and rivers captured within Special Management Zones, Conservation Zones and Proposed Conservation Initiatives, this policy should be applied to all of these zones.

The Conformity Requirement above is intended to support the themes of watershed management and nondegradation of water sources as stated in government policy and the *SDMCLCA*, and protect the most important lakes and rivers in the SSA from impacts originating outside the boundaries of Special Management Zones, Conservation Zones and Proposed Conservation Initiatives. Applicants and Regulators are referred to Map 12 in the Background Report, which identifies the major and regional watersheds within the SSA, and the Zone Descriptions in Chapter 5 for a description of current uses and values.

# CR #6 - Drinking Water

- 1) Before a land use activity is authorized, Regulators shall assess the potential impacts of the proposed activity to downstream drinking water sources.
- 2) Regulators may not authorize a land use activity that would result in the contamination of water within community catchments as shown in Map 6.

#### **Context and Rationale**

Community members use the land extensively for subsistence use. They drink water from lakes and rivers while out on the land, and eat the fish from the water. The water everywhere must remain clean enough for public consumption.

The first strategy outlined in the 2005 NWT Drinking Water Framework and Strategy is "Keeping NWT Water Clean". It focuses on protecting drinking water at the source – the lakes and rivers from which drinking water is taken. Strategies identified are:

- Community water licensing;
- Testing of source water quality;
- Coordinated watershed decision making;
- Effective legislation; and
- Public education.

"Coordinated watershed decision making" is of particular relevance to land use planning. In Map 6, the Department of Environment and Natural Resources (GNWT) identified the immediate areas of land around the community water source from which water drains into each of the community water supply areas (community source catchments). It also shows the larger upstream areas from which water flows into the community source catchments.



Of special note is Fort Good Hope. While the community gets its water from the Mackenzie River, identifying the entire river as a community catchment area would have unintended implications for other regions. As a result, only a small area immediately surrounding the community has been identified as the source catchment at this time.

The Drinking Water Framework and Strategy identified the following actions in progress or slated for future work, related to coordinated watershed decision-making:

- an inter-jurisdictional committee will be established to develop a source protection strategy;
- watershed protection measures will be implemented for all NWT public drinking water sources; and
- watershed management strategies will be developed.

In advance of the completion of these measures, the requirement above is intended to flag for regulators when land use activities may impact drinking water sources so that appropriate conditions and water standards will be implemented through authorizations.

# CR #7 - Wildlife

- 1) A land use activity shall be designed and carried out based on the most current wildlife information for species of concern (specific locations, sensitive periods, etc.) as obtained from ENR, CWS, DFO, the SRRB and local renewable resources councils (RRCs), including but not limited to fish, furbearers, waterfowl, raptors, barren-ground caribou, mountain and boreal woodland caribou, moose, muskox, mountain goats, Dall's Sheep, grizzly bears and black bears.
- 2) Before any land use activity is authorized, Regulators shall ensure that appropriate measures are in place to prevent and/or mitigate long-term adverse impacts from the proposed land use to the wildlife groups listed above, their habitat and migration patterns, and important community harvesting areas (including Special Harvesting Areas).
- 3) In particular, the area shown in Map 7 is known to be important rutting and winter habitat for the bluenose west barren-ground caribou herd. It is also considered to be Boreal woodland caribou habitat. Regulators shall ensure that appropriate measures are in place to prevent and/or mitigate long-term adverse impacts from the land use activity to barren-ground and boreal woodland caribou and their habitat, within the area shown in Map 7 from October 8th to March 31st.
- 4) In addition, Regulators shall ensure that no land use activity takes place around known habitat sites during sensitive periods except in accordance with the horizontal setbacks and minimum flight altitudes identified in Table 8.

Map 7. Fall Rut, Post-Rut and Winter Range of the Bluenose West Barren-Ground Caribou Herd

Table 8. Wildlife Setbacks, Minimum Altitude and Sensitive Periods 46

Species/Group	Habitat Type	Period	Horizontal Setback	Minimum Altitude
Black & grizzly bear	Dens	15 Oct - 15 May	800 m	300 m
Wolverine	Dens	15 Oct - 15 May	800 m	300 m
Wolf	Dens	1 May - 15 Sep	800 m <sup>47</sup>	300 m
Dall's sheep	Lambing areas	01 May - 15 Jun	2000 m <sup>48</sup>	300 m
Mountain goat	Goat habitat	Year Round	2000 m <sup>49</sup>	300 m
Raptors	Nest sites	1 Mar - 1 Aug	1000 m	650 m
Raptors	Nest sites	2 Aug - 28 Feb	500 m	650 m
Waterfowl	Nest sites	01 Jun - 31 Aug	250 m	650 m
Waterfowl	Staging Areas / Concentrations <sup>50</sup>	10 May – 20 Jun 15 Aug – 30 Sep	250 m	650m altitude, 1500 m lateral distance
Waterfowl	Concentrations	Year Round		650 m

#### **Context and Rationale**

The maintenance of wildlife and their habitat is critical to the well-being of the Sahtu Dene and Métis. It is a fundamental part of their culture, diet, and economy. Some species, such as boreal woodland caribou, are known to be sensitive to different forms of land use. Other species are in decline (e.g. barren-ground caribou) or have special status under federal or territorial legislation such as the *Species at Risk Act*, the *Migratory Birds Convention Act*, and the *Fisheries Act*. For these reasons, all land uses must be designed using current, accurate wildlife information to mitigate impacts to important species groups.

The SLUPB has gathered considerable wildlife habitat and wildlife harvesting information in developing the Plan (see the Background Report, Chapter 2 for maps and descriptions, as well as Zone Descriptions in Chapter 5 of this Plan). However, sufficient or updated wildlife information does not currently exist for many species. The information provided may soon be outdated, especially for migratory species whose migratory path may shift periodically. As a result, applicants are directed to contact wildlife managers directly to obtain the most current information with which to design their projects.

Wildlife managers consistently apply disturbance setbacks for key wildlife species in regulatory decisions. In order to streamline the regulatory process, wildlife managers in the SSA requested that the setbacks identified in Table 8 be implemented through the Land Use Plan. All land uses in the Sahtu Settlement Area are expected to adhere to these horizontal setbacks and minimum flight altitudes.

<sup>&</sup>lt;sup>46</sup> Information provided by GNWT. Minimum altitudes came from DRWED/WMAC(NWT) other than bottom two rows (provided by CWS) <a href="http://www.screeningcommittee.ca/screening/operating\_guidelines.html">http://www.screeningcommittee.ca/screening/operating\_guidelines.html</a>.
<sup>47</sup> Dean Cluff, GNWT, personal communication.

<sup>&</sup>lt;sup>48</sup> Cote, S. 1996. Mountain goat responses to helicopter disturbance. Wildlife Society Bulletin 24: 681-685 lbid.

<sup>&</sup>lt;sup>50</sup> CWS has identified key migratory bird terrestrial habitat sites within the Sahtu Settlement Area which are known areas of waterfowl concentrations. Waterfowl may concentrate in other areas from time to time as identified by CWS, to which these seasonal restrictions would be expected to apply.

# **CR #8 - General Environmental Impacts**

Any adverse environmental impact from a land use activity shall be minimized to the extent possible. This includes but is not limited to minimizing the footprint of a land use activity, and in particular, using an existing road, seismic lines or other disturbed area wherever possible.

#### **Context and Rationale**

Every land use has the potential to impact the environment. The northern landscape can be especially sensitive due to the presence of permafrost, shorter growing seasons, fewer species, lower biological productivity, and slower recovery rates as compared to other regions in Canada. Caution is needed with all land uses to reduce environmental impacts wherever possible. Re-using existing disturbed areas and concentrating land use in existing corridors protects new lands from being disturbed. For example, some communities have expressed an interest in having the proposed Mackenzie Gas Pipeline and Mackenzie Highway extension share the same corridor wherever possible.

# CR #9 - Climate Change

The design and operation of a land use activity shall take into account climate change factors, including but not limited to, preventing and/or mitigating adverse environmental impacts resulting from the degradation or aggradation of permafrost, and minimizing greenhouse gas emissions.

#### **Context and Rationale**

Increasing temperatures, melting permafrost and other environmental changes related to climate change add to general environmental concerns and require adaptations in the way projects are designed. The GNWT has documented the following impacts from climate change in the NWT<sup>51</sup>:

- Melting permafrost Causes ground movement such as heaving, slope failure, sinkholes, potholes, and erosion which affects building walls and foundations, bridges, culverts and all forms of infrastructure.
- Shorter freeze-up period Shortens winter road season and the period for northerners to access the land for trapping and subsistence harvest.
- Increasing variability in precipitation Leads to: increased snow loads on buildings
  causing roof collapse; increased snow removal expenditures; increased spring run-off
  causing wash-outs; more freeze-thaw cycles in spring and fall requiring increased use of
  salt and sand on highways and glycol for de-icing aircraft; greater degradation of
  permafrost; flooding; and low water levels restricting or delaying barge traffic.
- Impacts to forests Changes in insect activity; forested slope instability; earlier sap runs; earlier spring needle and leaf flush; increased risk of forest fires in some parts of the boreal forest, and decreased risk in other areas.
- Impacts to wildlife While there is greater uncertainty as to the cause, climate change
  impacts to wildlife may include the following observed changes: increased incidence of
  southern species in the NWT; changes in the types of parasites and their distribution as
  well as the frequency, intensity and rate of development of infections; changes in the

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<sup>&</sup>lt;sup>51</sup> NWT Climate Change Impacts and Adaptation Report, Environment and Natural Resources, GNWT, 2008.

- timing of insect hatch leading to bird species arriving on their northern breeding grounds too late to take advantage of the peak in insects, which could lead to population declines for ducks, geese and shorebirds.
- Impacts to culture and heritage Increased difficulty accessing the land for traditional
  activities due to uncertain weather, changes in ice and freeze-thaw cycles; impacts to
  subsistence harvest from changing wildlife migrations; impacts to archaeological,
  historical or cultural sites from exposure due to melting permafrost.
- Impacts to human health Reductions in subsistence harvest impact human health through a shift to a less healthy diet and more sedentary lifestyle.

Land users need to be aware of these impacts and design their land use so they do not add to these impacts and can adapt to a changing environment. The GNWT has identified a number of adaptation strategies that it is working on to address these impacts. <sup>52</sup> Some, such as new building foundation technology, may be of interest to other land users.

Through the NWT Greenhouse Gas Strategy<sup>53</sup> the GNWT is trying to control greenhouse gas emissions in the NWT, which are believed to contribute to climate change. The Strategy sets a target to reduce the government's own emissions by 10% below 2001 levels by 2011, and encourages all other sectors to develop their own emission management plans and targets. In 2001, emissions from all industrial sectors accounted for over 50% of the NWT's total annual emissions. The Strategy outlines Actions to assist with emissions control for the Commercial and Industrial Sector, including:

- Conducting commercial energy efficiency audits through the Arctic Energy Alliance;
- Supporting industry energy efficiency activities such as the use of renewable energy, energy conservation and efficiency technologies, and reduction of transportation fuel use; and
- Use by ENR of the Air Quality and Emissions Management Code of Practices for the Upstream Oil and Gas Industry in its review and assessment of NWT oil and gas development applications.

The Plan supports and reinforces the Strategy's goal of reducing greenhouse gas emissions in the NWT through the above requirement.

#### CR #10 - Incidental Harvest

Where a proposed land use activity involves the incidental harvest or removal of resources that will not be fully used by the applicant, the remaining usable resources shall be distributed to local communities wherever reasonably feasible.

#### **Context and Rationale**

Some land uses require the incidental harvest of other resources to access the desired resource (e.g. cutting trees to build a road or clear a seismic line; harvest of fish or wildlife for research and trophy hunting where only certain body parts are needed). Reasonable efforts should be made to reduce incidental harvests wherever possible. Where it is not possible, the resources

<sup>&</sup>lt;sup>52</sup> Ibid

<sup>&</sup>lt;sup>53</sup> NWT Greenhouse Gas Strategy, 2007-2011: A Strategy to Control Greenhouse Gas Emissions in the NWT, Environment and Natural Resources, GNWT, March 2007.

should not be wasted. If the applicant cannot use the resources directly, they should be distributed to local communities for their use. For instance, meat is regularly dispersed to communities from big game outfitters.

### CR #11 - Species Introductions

A land use activity shall not result in the introduction of non-native plant and animal species, or of domestic animal species or subspecies, except by special approval by the ENR.

### **Context and Rationale**

The introduction of non-native plant and animal species or domestic species can be detrimental to the viability of native species through direct or indirect competition, and disease transmission. Non-native plant and animal species may be introduced through a variety of ways - improperly cleaned equipment, the use of inappropriate seed mixes used in revegetating disturbed land, stocking lakes for sport fishing, development of livestock operations, or the use of domestic pack animals in tourism and outfitting businesses. Disease transmission is of particular concern in the Mackenzie Mountains where there the use of domestic pack animals in outfitting poses a risk to wild populations of mountain goats and Dall's sheep. To avoid this, the GNWT recommended that domestic goats not be used as pack animals, and that domestic sheep and goats not be pastured anywhere in the vicinity of Dall's sheep or mountain goat ranges within the NWT.<sup>54</sup> The conformity requirement above is intended to reduce the potential for species introductions by flagging this consideration in the regulatory process.

### CR #12 - Ecologically Significant Areas

- 1) A land use activity shall be designed and carried out based on the most current information on the location of rare and may-be at risk plants, hot and warm springs, mineral licks and amphibian sightings as obtained from ENR, and in a manner that mitigates impacts to these features.
- 2) A land use activity shall not take place on Karst topography, or if unavoidable, shall mitigate impacts to karst topography.
- 3) A land use activity shall not take place within 1000 m of any mineral lick.
- 4) Before a land use activity is authorized within the boundary of glacial refugia or within 500 m of known hot or warm spring(s), Regulators shall ensure that a rare plant survey is conducted, and shall require as a condition of their authorization, that any plants found are monitored for impacts from the activity.

<sup>&</sup>lt;sup>54</sup> "Examining the Risk of Disease Transmission between Wild Dall's Sheep and Mountain Goats and Introduced Domestic Sheep, Goats, and Llamas in the Northwest Territories", Prepared for: The Northwest Territories Agricultural Policy Framework and Environment and Natural Resources, GNWT, August 2005.

5) Authorizations shall require that the location of any hot or warm spring or mineral lick discovered while carrying out an authorized activity be reported to <a href="mailto:nwt pas@gov.nt.ca">nwt pas@gov.nt.ca</a>, and any amphibian sightings to <a href="mailto:nwtsoer@gov.nt.ca">nwtsoer@gov.nt.ca</a>.

### **Context and Rationale**

Map 8 shows known locations of the ecologically significant features discussed above. The GIS data used in this map, and the information below for each of the features were provided by the Protected Areas Strategy Science Team. <sup>55</sup>

### Karst

Karst is a landscape feature that forms when water dissolves soluble bedrock such as limestone, marble, or dolomite. The resulting topography can include caves, sinkholes, springs, and disappearing streams, sometimes forming complex underground drainage systems. The substrate and chemical composition of karst landscapes creates unique habitats for aquatic and terrestrial species. Some species have adapted specifically to the karst environment and cannot survive anywhere else. Other species thrive there because of the relatively rich nutrient load in some karst soils. Physical characteristics of karst features provide important habitat for species such as bats, Dall's sheep and other vertebrates and invertebrates that rely on caves for at least part of their lifecycle. The constant climatic conditions in subterranean karst provide an ideal environment for the preservation of fossils, making karst areas important to archaeologists and palaeontologists. Karst landscapes can be visually stunning due to their unique formations. The Sahtu Settlement Area contains world class examples of karst that should be protected.

### Mineral Licks

Mineral licks are unique habitat features that are important to many different wildlife species. Various animals visit these naturally-occurring, exposed deposits of salts or other minerals in order to ingest the mineral nutrients they need for healthy growth. Many species including moose, caribou and mountain goats use mineral licks. Mineral licks have a particularly strong influence on habitat use by Dall's sheep and are critical to the well-being of sheep populations. Dall's sheep may travel long distances to mineral licks and often use the same licks year after year. <sup>58</sup>

Mineral licks are extremely sensitive to land disturbance. <sup>59,60,61,62</sup> Mineral licks are usually identified by the extensive wildlife trails converging on one area. Rea *et al.* 2004 advise that it

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Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 draft Sahtu Land Use Plan, Protected Areas Strategy Science Team, August 6/09, Available at: <a href="http://www.sahtulanduseplan.org/website/web-content/index.html">http://www.sahtulanduseplan.org/website/web-content/index.html</a>.
Ibid

<sup>&</sup>lt;sup>57</sup> Ford, D. 2008. Report Upon a Survey of Karst Landforms around Norman Wells, Northwest Territories. Prepared for the NWT Protected Areas Strategy, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.

<sup>&</sup>lt;sup>58</sup> Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 draft Sahtu Land Use Plan, Protected Areas Strategy Science Team, August 6/09

<sup>&</sup>lt;sup>59</sup> Weeks, H. P., and C. M. Kirkpatrick. 1976. Adaptations of white-tailed deer to naturally occurring sodium deficiencies. Journal of Wildlife Management 40: 610-625.

<sup>&</sup>lt;sup>60</sup> Bechtold, J. P. 1996. Chemical characterization of natural mineral springs in northern British Columbia, Canada. Wildlife Society Bulletin 24: 649-654.

### Map 8. Ecologically Significant Areas

<sup>61</sup> Dormaar, J. F., and B. D. Walker. 1996. Elemental content of animal licks along the eastern slopes of the Rocky Mountains in southern Alberta, Canada. Canadian Journal of Soil Science 76: 509-512.
 <sup>62</sup> Rea, R. V., D. P. Hodder, and K. N. Child. 2004. Considerations for natural mineral licks used by moose in land use planning and development. Alces 40: 161-167.

July 12, 2010 61 is not only important to protect the mineral lick itself but also the area around the mineral lick, particularly during peak activity and, if it is a wet mineral lick, that the hydrological system feeding the lick is also maintained. These areas are used by individuals in a sensitive life stage (i.e. female sheep with young), so 1000 m was used as the setback for the Sahtu, based on the experience of the Sahtu regional biologist with Dall's sheep.<sup>63</sup>

### **Hot and Warm Springs**

Hot and warm springs often have unique ecosystems and are important to many different species. At a hot or warm spring, water temperature, air temperature, humidity, and water chemistry all differ from the surrounding area. As a result, the area around a hot or warm spring sometimes supports species or communities that are uniquely adapted to these environments, such as calcium-tolerant plants or warm-water bacteria. The PAS Science Team defines hot and warm springs as having a water temperature of at least 10°C. Hot and warm springs can be associated with rare plants. The data available are observations by people that visit these areas so they will be biased to areas that are more commonly visited by people. It is important that land-users report any sightings of hot and warm springs and that they know of any springs in their area of interest.<sup>64</sup>

### Glacial Refugia

During the last ice age, much of Canada was covered in ice. In order to survive, plants and animals shifted over time into areas that were ice-free, and established themselves in these refugia until the ice retreated. These areas are known as glacial refugia, and they are frequently "biodiversity hotspots" with a high diversity of plants and animals, rare species, unique species, and/or unique landforms. For example, refugia can contain the last remaining individuals of species that used to be wide-ranging but have now mostly disappeared. It is also possible that some populations that were separated from the rest of their species within these refugia during the ice age evolved increased genetic diversity and sometimes even into completely new species. The physical features of the land are also different in areas that were not glaciated because glaciations are such powerful forces that shape entire landscapes. The last glacial maxima in the NWT (~17,350 calendar years ago) resulted in a portion of one glacial refugium in the Sahtu.<sup>65</sup>

### Rare or May-Be at Risk Plants

The definition of a rare or may-be at risk plant can depend on the geographic area being considered. Plants labelled as 'rare' by the PAS Science Team, working with the GNWT Ecosystem Management Biologist, are endemic to the NWT and are thus globally rare. May-be at risk plants are extremely rare, at least regionally, but have not yet been assessed by COSEWIC (the Committee on the Status of Endangered Wildlife in Canada). There are no rare plants within the SSA. There are 70 locations of may-be at risk plants within the SSA. The data available are observations by people that visit these areas so they will be biased to areas that are more commonly visited by people. It is important that land-users report any sightings of rare and may-be at risk plants and that they know of any previous sightings in their area of interest. 66 Table 9 lists rare of may-be at risk plants in the SSA.

<sup>&</sup>lt;sup>63</sup> Claudia Haas, PAS Biologist, GNWT, Personal Communication, May 5/10

<sup>&</sup>lt;sup>64</sup> Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 draft Sahtu Land Use Plan, Protected Areas Strategy Science Team, August 6/09

<sup>&</sup>lt;sup>65</sup> Ibid

<sup>66</sup> Ibid

Table 9. Rare (highlighted in pink) and may-be at risk plant species in ecoregions wholly or partially within the Sahtu Settlement Area

# of species in ecoregion	Ecoregion	Family	Species	
1	35	BORAGINACEAE	Mertensia drummondii (G2)	
2	51	PAPAVERACEAE	Papaver mcconnellii	
1	51	POACEAE	Poa pseudoabbreviata	
1	51	POLYGONACEAE	Rumex lapponicus	
1	51	SAXIFRAGACEAE	Saxifraga ferruginea	
2	51	SCROPHULARIACEAE	Pedicularis oederi	
2	52	ASTERACEAE	Erigeron yukonensis	
2	52	BRASSICACEAE	Arabis calderi	
1	52	CYPERACEAE	Carex laxa	
1	52	ISOETACEAE	Isoetes lacustris	
1	53	BRASSICACEAE	Cardamine microphylla	
1	53	BRASSICACEAE	Rorippa barbareifolia	
1	55	ASTERACEAE	Packera ogotorukensis	
1	55	BRASSICACEAE	Draba incerta	
1	55	BRASSICACEAE	Rorippa barbareifolia	
1	55	SCROPHULARIACEAE	Pedicularis verticillata	
3	56	ASTERACEAE	Symphyotrichum yukonense	
1	56	BRASSICACEAE	Cardamine microphylla	
1	56	ZANICHELLIACEAE	Zanichella palustris	
2	58	BRASSICACEAE	Rorippa crystallina	
1	170	BRASSICACEAE	Draba ogilviensis	
2	170	CARYOPHYLLACEAE	Minuartia macrocarpa	
2	170	CYPERACEAE	Blysmopsis rufus	
3	170	FABACEAE	Oxytropis scammaniana	
1	170	PAPAVERACEAE	Papaver mcconnellii	
9	170	PORTULACACEAE	Claytonia megarhiza	
1	170	PTERIDACEAE	Cryptogramma stelleri	
2	171	ASTERACEAE	Hieracium albiflorum	
1	171	ASTERACEAE	Senecio sheldonensis	
1	171	ASTERACEAE	Symphyotrichum nahanniense (G1)	
1	171	BRASSICACEAE	Draba albertina	
1	171	BRASSICACEAE	Draba ogilviensis	
3	171	BRASSICACEAE	Draba porsildii	
1	171	CYPERACEAE	Carex eleusinoides	
1	171	CYPERACEAE	Carex hoodii	
1	171	CYPERACEAE	Carex petasata	
1	171	DRYOPTERIDACEAE	Dryopteris carthusiana	
7	171	DRYOPTERIDACEAE	Dryopteris expansa	
2	171	PTERIDACEAE	Cryptogramma sitchensis	
1	171	ROSACEAE	Luetkea pectinata	
2	171	SAXIFRAGACEAE	Leptarrhena pyrolifolia	
1	171	SCROPHULARIACEAE	Penstemon gormanii	

### **Amphibians**

Two amphibians, the boreal chorus frog and wood frog, occur in the Sahtu Settlement Area. Neither species is considered at risk or in decline. However, the boreal chorus frog is on the northern limits of its range in the Sahtu. Many people consider amphibians to be the "canary in the mineshaft", namely that they will be the first to show a sign of stress if an ecosystem is in danger. This is in part because amphibians live in both aquatic and terrestrial environments and are affected by impacts from both. Conversely, the protection of amphibians can translate into indirectly protecting many other species.<sup>67</sup>

### CR #13 - Closure and Reclamation

1) Financial security shall be posted and maintained with the Minister of Indian and Northern Affairs Canada for any land use activity that is not carried out by a local government or the territorial or federal government, in an amount sufficient to cover the full cost of reclamation and post-closure activities, where the amount calculated exceeds \$50,000.

2) On termination or abandonment of a land use activity, any area affected by the land use activity shall be restored to a viable, self-sustaining ecosystem consistent with the surrounding ecosystem and expected future uses of the area as determined in consultation with residents, communities and responsible authorities, prior to the return of security.

#### **Context and Rationale**

Once the desired resources are extracted, harvested or developed, there is an expectation that the area will be cleaned up and returned to a clean and healthy state and that the proponent should bear the costs for this. In the past, this has not been the case, resulting in numerous contaminated sites across the north for which the federal government has become liable as the landowner.

Mines approved today are subject to rigorous environmental regulations. INAC's NWT Mine Site Reclamation Policy includes the following general principles:

- Mine site reclamation should reflect the collective desire and commitment to operate under the principles of sustainable development, including the "polluter pays" principle.
- The required standard of reclamation should be based on the 1994 Whitehorse Mining Initiative definition: "returning mine sites and affected areas to viable and, wherever practicable, self sustaining ecosystems that are compatible with a healthy environment and with human activities."
- Every new mining operation should be able to support the cost of reclamation. Existing mining operations will also be held accountable for their reclamation liabilities.
- Adequate security should be provided to ensure the cost of reclamation, including shutdown, closure and post-closure, is borne by the operator of the mine rather than the Crown.
- Best management practices, including progressive reclamation, should be applied to advance environmental protection and reduce environmental risks.

<sup>&</sup>lt;sup>67</sup> Ibid

 Communication and consultation among all applicable parties should be comprehensive, complete and timely.

INAC recently applied the NWT Mine Site Reclamation Policy to oil and gas operations in regards to their expectations for abandonment and reclamation requirements in the absence of a similar policy for the oil and gas industry. <sup>68</sup>

These policies are reinforced in INAC's Contaminated Sites Management Policy, which includes provisions to avoid the creation of new contaminated sites and promotes the federal 'polluter pay' principle: "INAC will incorporate provisions into its permits, leases, agreements and other instruments requiring that the private sector, First Nations, Inuit and northerners make every reasonable effort to avoid contaminating the environment in the course of carrying out their operations and activities and holding third parties liable for contamination that they cause on reserve lands, on federal lands north of the 60<sup>th</sup> parallel, and on any other lands under INAC's custodial responsibility."

Flexibility is required in defining a reclamation goal as different circumstances will warrant a different decision. The minimum, as expressed in the Whitehorse Mining Initiative, is to return a site to a viable self-sustaining ecosystem. From there, the exact goal is best defined by the expected future use of the area and by those who will use or be affected by the area. Communities, as the most affected group, need to have a central role in setting the reclamation goal. If an area has seen little to no development and is not expected to see further industrial use, then expectations for reclamation may be quite high and companies should be prepared to return the land in much the same condition as they found it. If future exploration or development projects are expected in the near future or the community plans to maintain the access created, then a reclamation goal consistent with continued use will be more appropriate. A reclamation goal and reclamation plan should be discussed during the application stage, and gradually refined with communities throughout the life of the project as more information is known.

The security regime is also not straight-forward with security being collected by different government departments or agencies for different purposes.

Oil and Gas companies are required to provide "proof of financial responsibility" (financial security) with the NEB under s. 27(1) of the *Canada Oil and Gas Operations Act*. These funds are intended to cover the proponent's financial liabilities for actual loss or damage<sup>69</sup> incurred by any person as a result of debris<sup>70</sup>, spills<sup>71</sup>, or an authorized discharge, emission or escape of oil and gas, and the costs incurred by the federal government or any other person in taking action

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<sup>&</sup>lt;sup>68</sup> INAC comments on Type A Water Licence Application MV2010L1-0001 Paramount Resources Ltd, Oil and Gas Exploration and Development, Cameron Hills, May 3/10

<sup>&</sup>lt;sup>69</sup> Defined to include loss of income, including future income, and with respect to any aboriginal peoples of Canada, includes loss of hunting, fishing and gathering opportunities.

<sup>&</sup>lt;sup>70</sup> Defined as any installation or structure that was put in place in the course of any authorized work or activity that has been abandoned without authorization, and any material that has broken away or been jettisoned or displaced in the course of any such work or activity.

<sup>&</sup>lt;sup>71</sup> Defined as a discharge, emission or escape of petroleum, other than one that is authorized under the regulations or any other federal law.

in relation to any of the above. In plain language, it is meant to cover costs for damages and cleanup efforts from unintended spills and operations.

INAC Land Administration may also collect security and set reclamation requirements specific to surface leases, rights-of-way and easements it administers. A mine requires a surface lease and therefore would likely be expected to post security with INAC Land Administration through this mechanism. Land uses that do not require one of these types of land interests from INAC would not be subject to these security requirements.

In contrast to these specific security requirements, security collected under the *Mackenzie Valley Land Use Regulations* and the *Northwest Territories Waters Regulations (NWTWR)* and held by the Minister of INAC, is more general and is intended to cover costs related to the abandonment of the land-use operation or undertaking, restoration of the site, and any measures that may be necessary after abandonment (e.g. monitoring activities). In short, the financial security held by the NEB, INAC Land Administration, and the Minister of INAC under the *MVLURs and NWTWR* are for different purposes. All are needed to protect the Crown and taxpayers from financial liability.

The *Mackenzie Valley Resource Management Act* and the *NWT Waters Act* give discretionary authority to the Sahtu Land and Water Board (SLWB) to collect security. Only municipal, territorial and federal governments are exempt from these provisions<sup>73</sup>. The SLWB has stated that it has never collected security for any application in the Sahtu Settlement Area.<sup>74</sup> In contrast, the Mackenzie Valley Land and Water Board (MVLWB) collects security on all projects, though generally not for amounts less than \$50,000.<sup>75</sup> The land and water Boards in the Mackenzie Valley are currently reviewing their processes and policies respecting the collection of security deposits with the aim to harmonize their processes.

There is a public expectation that all land uses will be cleaned up, the environment properly restored, and that the cost for this will be borne by the proponent. The best way to assure this is to set minimum reclamation goals and require that sufficient security be posted to achieve these goals prior to authorizing any land use that will create impacts.

### 4.2.2 Special Management Conditions

Special Management Zones are established to protect specific ecological and cultural values present within the zones while allowing a range of land use activities to proceed. Given the dual purpose of these zones, all land use activities are expected to proceed with greater caution. Conservation Zones and Proposed Conservation Initiatives do not allow new development in general, but the Plan exempts certain land uses from the zoning prohibitions

<sup>&</sup>lt;sup>72</sup> INAC Detailed Comments on the Integration of the Policies, Conditions & Prohibitions from the Great Bear Lake Watershed Management Plan with the Draft Sahtu Land Use Plan, December 18th, 2009, Available at:

http://www.sahtulanduseplan.org/ftpfiles/public\_comments/INAC\_GBLWMP%20Detailed%20Comments\_Dec%2018-09.pdf

<sup>&</sup>lt;sup>73</sup> George Govier, Personal Communication, May 5/10

<sup>&</sup>lt;sup>74</sup> George Govier, Executive Director, SLWB, Personal Communication, Oct 28/09

<sup>&</sup>lt;sup>75</sup> Shannon Ward, Senior Policy Advisor, MVLWB, Personal Communication, May 19/10.

under S. 2.3.2, so some development may occur within these zones. To the extent that it does, the Special Management Conditions will apply to all land uses proposed for these zones.

The following conditions only apply within Special Management Zones, Conservation Zones and Proposed Conservation Initiatives.

### CR #14 - Assessment and Mitigation

Before any land use activity is authorized within a Special Management Zone, Conservation Zone or Proposed Conservation Initiative, Regulators shall assess the potential impacts from the activity on the values for which the zone was established and ensure that appropriate measures are in place to minimize impacts to the zone values.

### **Context and Rationale**

Each special management zone was established to protect specific values identified for that zone, while allowing development to proceed. For many zones, exploration and development are already underway or are anticipated in the near future. Conservation Zones and Proposed Conservation Initiatives were also established to protect certain features or values. Chapter 5 Zone Descriptions clearly identify the reasons for establishment, and provide considerable detail on the cultural and ecological values that exist within each zone. Development occurring within Special Management Zones, Conservation Zones and Proposed Conservation Initiatives must not significantly impact the values for which the zone was established. A higher level of care and scrutiny is expected for all land uses within these zones. Regulators and applicants are referred to the zone descriptions for the areas in which a land use is proposed, and in particular to the sections describing the reasons for protection, ecological values and socio-cultural values, and are expected to design and manage the land uses in a way that protects these values.

### CR #15 - Monitoring

- 1) Any land use activity proposed for a Special Management Zone, Conservation Zone or Proposed Conservation Initiative shall include a site-specific monitoring program that is sufficient to monitor the effectiveness of the proposed mitigation measures and any impacts on the values identified for the zone in which the activity is proposed.
- 2) Monitoring reports shall be distributed to relevant community organizations and made publicly available, where confidentiality issues do not prevent such distribution.

### **Context and Rationale**

Land use activities are designed and authorized based on assumptions and predictions about how the proposed activities may affect specific values. It is necessary to monitor whether these predictions hold true during and after the land use activities are carried out. Periodic monitoring allows the applicant to detect problems before they become serious and adjust their operations accordingly to protect the values present in the surrounding area. The SLWB currently requires applicants to do baseline assessments of soil, water and vegetation and monitor the area for a

minimum of five years. The scale and nature of the monitoring program depends on the scale of the proposed land use and its potential to impact zone values. Small short-term projects or those with low potential to impact the values of concern may require very little monitoring. Large projects with higher potential for impacts may require a more sophisticated monitoring program.

The *SDMCLCA* (S. 25.1.4) and the *MVRMA* (S. 146) provide for the establishment of a mechanism to monitor cumulative impact of land and water uses on the environment in the Mackenzie Valley. The NWT Cumulative Impact Monitoring Program (CIMP) was established to fulfill these requirements. CIMP is intended to monitor cumulative impacts of land and water uses and waste deposits, fill in key monitoring gaps, build community capacity and provide reports and information on the state of the environment to independent audits, decision-makers and the public. An independent audit is to be conducted every 5 years in order to determine changes occurring in the environment, and recommend improvements to CIMP and land and water management. The first audit was carried out in 2005 and released in 2007. Work has begun on the 2010 audit. CIMP's working group includes INAC, GNWT-ENR, and regional Aboriginal governments.

Appendix 4 lists the NWT CIMP valued components (VCs) and indicators applicable within the Sahtu Settlement Area (all except marine mammals).

Standardized monitoring protocols have been developed for most of these valued components to guide future data collection work. <sup>77, 78</sup> A preliminary state of knowledge report was updated in 2007, which identifies key indicators, status and trends for each of the VCs. <sup>79</sup> As CIMP is more fully developed and implemented, applicants will have access to better baseline information for each of the indicators.

To be effective, project-specific monitoring must use the same indicators and protocols as CIMP. Ideally, CIMP will guide project-specific monitoring efforts and project-specific monitoring will support CIMP through the provision of site-specific information. Applicants should give priority to monitoring those Valued Components and indicators highlighted in zone descriptions as reasons for protection for the zones in which their land use is proposed.

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<sup>&</sup>lt;sup>76</sup> SLWB Comments on Draft 2, July 30, 2009. Available at: <a href="http://www.sahtulanduseplan.org/ftpfiles/public\_comments/SLWB\_July%2030-09.pdf">http://www.sahtulanduseplan.org/ftpfiles/public\_comments/SLWB\_July%2030-09.pdf</a>

<sup>&</sup>lt;sup>77</sup> Standardized Protocols for Collection of Monitoring Information for the NWT Cumulative Impact Monitoring Program Working Group and Valued Components Advisory Teams, Prepared for INDIAN AND NORTHERN AFFAIRS CANADA by IMG-Golder Corporation, Inuvik, NT, April 30/08, Available at <a href="http://www.nwtcimp.ca/documents/MonitoringFinalReportApril3008.pdf">http://www.nwtcimp.ca/documents/MonitoringFinalReportApril3008.pdf</a>

<sup>&</sup>lt;sup>78</sup> Data Collection Protocols for the Northwest Territories Cumulative Impact Monitoring Program Valued components: Caribou; Fish habitat, population & harvest; Water & sediment quality, Prepared for Indian and Northern Affairs Canada by Kavik-AXYS Inc. Yellowknife, NT, April 2008, Available at: <a href="http://www.nwtcimp.ca/documents/CdIMPDataCollectionProtocols\_e.pdf">http://www.nwtcimp.ca/documents/CdIMPDataCollectionProtocols\_e.pdf</a>

<sup>&</sup>lt;sup>79</sup> "A Preliminary State of Knowledge Report of Valued Components for the NWT Cumulative Impact Monitoring Program (NWT CIMP) and Audit FINAL DRAFT", Prepared for NWT CIMP and Audit Working Group, June 2007.

### 4.2.3 Zone-Specific Special Management Conditions

The following conditions are applicable only within the zones described for each.

### CR #16 - Ecological and Cultural Integrity

Before any land use activity is authorized in the Great Bear Lake Watershed (GBLW), Regulators shall ensure that the activity is consistent with the maintenance of the ecological and cultural integrity of the GBLW.

**Applicable Zones:** Zones #15, 16, 18, 57, 58, and 59.

### **Context and Rationale**

The community of Déline, government, co-management boards and other partners invested considerable effort and time in the development of the Great Bear Lake Watershed Management Plan (GBLWMP). The over-riding theme of that plan is the maintenance of ecological and cultural integrity. While providing for a few specific conservation zones, the remainder of the watershed was designated as special management, allowing development, as long as it does not impact the overall integrity of the watershed and conservation zones within it.

"The GBLW is part of the natural and cultural heritage of the Sahtugot'ine, other Canadians, and indeed the world. The lake and its watershed must be protected for generations to come. The conservation of renewable resources and the maintenance of the ecological and cultural integrity of the GBLW must be the first priority in all management decisions affecting the lake and its watershed." 80

Ecological integrity refers to an ecosystem that it is characteristic for its natural region, including the composition and abundance of native species and biological communities, rates of change and supporting processes. Ecosystems have integrity when they have their native components (plants, animals and other organisms) and processes (such as growth and reproduction) intact.<sup>81</sup>

The maintenance of cultural integrity as defined in the GBLWMP means to protect and promote the existing and future well-being of the residents and communities of the Sahtu Settlement Area, having regard to the interests of all Canadians, and paying special attention to the existing and future social, cultural and economic well-being of participants, land used by participants and the rights of participants under the *SDMCLCA*.

The Zone Description for the Great Bear Lake Watershed Special Management Zone describes the many ecological and cultural values of the watershed. Additional details may be found in the GBLWMP itself. Key values include the lake's size and global importance, low biological productivity, high genetic diversity within fish species, important subsistence fishery, trophy size

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<sup>&</sup>lt;sup>80</sup> From GBLWMP, Great Bear Lake Working Group, May 31/05

<sup>&</sup>lt;sup>81</sup> Definition from Report of the Panel on the Ecological Integrity of Canada's National Parks, Parks Canada, <a href="http://www.pc.gc.ca/eng/docs/pc/rpts/ie-ei/report-rapport\_1.aspx">http://www.pc.gc.ca/eng/docs/pc/rpts/ie-ei/report-rapport\_1.aspx</a>

lake trout and grayling, and habitat for the bathurst, bluenose east and west barren-ground caribou herds. In addition, Great Bear Lake is the source of Déline's drinking water supply. Activities anywhere in the watershed have the potential to affect their drinking water quality.

The Plan supports and reinforces this requirement from the GBLWMP to honour the work done by the Great Bear Lake Working Group, and to protect the community's drinking water, and the many cultural and ecological values that exist within the watershed.

### CR #17 - Fish Farming and Aquaculture

Fish farming and aquaculture shall not be authorized within the Great Bear Lake Watershed.

**Applicable Zones:** Zones #15, 16, 18, 57, 58, and 59.

#### **Context and Rationale**

Great Bear Lake's subsistence fishery is very important to the community of Déline. It is also home to trophy-size lake trout which is important to the local economy. The lake contains a wide diversity of "morphotypes" or forms of lake trout which allow populations to better adapt to environmental changes over the long term. This diversity has been extinguished or greatly reduced in the other Great Lakes due to over-harvesting and the introduction of non-native species. Great Bear Lake provides one of the only remaining models of how lake trout populations naturally function in a large lake ecosystem. <sup>82</sup>

Fish farming and other forms of aquaculture have the potential to alter the ecology of GBL through introduced farmed-fish species, waste from fish farms, and other unforeseen impacts. <sup>83</sup> These uses are therefore restricted to protect the pristine nature of Great Bear Lake, the importance of its subsistence and trophy fisheries, and its importance as a benchmark for natural trout-lake ecosystem dynamics.

### CR #18 - Disturbance of Lakebed

A land use activity that would disturb the lakebed of Great Bear Lake, other than the installation of environmental monitoring equipment, and public, private or commercial wharves and docks, shall not be authorized.

**Applicable Zones:** Zone 15

### **Context and Rationale**

Great Bear Lake (GBL) has very clear, transparent waters (maximum recorded Secchi depth 30 m). Its productivity is very low, with standing crops of phytoplankton and zooplankton (microscopic plants and animals) being among the lowest found in freshwater systems and mainland lakes in North America. The GBL food web is relatively simple with benthic (bottom dwelling) invertebrates being an important food source for fish species. The lake's low productivity, low inflows of nutrients from surrounding areas, and simple food web suggest a

<sup>82</sup> Ibid

<sup>83</sup> Tom Nesbitt, June 3/10, Personal Communication

vulnerability to disturbance activities and potentially slow recovery times, were impacts to occur.

Disturbance of the lakebed increases the amount of sediment particles suspended in the water, reducing water clarity. Water clarity affects the ability of fish to find food, the depth to which aquatic plants can grow, dissolved oxygen content, and water temperature, which in turn affects fish. Lakebed disturbance can also cause nutrients that are stored in the sediments, such as phosphorous, to become available for algal growth. Equipment which disturbs the lakebed may also transfer pollutants to the water from leaks or unintended malfunctions. For these reasons, land uses that have the potential to disturb the lakebed, other than those listed above, are restricted.

### CR #19 - Uses of Du K'ets'Edi (Sentinel Islands)

No permanent structure or land use other than the installation of research and monitoring equipment shall be authorized on Du K'ets'Edi (Sentinel Islands).

**Applicable Zones:** Zone 59

### **Context and Rationale**

The Sentinel Islands (Du K'ets'Edi) are scattered all around Great Bear Lake. Their ecological importance lies in their location. The Great Bear Lake Working Group stated that the islands are to be protected in a natural, undeveloped state, primarily to protect the water quality of Great Bear Lake. The Sahtugot'ine have used the islands primarily for safety purposes when travelling on Great Bear Lake. Many of the islands have mythical significance and have stories associated with them.

The GBLWMP states that the islands should be used for temporary purposes only, including stopping and camping for safety reasons, research and monitoring, and youth educational camps. Emergency shelters and youth educational shelters shall be authorized for temporary purposes only. There is to be no commercial renewable or non-renewable resource development activities on Du K'ets'Edi.

### CR #20 - Water Withdrawal

The withdrawal of water for industrial purposes from Lac Belot, Stewart Lake or Tate Lake, except from the outflow, shall not be authorized until DFO addresses community concerns related to observed water draw-down in these lakes.

**Applicable Zones:** Zones 33 and 53

### **Context and Rationale**

The communities of Colville Lake and Tulita have observed rapid drops in water levels in Lac Belot, Stewart Lake and Tate Lake. The reasons for this are not clear. Because of their observations, they do not believe these lakes should be used as water sources for exploration and development activities.

DFO submitted bathymetric surveys conducted on the west side of Lac Belot showing depths in excess of 15 m in some locations and suggested that Lac Belot is better suited to water withdrawal because of its depth than shallower lakes nearby. BFO also limits water withdrawal to 5% of available water volume from any water body per winter season. Colville Lake residents indicated that it isn't a question of overall depth but rather the large variations in water levels. If water levels are low, the lakes may not be suited to water withdrawal at that time. The communities are concerned about the impacts to fish from rapidly dropping water levels, whether from natural variation or in combination with water withdrawals.

All three lakes are designated as Conservation Zones in part because of their importance to the communities for subsistence fish and wildlife harvesting and require special attention because of this. While no new land uses are allowed in Conservation Zones, there are existing uses within these areas; exploration and development associated with these uses is expected to continue.

There appears to be a gap between the communities' traditional knowledge and the scientific information used by DFO to manage water withdrawal. A measurement of lake depth in one section at one point in time does not provide any information about the overall variability of water levels that the communities may experience. The SLWB identified that in the past they have restricted water withdrawal from Stewart Lake to the lake's outflow, which was near the proposed land use. The Plan includes an Action in Chapter 6 for DFO to work with the communities to resolve the differences in their understanding and identify appropriate solutions. In the meantime, the Board respects and acknowledges the communities' observations and is restricting water withdrawal to the outflow from these three lakes until the communities' concerns have been addressed.

### 4.3 PROJECT-SPECIFIC RECOMMENDATIONS

The following recommendations should be considered by regulators and applicants as appropriate.

### Recommendation #1 - Air Quality 88

The SLWB should recommend to those applying for permits, licences or other authorizations that they conduct all activities in the SSA in conformity with the standards set out in the

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<sup>&</sup>lt;sup>84</sup> DFO Comments on Draft 2 of the Sahtu Land Use Plan, December 4/09, Available at: <a href="http://www.sahtulanduseplan.org/ftpfiles/public comments/DFO Dec%204-09.pdf">http://www.sahtulanduseplan.org/ftpfiles/public comments/DFO Dec%204-09.pdf</a>

<sup>85</sup> DFO Protocol for Winter Water Withdrawal in the Northwest Territories, DFO, January 31/05.

<sup>&</sup>lt;sup>86</sup> Colville Lake Draft 2 Consultation Summary Notes, February 8/09, Available at <a href="http://www.sahtulanduseplan.org/ftpfiles/public\_comments/Colville%20Lake%20Draft%202%20Consultation%20Summary%20Notes\_Feb%208%202010.pdf">http://www.sahtulanduseplan.org/ftpfiles/public\_comments/Colville%20Lake%20Draft%202%20Consultation%20Summary%20Notes\_Feb%208%202010.pdf</a>

<sup>87</sup> SLWB-SLUPB Meeting Summary Notes, October 28/09, Available at <a href="http://www.sahtulanduseplan.org/ftpfiles/public comments/SLWB%20Meeting Oct%2028-09%20Summary%20Notes.pdf">http://www.sahtulanduseplan.org/ftpfiles/public comments/SLWB%20Meeting Oct%2028-09%20Summary%20Notes.pdf</a>

<sup>&</sup>lt;sup>88</sup> This entire section, including Recommendation #1 and Actions # 11-13 in Chapter 6 are taken from the GBLWMP, May 2005, and modified as per GNWT comments, Dec. 2, 2009.

GNWT's Guidelines for Ambient Air Quality Standards, and other applicable federal or territorial regulations, guidelines or standards as they are developed.

### **Context and Rationale**

Air Quality is a valued component of environmental protection in the GBLW. ENR currently monitors air quality at four stations (most remotely operated) in the NWT: Yellowknife, Inuvik, Norman Wells and Fort Liard. The focus is on the common or "criteria" air contaminants: ground-level ozone, carbon monoxide, oxides of nitrogen, sulphur dioxide, total suspended particulates, fine particulates and hydrogen sulphide. Not all contaminants are monitored at every station, but new instruments are added as funding becomes available. The purpose of the program is to establish and publish a baseline against which to measure future changes in ambient air quality in the NWT. The air quality data is summarized in an annual report and published on the ENR website.

The GNWT has developed guidelines for ambient air quality in the NWT (the "Guidelines"). These Guidelines define and set standards for Fine Particulate Matter, ground level ozone, sulphur dioxide and total suspended particulates. The Guidelines for fine particulate matter and ground level ozone are based on standards developed by the Canadian Council of Ministers of the Environment. The Guidelines for sulphur dioxide and total suspended particulates are based on National Ambient Air Quality Objectives. The standards in the Guidelines are therefore widely accepted and based on sound science.

As currently drafted, the *Guidelines* are guidelines only, to be used in assessing the acceptability of emissions from existing and proposed activities and for reporting on the status of air quality in the NWT. They do not currently have the status of mandatory standards, enforceable under regulation. But they are based on national standards and objectives that are to be implemented in each jurisdiction as the jurisdiction deems appropriate. They are therefore appropriate as a basis for enforceable regulations, if that is the direction that the responsible jurisdiction(s) wishes to take.

There are currently no air quality regulations under the *MVRMA*. In the absence of such regulations, it is not clear whether the SLWB or its inspectors have any authority to regulate air quality in the Sahtu settlement area. Any attempt to regulate air quality on the SLWB's part could be subject to legal challenge for action in excess of their jurisdiction.

The NEB may be able to regulate emissions from oil and gas operations, but any such regulation would be limited by the sectoral jurisdiction of that Board. There does not appear to be any other comprehensive federal regulation of air quality in the NWT. In Canada, most federal regulation of air quality is under the *Canadian Environmental Protection Act* (CEPA). But regulations under that *Act* are designed with the constitutional division of powers in mind — provinces are the primary regulators of air quality in Canada — and existing regulations under CEPA do not address the substances covered by ENR's *Guidelines* or most other substances which would be of concern to the residents and communities of the Mackenzie Valley and the NWT.

### Recommendation #2 - Wildlife Monitors

Applicants are encouraged to work with the local Renewable Resources Council (RRC) to hire a qualified monitor, who will assess the presence of wildlife in the area of operations, monitor

impacts on wildlife from the proposed activities, and keep the RRCs and SRRB informed of activities affecting wildlife. Where a monitor judges that an activity may have a negative impact on wildlife, the monitor should discuss this with the applicant and attempt to resolve the concern. Any unresolved concerns should be reported to the land use inspector and the RRC so that appropriate action may be taken to mitigate impacts.

### **Context and Rationale**

Some applicants hire local wildlife or environmental monitors, recognizing that it is beneficial to have access to both scientific and local traditional expertise on site. Hiring a monitor builds community confidence that the values and areas important to them will not be harmed, increasing community support for the land use. This is not done consistently though, and the roles and responsibilities of monitors may vary considerably. Monitors need to be able to identify important wildlife, their habitat, significant sites, and potential risks to these from the operations, and communicate their observations effectively to operators and inspectors. Ideally monitors will have some formal training such as a Aurora College's Environmental Monitor Training Program.

### **Recommendation #3 - Project Summary Meeting**

Applicants are encouraged to meet with residents and community representatives upon completion of their land use activities to discuss the results of the work, any issues that arose, community concerns, next steps and lessons learned.

### **Context and Rationale**

Information sharing is essential to a successful working relationship between companies and communities. Upon completion of a season of work or a project, it would be beneficial for both companies and communities to meet. This provides an opportunity for the company to share the results of their work, answer any questions the community may have, discuss challenges that were faced, and community insights to overcome those obstacles. Such discussions would help to build strong working relationships between communities and companies.

### Recommendation #4 - Community Research Liaison

Individuals or organizations interested in carrying out research in the Sahtu Settlement Area are encouraged to establish and maintain a working contact with the appropriate organization(s) in affected communities (Land Corporation, first nation, and/or renewable resources council).

### **Context and Rationale**

Research is conducted for a variety of reasons in the Sahtu Settlement Area, including studies related to resource development, university students working on independent studies for their degrees, and government-sponsored research. Some community members have expressed concerns about research due to lack of information and community involvement in scoping the research. The community of Fort Good Hope suggested that such concerns could be addressed if researchers were paired with a community liaison.

The community liaison would act as the main contact for the researcher with the community. The liaison can facilitate communication with appropriate community representatives, assist in coordinating information sessions if needed, identify and provide access to information sources, advise on research design and community protocols, ensure the community receives copies of draft and final reports, and generally ensure that community interests are respected.

## Chapter 5 - Zone Descriptions

### 5.1 CHAPTER ORGANIZATION

The Plan establishes 59 land use zones, which are described in this Chapter.

All zone descriptions are based on reports and documents used in the Plan's Background Report. The Background Report contains greater detail on the sources of information used and includes extensive mapping on the social, cultural, ecological and economic values of the Sahtu Settlement Area (SSA). Further mapping and the full Sahtu Land Use Plan Background Report are available for download on the Sahtu Land Use Plan website at:

### http://www.sahtulanduseplan.org/website/web-content/index.html

The zone descriptions describe the key values present in each zone, based on the extensive information collected and presented in the Background Report. Section 5.3 describes key data sources and terminology used in the descriptions.

The zone descriptions begin in S. 5.4. Due to the large number of zones, they have been clustered where appropriate to reduce the number and complexity of maps and descriptions. Readers are referred to Table 10 on Page 85 to assist them in determining the location of the relevant zone description and map reference.

### **5.2 ZONE TYPES**

Conformity Requirement #1 in Chapter 4 establishes a set of land use zones which identify where key land uses may and may not take place, and provides a spatial framework for managing different values and competing interests through the conditions that are applied to those zones. This plan establishes four types of land use zones, the intent and purpose of which is described below.

**General Use Zones (GUZ)** allow all land use except bulk water removal, subject to the general conditions outlined in Chapter 4. They include areas of significant resource potential and are the economic engines of the SSA. The primary objective of General Use Zones is to promote a full range of land use activities to provide economic benefits for the Sahtu, in a manner that protects the SSA's environment, culture and historical resources.

General Use Zones form the background or matrix in which the other zone types are situated. As a result, General Use Zones are not numbered or labelled.

**Special Management Zones (SMZ)** allow all types of land use other than bulk water removal, subject to the general use and special management conditions outlined in Chapter 4 to protect cultural and ecological values present in those zones. Some special management

conditions are zone-specific while others apply to all Special Management Zones. All Special Management Zones are labelled and numbered.

The goal of Special Management Zones is to provide for balanced and controlled development in a manner that will not impact the key ecological and socio-cultural values within these zones, such as water, wildlife and wildlife habitat, important community subsistence and recreational use areas, and significant cultural sites. Protection of the values is a primary concern and all land use activities are expected to proceed with much greater caution than in General Use Zones.

**Conservation Zones (CZ)** are significant traditional, cultural, heritage and ecological areas in which specified land uses are prohibited. These include major lakes and rivers, International Biological Programme (IBP) sites, important wildlife areas, heritage sites, important harvesting areas, and significant cultural sites. CR #1 prohibits bulk water removal, mineral exploration and development, oil and gas exploration and development, quarrying, power development, and commercial forestry in Conservation Zones, but provides limited exceptions for quarrying, transportation and infrastructure development or any water use other than a bulk water removal under specific circumstances as per CR #1,S 2. Permitted land uses are subject to the general use and special management conditions outlined in Chapter 4. All Conservation Zones are labelled and numbered.

The primary goal of Conservation Zones is to ensure that traditional, cultural, and heritage values are preserved and passed on to future generations, and biophysical values are maintained or improved.

**Proposed Conservation Initiatives (PCI)** are areas for which formal legislated protection is being sought through either the Protected Areas Strategy, or under Parks Canada's legislation (*Canada National Parks Act, Historical Sites and Monuments Act*). They have the same status as Conservation Zones in the Plan until they are protected under other legislation. S. 2.1.1 describes the application of the Plan during the establishment and following designation of legislated protected areas. All Proposed Conservation Initiatives are labelled and numbered.

The primary goal of Proposed Conservation Initiatives is to ensure that traditional, cultural, and heritage values are preserved and passed on to future generations, and biophysical values are maintained or improved.

### 5.3 SOURCES AND TERMINOLOGY USED

A number of sources were used to create the Zone Descriptions in this chapter. Below is a brief explanation of the terms and terminology used to describe the social, cultural, ecological and economic values of the land.

The terms listed below were used in the Zone Descriptions and have specific meaning. They are often associated with specific reports that further define the terms. Readers seeking more information should consult the Sahtu Land Use Plan Background Report where brief descriptions

of the reports are provided.<sup>89</sup> Readers seeking greater detail are referred to the original reports themselves, cited within the Background Report, some of which are cited below. This is not a comprehensive list of the reports and information used in the Zone Descriptions.

### **Barrenground Caribou Seasonal Ranges**

In 2005, Environment and Natural Resources (ENR) released "Seasonal Ranges of the Cape Bathurst, Bluenose-West, and Bluenose-East Barrenground Caribou Herds", a report with extensive caribou range mapping. The maps showed Bluenose-West and Bluenose-East barrenground caribou herd migration routes throughout the Sahtu Settlement Area (SSA).

Satellite tracking data from March 1996-May 2004 was used to track the herds. Seasonal and cumulative ranges for each herd were identified. The data was grouped into 8 seasons:

- calving/post calving (1-25 June),
- early summer (26 June-15 July),
- mid-summer (16 July-7 August),
- late summer (8 August-7 October),
- fall/rut (8-31 October),
- fall/post rut (1-30 November),
- winter (1 December-31 March), and
- spring, spring migration, and pre-calving (1 April-31 May).

Whenever Bluenose West or Bluenose East barren-ground caribou are described as occurring in a zone, it is based on this report:

Nagy, J.A, Wright, W.H, Slack, T.M, and Veitch, A.M. 2005. *Seasonal Ranges of the Cape Bathurst, Bluenose-West and Bluenose East Barren-Ground Caribou Herds*, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories

#### **CWS Terrestrial Habitat Sites**

The Canadian Wildlife Service (CWS) released the third edition of "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", a report that describes key terrestrial habitat areas that are essential to the welfare of various migratory bird species in Canada. The sites identified in the report support at least 1% of the Canadian population of at least one migratory bird species or subspecies. The sites include marine and freshwater habitats. Four of the sites identified in the report are found in the SSA.

When "terrestrial habitat sites for migratory bird species" is used in the Zone Descriptions, it is in reference to the four sites located within the Sahtu Settlement Area in the following report:

<sup>&</sup>lt;sup>89</sup> Sahtu Land Use Plan Background Report: <a href="www.sahtulanduseplan.org">www.sahtulanduseplan.org</a>

Latour, P.B, Leger, J, Hines, J.E., Mallory, M.L., Mulders, D.L., Gilchrist, H.G., Smith, P.A., & Dickson, D.L., 2008, *Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut*, 3rd. Ed., CWS Occ. Paper No. 114.

### **International Biological Programme (IBP) Sites**

The International Biological Programme (IBP) was a cooperative study of the land conducted from 1969 to 1974. It involved the International Council of Scientific Unions and 58 participating nations around the world.

The IBP Ecological sites are special areas that represent a variety of plant and animal communities. The vegetation, animals, soils and other physical characteristics form balanced ecosystems. Many of the sites have special features such as endangered or relict (very old) populations, unique plants, breeding areas and critical range for animals, pristine lakes, mineral springs or other naturally unique features.

When and IBP site is located within a zone, its IBP site name and number are given so that readers may locate the site's description within the IBP report in:

International Biological Program (IBP) Ecological Sites in Subarctic Canada, Areas recommended as Ecological Sites In Region 10, Yukon and Northwest Territories Boreal Forest to the Treeline, 1975, Edited by Dorothy K.B. Beckel, Coordinator Region 10 (Subarctic) Panel, Lethbridge, Alberta, The University of Lethbridge Production Services, CCIBP/CT

### **Important Breeding Duck Habitat**

Ducks Unlimited Canada submitted a report to the Sahtu Land Use Planning Board that identified important breeding duck habitat. The report identified locations in the Northwest Territories that were modelled to support 60% of the breeding duck pairs in the Taiga and Boreal Plains. Ducks require similar habitat as other waterfowl and migratory bird species. Habitat that is appropriate for breeding duck pairs can hence be said to be important for these other species as well. As a result, ducks can be used as a surrogate to identify areas that will be of importance for a number of other species.

When "important breeding duck habitat" is used in the Zone Descriptions, it is in reference to areas that have been identified as supporting 60% of the total breeding duck pairs the Taiga and Boreal Plains in the following report:

Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. <a href="http://www.sahtulanduseplan.org/website/web-content/index.html">http://www.sahtulanduseplan.org/website/web-content/index.html</a>

### **Important Areas for Ecological Representation**

The Protected Areas Strategy (PAS) Science Team submitted a report to the Sahtu Land Use Planning Board regarding ecological representation analysis. The report detailed two general aspects:

- 1. Areas important for ecological representation
- 2. Important ecological areas such as:
  - Hot and warm springs
  - Mineral licks
  - Rare and possibly at risk plants

**Ecological representation** means "protecting samples of broad landscape and habitat variations in each ecoregion of the NWT" in order to "help protect the majority of species" that occur in the NWT. <sup>90</sup> Protecting portions of each ecoregion will in theory, help conserve the different life forms that are found in the NWT and their habitats. A computer model was run 100 times in order to identify areas that were found to be important for ecological representation.

- Areas that appeared 90-100% of the time;
- Areas that appeared 61-89% of the time; and
- Areas that appeared 30-60% of the time were identified in the Sahtu Settlement Area and were put forth for conservation consideration.

When "important for ecological representation" is used in the Zone Descriptions, it is in reference to the areas that appeared 30-60% of the time and "very important for ecological representation" refers to areas that appeared 61-100% of the time in the following report:

Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/public\_comments/Draft%202%20Ecological%20Representation%20Analysis.pdf">http://www.sahtulanduseplan.org/ftpfiles/public\_comments/Draft%202%20Ecological%20Representation%20Analysis.pdf</a>

### **Important Wildlife Areas**

The GNWT's Department of Environment and Natural Resources released a DRAFT of *Important Wildlife Areas in the Northwest Territories* in February 2010. The report identifies a number of areas that are of special importance to certain wildlife species.

The "Important Wildlife Areas" do not include all areas that are important to all wildlife species in the Sahtu Settlement Area.

1. The report considered certain key species; and

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Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan, P. 4-5

- 2. The wildlife habitat areas had to meet one of six key criteria:
  - a. Areas that many animals use traditionally, around the same time each year;
  - b. Places where animals consistently aggregate in relatively large numbers;
  - c. Areas that animal repeatedly use under adverse conditions as refugia (to take shelter);
  - d. Areas with source populations (area that supports healthy populations for "immigration" into less populated areas);
  - e. If a species has very low numbers in the NWT or very limited suitable habitat, their year-round range may be important;
  - f. Unique areas used by different species (e.g. mineral licks, hot springs, wetlands).

These areas do not identify all important wildlife habitat. When an "Important Wildlife Area" is used in the Zone Descriptions for a specific species or group of wildlife, it is in reference to the specific areas identified in ENR's report:

Haas, C.A., & Wilson, M.J., *DRAFT Important Wildlife Areas in the Western Northwest Territories*, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

### **Level IV Ecoregions**

Ecological classification is a way of describing, assessing and categorizing the ecological diversity of an area (including but not limited to soil type, precipitation and climate, landforms, and vegetation). The Government of the Northwest Territories classified the large majority of the Sahtu Settlement Area (SSA) in detail through Level IV Ecoregions. The Sahtu Land Use Plan has referred to these Level IV Ecoregions so that interested parties can refer directly to the GNWT reports for complete descriptions.

When "Level IV Ecoregion" is used in the Zone Description, it is in reference to the classification system described in the following reports:

Ecosystem Classification Group. 2007 (rev 2009). *Ecological Regions of the Northwest Territories - Taiga Plains*. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, Canada. viii + 173 pp. + folded insert map

Ecosystem Classification Group. 2010. *DRAFT Ecological Regions of the Northwest Territories - Cordillera*. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, Canada. viii + 245 + x pp. + insert map

Ecosystem Classification Group. 2008. *Ecological Regions of the Northwest Territories - Taiga Shield*. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, Canada. viii + 146 pp. + insert map

#### **Permafrost**

Environment Canada provided a permafrost map that describes extent of coverage through ranges in percentages (Continuous, Discontinuous and Sporadic Permafrost Zones of Canada (adapted from Atlas of Canada, Natural Resource Canada, 2009). The zones are described as falling into one of two coverage categories:

- "extensive discontinuous permafrost" where permafrost covers between 50%-90% of the landscape; or
- "continuous permafrost" where permafrost covers between 90%-100% of the landscape.

There is no report associated with these classification categories. The primary source of information was provided by Environment Canada and originated from the Atlas of Canada, retrievable at:

http://atlas.nrcan.gc.ca/auth/english/maps/environment/land/permafrost

### **SLUPB-RWED Wildlife Mapping Project**

The Sahtu Land Use Planning Board previously collaborated with Environment and Natural Resources (ENR, previously RWED) wildlife biologists on a project to collect Scientific Traditional Knowledge. The Board worked with the regional wildlife biologists to map their knowledge of wildlife habitat, based on field and on-the-land experience. The project identified the range, occurrence and habitat of key wildlife species that are of interest to people for harvesting and for other reasons.

When Zone Descriptions mention wildlife habitat of a specific species, it often times originates from this source. There is no report associated with the digital maps. The Sahtu Land Use Planning Board is the holder of the GIS shapefiles of this project.

### The People of the Sahtu

Many different cultural groups exist in the Sahtu and each are referred to by a specific name. These names refer to the people of a specific area or region and are sometimes used in the Zone Descriptions. The Districts are based on three main cultural groups in the Sahtu. Within each District are more cultural groups, often named based on their home territory:

- People living in the K'asho Got'ine District with the communities of Fort Good Hope and Colville Lake are called the K'asho Got'ine:
  - Shigago Got'ine people who lived around Little Chicago
  - Ts'oga Got'ine people who lived around Ts'oga
  - o Duta Got'ine people who lived at Duta, Among the Islands
  - Tashin Got'ine people who lived around Lac des Bois
- People living in the Déline District are the Sahtugot'ine;

- People living in the Tulita District with the communities of Norman Wells and Tulita are the Shuta Got'ine;
  - o Shita Got'ine people who lived in the upper Mackenzie Mountains
  - o K'aalo Got'ine people who lived around Willow Lake.

For more information on cultural groups, see:

The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2nd Edition). *Rakekée Gok'é Godi: Places We Take Care Of.* Written by Tom Andrews.

### **Traditional Knowledge (TK) Projects**

A number of traditional knowledge (TK) projects were used in determining the cultural and traditional values of the land. The Zone Descriptions give interested parties an idea of the extent and type of occupation that exists on the land.

A number of sources were merged to create our TK maps, which protects confidentiality of individual data points and sources. The terms used to describe different TK values often vary from one report to another. This means that our TK maps use a number of different terms to describe similar values. Below is a list of terms that are similar in nature but that vary depending on the TK source used – each bullet identifies one type of use:

- o Cultural site, recreational site
- o Cabin, tent frame, outpost camp, camp, tent
- o Archaeological site, burial site, grave
- Heritage site, historic site.

### 5.4 ZONE DESCRIPTIONS

For ease of readability, the Zone Descriptions have been grouped based on their geographic location. The Sahtu Settlement Area (SSA) has been divided into four general areas to help readers navigate their way through the fifty-nine Zone Descriptions. Within each of these general areas, more detailed maps show the location of feature zones in that area. The zone descriptions have been grouped behind the maps on which they are shown so will appear out of numerical order.

A Sahtu Overview map shows the entire Sahtu Settlement Area (SSA), the Mackenzie River Special Management Zone, the Mackenzie River Islands Special Management Zone and Ts'ude niline Tu'eyeta (The Ramparts River and Wetlands). This map also shows the four Sahtu area maps (NW Corner, Great Bear Lake and Area, South-Central Mackenzie Valley, and Mackenzie Mountains). Please consult the table below to better navigate through the Zone Descriptions.

### Table Note:

- Yellow Areas Special Management Zones (SMZ)
- Grey Areas Proposed Conservation Initiatives (PCI)
- Green Areas Conservation Zones (CZ)

For a description of the terms that apply to each zone, please see Chapter 4 of the Plan.

**Table 10. Zone Map Numbers** 

Zone Number and Name	Page #	Area Map Name	Map
1. Marion Lake SMZ	102	NW Corner – 1	11
2. Little Chicago SMZ	103	NW Corner – 1	11
3. Mackenzie River SMZ	88	Sahtu Overview	9
4. Ontaratue River SMZ	106	NW Corner – 1	11
5. Loon River and Fort Anderson Trail SMZ	110	NW Corner – 2	12
6. Hare Indian River SMZ	140	NW Corner – 6	16
7. Bluefish Creek to Tsintu River SMZ	149	NW Corner – 7	17
8. Snafu Creek SMZ	149	NW Corner – 7	17
9. Underground River SMZ	142	NW Corner – 6	16
10. Norman Range SMZ	193	South Central – Overview	22
11. Willow Lake Wetlands SMZ	207	South Central – 2	24
12. Carcajou River SMZ	244	Mackenzie Mountains – 1	27
13. Mackenzie Mountains SMZ	231	Mackenzie Mountains – Overview	26
14. Great Bear River SMZ	185	Great Bear Lake & Area – 3	21
15. Great Bear Lake Watershed SMZ	156	Great Bear Lake & Area – Overview	18
16. Neregah/North Shore SMZ	176	Great Bear Lake & Area – 2	20
17. Horton Lake SMZ	172	Great Bear Lake & Area – 1	19
18. Edaįį́la PCI	163	Great Bear Lake & Area – Overview	18
19. Ts'ude niline Tu'eyeta PCI	92	Sahtu Overview	9
20. Shúhtagot'ıne <b>N</b> éné PCI	235	Mackenzie Mountains – Overview	26
21. Canol Heritage Trail PCI	257	Mackenzie Mountains – 2	28
22. Nááts?ıhchoh PCI	240	Mackenzie Mountains – Overview	26
23. Mackenzie River Islands CZ	97	Sahtu Overview	9
24. Travaillant Uplands CZ Boil Betuwe, Manuel Lake, Onhda Lake, Yealtea Lake	107	NW Corner – 1	11
25. Fort Andersen Trail Lakes CZ Canot Lake, Carcajou Lake, Loon Lake, Rond Lake, Rorey Lake	112	NW Corner – 2	12
26. Colville Upland Lakes CZ Burnt Lake, Long Lake, Stink Lake, Stump Lake, Trout Lake	116	NW Corner – 3	13
27. Aubrey Lake & Dunedelatue Lake CZ	122	NW Corner – 4	14
28. Ts'oga Tue CZ	118	NW Corner – 3	13
29. Maunoir Dome CZ	124	NW Corner – 4	14
30. Anderson River CZ	135	NW Corner – 5	15
31. Dene Di Gon'e CZ	127	NW Corner – 4	14
32. Lac Des Bois CZ	128	NW Corner – 4	14
33. Lac Belot CZ	131	NW Corner – 4	14

Zone Number and Name	Page #	Area Map Name	Map
34. Tunago Lake CZ	145	NW Corner – 6	16
35. Lac a Jacques CZ	198	South Central – 1	23
36. Nerehtene CZ	151	NW Corner – 7	17
37. Yamoga Rock CZ	200	South Central – 1	23
38. Chick Lake CZ	200	South Central – 1	23
39. Mountain River Extension CZ	246	Mackenzie Mountains – 1	27
40. Sam McRae Lake CZ	200	South Central – 1	23
41. Turton Lake CZ	200	South Central – 1	23
42. Doctor Lake CZ	204	South Central – 1	23
43. Mahoney Lake CZ	209	South Central – 2	24
44. Willow Lake Wetlands CZ	212	South Central – 2	24
45. Kelly and Lennie Lake CZ	215	South Central – 2	24
46. Kelly Lake Protected Area (Land Claim) CZ	215	South Central – 2	24
47. Oscar Lake CZ	200	South Central – 1	23
48. Three Day Lake CZ	248	Mackenzie Mountains – 1	27
49. Mountain Lakes CZ	250	Mackenzie Mountains – 1	27
50. Plains of Abraham CZ	253	Mackenzie Mountains – 1	27
51. Mountain Hot Springs CZ	260	Mackenzie Mountains – 2	28
52. Red Dog Mountain CZ	222	South Central – 3	25
53. Stewart and Tate Lakes CZ	224	South Central – 3	25
54. Mio Lake CZ	226	South Central – 3	25
55. Mackay, Rusty and Yellow Lakes CZ	227	South Central – 3	25
56. Bear Rock CZ	218	South Central – 2	24
57. Johnny Hoe River (Tehkaicho Dé) CZ	188	Great Bear Lake & Area – 3	21
58. Whitefish River (Luchaniline) CZ	180	Great Bear Lake & Area – 2	20
59. Sentinel Islands (Du K'ets'Edi) CZ	168	Great Bear Lake & Area – Overview	18

### Map 9. Sahtu Overview

### 3. MACKENZIE RIVER (Dehcho) Special Management Zone

Dene Place Name:	Dehcho
Size:	6,335 km <sup>2</sup>
Elevation (min, max, average):	0 m, 490 m, 101 m

### **Reasons for Special Management**

- The Mackenzie River Special Management Zone provides protection for cultural heritage areas such as grave sites and archaeological sites, recreation and subsistence use areas such as community gathering places, and harvest locations.
- Ecologically speaking, it also offers added protection to the river by way of protecting its shoreline.
- Provides for continued use as an important transportation corridor (barge traffic and landing sites, winter road).

#### **Location and Boundaries**

The Mackenzie River (Dehcho) Special Management Zone is a 5 km buffer that applies to the entire length of the Mackenzie River as it runs through the SSA. The communities of Tulita, Norman Wells and Fort Good Hope are located along the Mackenzie River but lands within community boundaries are exempt from the Plan.

### **Land Ownership**

The Mackenzie River lies within the Tulita and K'asho Got'ine Districts and consist of a mix of Crown and Sahtu lands. The Crown holds all subsurface rights.

### **Ecological Importance**

Geological Province: Interior Platform; tiny fragments cross into Cordilleran Orogen

<u>Permafrost Type(s)</u>: From Mountain River running north into the Gwich'in Settlement Area: continuous permafrost

From Dehcho Territory until the confluence with Mountain River: extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: From north to south - Arctic Red Plain HS; Travaillant Upland HS; Arctic Red Plain LS; North Mackenzie Plain LS; Norman Range LS; Central Mackenzie Valley Lsb

<u>Major Watershed(s)</u>: Lower Mackenzie; Central Mackenzie – The Ramparts; Central Mackenzie – Blackwater Lake

<u>Regional Watershed(s)</u>: Lower Mackenzie – Ontaratue; Central Mackenzie – Ramparts; Central Mackenzie – Little Bear; Central Mackenzie - Blackwater

<u>Burn History</u>: Fires have occurred at different locations along the shores of the river, dating back to the 1980s and to the 1960s

### **Ecological features**:

- 1. Three species of rare or possibly at risk plants have been identified along the Mackenzie River shores: *Rorippa crystalline, Symphyotrichum yukonense,* and *Rorippa barbareifolia*<sup>91</sup>
- 2. From Fort Good Hope to Snafu Creek, the eastern shore of the Mackenzie River has been identified as an area of high importance for meeting ecological representation in protected areas across the Sahtu and the NWT<sup>92</sup>
- 3. A number of bear harvest and habitat sites are located along the Mackenzie River. An especially large habitat and harvest area is located near Norman Wells starting about halfway to Tulita and continuing north about one third of the way to Fort Good Hope
- 4. The Bluenose East herd uses the southern portion of the Mackenzie River during the fall post rut in November<sup>93</sup>
- 5. The entire zone is important duck breeding habitat (also heavily used by migrating waterfowl)<sup>94</sup>
- 6. CWS has identified two Migratory Bird Terrestrial Habitat Sites along the river
- 7. An Important Wildlife Area<sup>95</sup> for furbearers is located at the southern tip of the zone where the Sahtu meets the Dehcho Territory and other large areas have been identified as furbearer habitat by various TK sources
- 8. A large number of fish habitat areas are located all along the Mackenzie River
- 9. Important as a resting stop for migratory waterfowl and is general waterfowl and bird habitat. The shoreline is habitat for sandpipers. The Sans Sault Rapids and the Ramparts Rapids are also important feeding areas for scoters (black-ducks). Other waterfowl also use the river for food.

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<sup>&</sup>lt;sup>91</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>
<sup>92</sup> ibid

<sup>&</sup>lt;sup>93</sup> Nagy, J.A, Wright, W.H, Slack, T.M, and Veitch, A.M. 2005. Seasonal Ranges of the Cape Bathurst, Bluenose-West and Bluenose East Barren-Ground Caribou Herds, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories

<sup>&</sup>lt;sup>94</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>95</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- 10. Raptor nest sites can be found along the banks of the river.
- 11. Moose surveys in the Sahtu have found that riparian areas along the Mackenzie River and its tributaries consistently have high moose densities in the winter demonstrating appropriate winter moose habitat. 96
- 12. Boreal woodland caribou are present in this zone. 97

### Socio-Cultural Importance

The Mackenzie River, or Dehcho (Big River) is a symbolic focal point of Sahtu Dene and Métis culture and history. For as long as the Dene and Métis have lived in the area, the Mackenzie River has served as a valuable transportation corridor, cultural, recreational, subsistence use and harvest location. It is also an important Regional and Territorial travel and transportation corridor, subsistence use area and heritage place for aboriginal people outside of the Sahtu. It is associated with a number of legends, including the stories of Yamoria. The Mackenzie River has been extensively used over the years and continues to be a central part of peoples' lives. It is not possible to locate every point of significance on the River but a list of primary interest sites is provided below.

### Socio-cultural features:

- 1. Heritage, Cultural or Important Sites found along the Mackenzie River include:
  - o Shigago, north of Fort Good Hope
  - Manitou Island, across the river from Fort Good Hope
  - Sans Sault Rapids south of Fort Good Hope
  - o Bear Rock, across the river from Tulita
  - o Old Fort Point, south of Tulita
- 2. Very high concentration of archaeological and burial sites all along the river
- 3. High concentration of historic, cultural and sacred sites along the river
- 4. Recreational areas often found on the islands, along the river and some significantly large areas around the Ramparts
- 5. Cabins, camp sites, tent frames and fish camps spread all along the river
- 6. Berry picking and plant harvest sites along the river
- 7. Traditional trails leading north and south and on the Mackenzie River Islands
- 8. Log timber collection sites along the southern shores

http://www.sahtulanduseplan.org/ftpfiles/public\_comments/SRRB\_Aug%205-09.pdf

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008,
 Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 SRRB Comments on Draft 2 SLUP, Aug 5/09, Available at:

- 9. Special Harvesting Areas (as per *SDMCLCA*) for fish, moose and migratory birds are located throughout the zone
- 10. The entire zone is extensively used for the harvesting of furbearers and other wildlife species such as moose, fish, and boreal woodland caribou

The reports *Rakekée Gok'é Godi: Places We Take Care Of* and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*<sup>98</sup> recommend that the following be undertaken:

- Heritage River and National Historic Site designation;
- Oral history and archaeological research to document and protect existing heritage resources:
- Protection of the surface of documented sites.

### **Economic Importance**

### Oil and Gas Potential:

The Dehcho Territory and SSA border to Tulita: low to moderate; moderate to high

Tulita to Mountain River: high to very high

Mountain River to Fort Good Hope: mostly moderate to high Fort Good Hope to SSA border with Gwich'in: moderate

### Oil and Gas Rights:

Two exploration licences at Tulita

One exploration licence on western bank of the Mackenzie River at the southern end of the zone near SSA/Dehcho Territory border

<u>Mineralization</u>: Coal deposit on Mackenzie River Island south of Tulita and directly east of Mackay Lake

Mineral Rights: Two mineral claims north of Tulita on the western bank of the river, directly east of Mirror Lake

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Potential hydroelectric site, Mackenzie River – Norman Wells HPP, located along Mackenzie River, directly east of Mirror Lake

### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>98</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

# 19. TS'UDE NILINE TU'EYETA (Ramparts River and Wetlands) Proposed Conservation Initiative

Dene Place Name:	Ts'ude niline Tu'eyeta
Size:	15,136 km <sup>2</sup>
Elevation (min, max, average):	13 m: 2097 m: 271 m

### **Reasons for Conservation**

- Ts'ude niline Tu'eyeta is a sacred place and harvesting area of the Fort Good Hope Dene.
- For generations it has been used for trapping, hunting, fishing, and camping. It has many archaeological, burial and historic sites.
- The Ramparts River watershed is a critical wetland that filters millions of gallons of water per day. As a key migratory bird terrestrial habitat site, the wetlands provide excellent nesting, brood rearing and staging habitat for ducks, geese and loons. Six species at risk peregrine falcon, grizzly bear, mountain caribou, wolverine, short-eared owl, and boreal woodland caribou are also found within the Candidate Protected Area.

#### **Location and Boundaries**

Ts'ude'hiline-Tuyeta (Ramparts River and Wetlands) is located in the north-western edge of the SSA, north of the Mackenzie Mountains and west of the Mackenzie River. It is nearest to the community of Fort Good Hope.

The Ramparts River and Wetlands flows from the foothills of the Mackenzie Mountains east to the Mackenzie River, entering it just above the Ramparts Canyon, and the community of Fort Good Hope. The Ramparts River and Wetlands PCI contains many named places including a sacred site, the Thunderbird Place and The Ramparts or Fee Yee, which is the only canyon-like feature on the Mackenzie River.

### **Land Ownership**

The large majority is Crown land. The K'ahso Got'ine District holds surface rights to two small parcels: one just south of the eastern segment of the Ontaratue River as it exits the Ramparts (where subsurface rights are also held) and the second at Fossil Creek and the surrounding area. The District holds subsurface rights to a parcel along the NWT/Yukon border.

### **Conservation Initiative Status**<sup>99</sup>

The Canadian Wildlife Service (CWS) is sponsoring the Ts'ude niline Tu'eyeta Candidate Protected Area and is seeking permanent protection for the area through the *Canada Wildlife Act*. The Yamoga Land Corporation is the local lead. A four-year interim land withdrawal was approved in November 2007 until October 31, 2011.

<sup>99</sup> PAS website: http://www.nwtpas.ca/area-tsudeniline.asp

Ts'ude niline Tu'eyeta is early in Step 5 of the PAS – a working group has been established, and assessments of the area's ecological, cultural and economic values are in progress. Once complete, assessment results and options for final designation, boundaries, and management of the area will be presented to communities and other stakeholders.

### **Ecological Importance**

The Working Group has developed an ecological assessment on the area as part of the PAS process. Readers are referred to this report for more detailed information on this area. <sup>100</sup>

<u>Geological Province</u>: The majority of the zone is in the Interior Platform; the southern tip is in the Cordilleran Orogen

<u>Permafrost Type(s)</u>: continuous permafrost

<u>Level IV Ecoregion(s)</u>: Arctic Red Plain LS; Arctic Red Plain HS (only the northern tip); Arctic Red Upland LSb; Shattered Ranges HSas (only the southern tip); North Mackenzie Plain LS (the eastern edge along the Mackenzie River)

<u>Major Watershed(s)</u>: Central Mackenzie – The Ramparts

<u>Regional Watershed(s)</u>: Central Mackenzie – Ramparts

<u>Burn History</u>: A number of significant burns have occurred in the Ramparts and Wetlands over the years. The northern portion was burned in the 1990s and the eastern edge along the Mackenzie River and extending significantly into the zone was burned in the 1960s. Other smaller parcels also burned at different times.

The wetlands are comprised of numerous lakes between the Hume, Ramparts and Ontaratue Rivers. The Ramparts is the only canyon-like feature on the Mackenzie River and serves as a unique and important landmark.<sup>101</sup>

The area of wetland in this zone and the Ramparts River supports high densities of moose. The wetland is also high quality beaver habitat and has been called "the best beaver habitat north of Fort Simpson" (Wooley 1974). Surveys in 1989, 1997, and 2001 found densities from 58 – 86 active beaver lodges per 100 km² for a portion of the wetlands. The wetlands of the wetlands.

The zone is habitat for boreal woodland caribou, mountain caribou, moose, sheep, black bear, grizzly bear, wolverine, marten, beaver, muskrat, mink, red fox, wolf, lynx, snowshoe hare,

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<sup>&</sup>lt;sup>100</sup> Ecological Assessment of the Ts'ude niline Tu'eyeta Candidate Protected Area, May 2007. Available at: <a href="http://www.nwtpas.ca/areas/document-2007-ramparts-eafull.pdf">http://www.nwtpas.ca/areas/document-2007-ramparts-eafull.pdf</a>

<sup>&</sup>lt;sup>101</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 ibid

<sup>&</sup>lt;sup>104</sup> ibid

peregrine falcons and numerous species of waterfowl. The zone is habitat for a small herd of boreal woodland caribou.

The wetlands are critical habitat for thousands of nesting, brood-rearing and staging waterfowl of numerous species. The Canadian Wildlife Service (CWS) has identified the wetlands as a Key Habitat Site because the zone is habitat for more than 1% of the Canadian population of scaup, scoter and pacific loons as well as many other species of waterfowl and birds.

Peregrine falcons are known to nest in the zone. This has been observed in surveys held every 5 years since the 1970s. <sup>105</sup> This zone is one of three key high density sites in the Mackenzie Valley that is believed to support at least half of the valley's population of nesting peregrine falcons. <sup>106</sup>

Most of the lakes in the wetlands contain pike and a few of the larger lakes are known to have whitefish. The Ramparts Rapids are a spawning area for cisco and river whitefish. <sup>107</sup>

### **Ecological features**:

- 1. CWS has identified the entire wetlands as a key waterfowl and bird habitat site. In addition to this, general waterfowl and bird habitat exists throughout the zone
- 2. An Important Wildlife Area 108 for woodland caribou is identified throughout a significant portion of the zone
- 3. Muskox habitat is found in the southern portion of the zone
- 4. The southern tip of the zone is within the Bonnet Plume Mountain Woodland caribou migration path
- 5. Furbearer habitat occurs throughout the zone and the entire Ramparts Wetland is an Important Wildlife Area for furbearers<sup>109</sup>
- 6. An esker is found in the northern end of the zone by the Ontaratue River
- 7. The southern end of the zone is within goat habitat
- 8. Important breeding duck habitat<sup>110</sup> occurs throughout the zone and especially throughout the wetland area
- 9. A small section in the south-western corner is an Important Wildlife Area for Dall's Sheep<sup>111</sup> and Dall's sheep have been observed in the southern portion of the zone
- 10. Bear habitat is located throughout the wetlands
- 11. Habitat for wildlife species such as: marten, mink, wolf, wolverine, fox and moose
- 12. Critical raptor nesting area according to DIAND
- 13. Good fish lakes are rare but those that exist are important for subsistence 112

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<sup>&</sup>lt;sup>105</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>106</sup> ibid

<sup>&</sup>lt;sup>107</sup> John T'seleie, Draft 2 Comments available at: www.sahtulanduseplan.org

<sup>&</sup>lt;sup>108</sup> ihid

<sup>&</sup>lt;sup>109</sup> ibid

<sup>&</sup>lt;sup>110</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>111</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

### Socio-Cultural Importance

Ts'ude'hiline-Tuyeta, the Ramparts River and Wetlands PCI encompasses a number of named placed including a sacred site, Thunderbird Place, and Fee Yee, the Ramparts, a canyon-like area along the Mackenzie River.

The Ramparts River meanders "through critical wetlands and has been an important hunting, trapping and fishing area for Fort Good Hope families for generations. The area is particularly important for hunting moose, beaver, and muskrats. The area is also a critical waterfowl breeding site and known as an excellent place to begin teaching young hunters the rules and behaviours necessary for a successful hunt." <sup>113</sup>

The zone is important for the stories that are associated with specific places and events, and for the history, values and law of the K'asho Got'ine that these stories preserve. It is important for its educational value and the transmission of culture from the elders to the younger generation. It continues to be used for the teaching of legends, history, values, law and land based skills.

#### **Thunderbird Place**

The Thunderbird Place is located on a sharp bend in the Ramparts River. For a long time it was a dangerous place where a giant Thunderbird lived and killed travellers. One day an elder with powerful medicine killed the Thunderbird, making river travel safe again. "There are several place in the Sahtu Settlement Area where other water monsters live or have lived and these places are always considered dangerous, requiring special rituals or practices when travelling nearby." To this day, people still feel uneasy when travelling past the Thunderbird Place.

# Fee Yee, The Ramparts

"The only canyon-like feature on the Mackenzie River, the Ramparts is a unique and important landmark. Called Fee Yee in Slavey, it is the location of an important domestic fishery. In historic times Fee Yee was also used as a refuge for local people to defend against raiding parties of Inuit travelling upstream from the coast." 114

Many of the topographic features at the Fee Yee were created by a giant, an important legendary hero for the people of FGH. A number of places within or near the the Ramparts have their own name or stories. "The Ramparts rapids were created when Wichididelle threw rocks at a giant beaver. There's also a place where he laid down for a nap – his head and footprints can still be seen today. The small waterfall is where he had a pee... His boat is located above the rapids (Spruce Island is said to be his overturned boat)... His boat is still there." 115

<sup>112</sup> ibid

<sup>&</sup>lt;sup>113</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews. P. 68

<sup>&</sup>lt;sup>114</sup> Ibid, P. 32

<sup>&</sup>lt;sup>115</sup> Ibid, P. 32

#### Socio-cultural features:

- 1. Many named places exist in this zone, including a sacred site, the Thunderbird Place 116
- 2. A number of traditional trails lead into the Ramparts Wetlands
- 3. A number of outpost camps, fish camps, cabins, camps and tent sites are located throughout the wetlands area. Several cabins in the zone are currently in use
- 4. Historic and cultural sites located throughout and mostly concentrated in the wetlands area
- 5. Some archaeological and burial sites located in the wetlands area
- 6. Log timber harvesting occurs along the shore of the Mackenzie River
- 7. Harvest of waterfowl and birds takes place in high concentration throughout the zone
- 8. Furbearer harvest throughout the zone is amongst one of the highest concentrations throughout the Sahtu Settlement Area
- 9. Fish harvesting mostly takes place throughout the wetland and along the Mackenzie River shore. At times it takes place in the southern portion of the zone
- 10. Bears are harvested in the wetlands
- 11. As per the *SDMCLCA*, a Special Harvesting Area for fish is located on the western shore of the Mackenzie, just south of Fort Good Hope
- 12. The K'ahso Got'ine use the zone to hunt moose, caribou, beaver, muskrat, and waterfowl

The reports *Rakekée Gok'é Godi: Places We Take Care Of* and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*<sup>117</sup> recommend a combination of the following actions: <sup>118</sup>

# Fee Yee, The Ramparts

- Designate a National Historic Site
- Protect the site by extending Fort Good Hope's community boundary to encompass area and provide for a local management regime. Designate as Commissioner's Land.

#### **Ramparts River and Wetlands**

- Designate a Heritage River
- Designate the wetlands a Migratory Bird Sanctuary to protect waterfowl nesting and staging areas
- Designate the river and wetlands a Critical Wildlife Area to protect subsistence and trapping species
- Oral history and archaeological research to document and protect heritage resources and burials
- Surface protection of documented sites

#### The Thunderbird Place

 Undertake oral history research and give special consideration in the land use planning process

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<sup>&</sup>lt;sup>116</sup> Ibid, P. 74

<sup>&</sup>lt;sup>117</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

<sup>&</sup>lt;sup>118</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

#### **Economic Importance**

The Working Group has developed renewable and non-renewable resource assessments on the area as part of the PAS process. Readers are referred to these reports for more detailed information on this area.<sup>119</sup>

Oil and Gas Potential: High; see PAS non-renewable resource report

Oil and Gas Rights: None

Mineralization: Undetermined; see PAS non-renewable resource report

Mineral Rights: None

<u>Tourism and Outfitting Potential</u>: Arctic Red River Oufitters and Gana River Outfitters; Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; two identified airstrips in the Mountain River corridor

#### **Applicable Conditions**

All General and Special Management Terms apply

23. MACKENZIE RIVER ISLANDS Conservation Zone	
Dene Place Name:	To be determined
Size:	57 km <sup>2</sup>
Elevation (min, max, average):	0 m; 174 m; 53 m

#### **Reasons for Conservation**

The Mackenzie River Islands have been used by the Dene and Métis for as long as they have been travelling on the river. The river serves as an important transportation corridor where hunting, fishing and trapping all take place. The islands are used during travel and for recreational and cultural activities. Cabins and camps are located on them.

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Renewable Resource Assessment, Ramparts River and Wetland Candidate Protected Area, EBA Engineering Consultants Ltd, August 2006. Available at: <a href="http://www.nwtpas.ca/areas/document-2006-rampartsdraftrra.pdf">http://www.nwtpas.ca/areas/document-2006-rampartsdraftrra.pdf</a>

Ts' ude niline Tu' eyeta (Ramparts River and Wetlands) Candidate Protected Area, Phase 1 Non-renewable Resource Assessment – Minerals, NWT Geoscience Office, NWT Open File, March 18, 2008, Ts' ude niline Tu' eyeta (Ramparts River and Wetlands) Candidate Protected Area Phase 1 Non-renewable Resource Assessment – Petroleum, NWT Geoscience Office, NWT Open File, February 20, 2007

#### **Location and Boundaries**

The Mackenzie River Islands Conservation Zone includes a number of islands in the K'asho Got'ine District.

## **Land Ownership**

The K'asho Got'ine District holds surface title to a few of the Mackenzie Islands. The rest are held by the Crown as is all subsurface title.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: all but the most southern Mackenzie islands are in continuous; south of Mountain River Extension the islands are in extensive discontinuous permafrost

Level IV Ecoregion(s): Arctic Red Plain HS; Arctic Red Plain LS; North Mackenzie Plain LS

<u>Major Watershed(s)</u>: Lower Mackenzie; Central Mackenzie – The Ramparts

<u>Regional Watershed(s)</u>: Lower Mackenzie – Ontaratue; Central Mackenzie – Ramparts, Central Mackenzie – Little Bear

**Burn History**: The recent history does not show any burns

#### **Ecological features:**

- 1. Moose habitat in the area. Moose surveys in the Sahtu have found that riparian areas along the Mackenzie River and its Islands have high moose densities in the winter 120
- 2. Waterfowl and bird habitat
- 3. All of the islands are Important Wildlife Areas<sup>121</sup> for moose and consist of general moose habitat as identified by a number of TK sources
- 4. Furbearer habitat exists all along the River and on the large majority of the islands
- 5. All of the islands are important breeding duck habitat 122
- 6. Some of the islands are identified as key migratory bird habitat by CWS<sup>123</sup>
- 7. One of the islands between Snafu Creek and Chick Lake is considered important for ecological representation 124
- 8. Rare or possible at risk plants have been identified on the islands:
  - o Rorippa barbareifolia

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Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 ibid

<sup>&</sup>lt;sup>122</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.

http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>123</sup> Latour et al., 2008

<sup>&</sup>lt;sup>124</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. http://www.sahtulanduseplan.org/ftpfiles/p

### **Socio-Cultural Importance**

As a subsistence use area the Mackenzie River and its islands continue to provide critical domestic fisheries, moose and waterfowl hunting areas, travel access to many other locations, and are associated with numerous legends including stories of Yamoria.

#### Socio-cultural features:

- 1. Moose and migratory bird Special Harvesting Areas occur on islands along the Mackenzie
- 2. Traditional trails run the length of the river, along the islands
- 3. Moose harvesting takes place in very high concentration on the islands
- 4. Fish harvesting occurs on almost all islands
- 5. Furbearer harvesting takes place in very high concentration on the islands
- 6. Bears are harvested
- 7. Barren-ground caribou are harvested
- 8. A high concentration of archaeological and burial sites are located on the islands
- 9. Cabins and fish camps are located on the islands
- 10. A high concentration of recreational areas and historical sites are located on the islands

#### **Economic Importance**

#### Oil and Gas Potential:

The Dehcho Territory and SSA border to Tulita: low to moderate; moderate to high

Tulita to Mountain River: high to very high

Mountain River to Fort Good Hope: mostly moderate to high Fort Good Hope to SSA border with Gwich'in: moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

# Map 10. NW Corner - Overview

# Map 11. NW Corner - 1

# 1. MARION LAKE Special Management Zone

Dene Place Name:Qhdarah TuéSize:1,780 km²Elevation (min, max, average):28 m; 461 m; 227 m

# **Reasons for Special Management**

- Marion Lake and a number of the surrounding fish lakes were identified as important subsistence use sites.
- This zone is an important heritage location with a number of burial and archaeological sites.
- Marion Lake has moderate/high to high Oil and Gas Potential.

#### **Location and Boundaries**

The Marion Lake Special Management Zone includes Marion Lake and a number of other fish lakes in the north-western tip of the SSA. The zone lies west of the Mackenzie River as it enters the Gwichi'in Settlement Area.

# **Land Ownership**

The K'asho Got'ine District holds surface title to the area around Marion Lake and a few other small parcels of land. The District also holds subsurface rights to a small parcel of land at the western edge of the zone. The remainder is Crown land.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Travaillant Upland HS; Arctic Red Plain HS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Lower Mackenzie - Ontaratue

<u>Burn History</u>: The southern half of the zone experienced a burn in the 1990s and the north-eastern portion was burned in the 1980s. A fragment in the north-western portion was burned in the 2000s.

# **Ecological features:**

1. Eskers (valuable wildlife habitat, serve as prime denning areas)

- 2. Important breeding duck habitat concentrated around Marion and other lakes 125
- 3. Furbearer habitat located around lakes and throughout zone
- 4. Waterfowl and bird habitat and harvest areas around lakes and throughout zone

#### **Socio-Cultural Importance**

This zone's primary importance lies in its heritage and subsistence use values. There are a number of outpost camps, documented archaeological sites and traditional trails. Waterfowl, bird and furbearer harvest areas can be found around the lakes and throughout the zone.

#### **Economic Importance**

Oil and Gas Potential: Moderate to high in the western half; high in the eastern half

Oil and Gas Rights: Exploration licence in north-eastern corner of zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: None identified

## **Applicable Conditions**

All General and Special Management Terms apply

2. LITTLE CHICAGO Special Management Zone	
Dene Place Name:	Shigago
Size:	116 km²
Elevation (min, max, average):	7 m; 77 m; 37 m

## **Reasons for Special Management**

- Little Chicago is of valuable cultural significance. The Special Management Zone is in place to protect physical heritage in the form of heritage buildings, grave sites, traditional trails, camp sites, cabins and archaeological sites.
- The zone continues to be a destination for subsistence use where families and hunters camp, hunt and fish.
- Provides for the continued use of important infrastructure for economic development such as barge landing sites, airstrips, equipment staging areas and access roads.

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<sup>&</sup>lt;sup>125</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

#### **Location and Boundaries**

The Little Chicago Special Management Zone is located on the Mackenzie River in the northern portion of the Sahtu, near its boundary with the Gwich'in. The 1.5 km buffer around the islands and shoreline were set to include all cabins and heritage locations as well as the airstrip and barge landing sites to enable future development and use of the area.

#### **Land Ownership**

The K'asho Got'ine District holds surface title to the islands and the eastern side of the zone. All other land is Crown land and the Crown retains subsurface ownership.

## **Ecological Importance**

**Geological Province:** Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Arctic Red Plain HS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Lower Mackenzie - Ontaratue

<u>Burn History</u>: The western portion of the zone burned in the 1960s and the eastern portion burned in the 1980s

#### **Ecological features:**

- 1. The entire zone is important breeding duck habitat 126
- 2. Important Wildlife Area<sup>127</sup> for moose exists throughout the zone
- 3. CWS Terrestrial Habitat Site<sup>128</sup> for migratory birds

#### Socio-Cultural Importance

This is an important home base for the Shigago Got'ine regional group. <sup>129</sup> A number of families such as the Charney, Edgi and Shae families have traditionally and continue to use this area. <sup>130</sup>

"Rakekee Gok'e Godi: Places we Take Care Or. Written by Tom Andr <sup>130</sup> ihid

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Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. <a href="http://www.sahtulanduseplan.org/website/web-content/index.html">http://www.sahtulanduseplan.org/website/web-content/index.html</a>

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

Latour, P.B, Leger, J, Hines, J.E., Mallory, M.L., Mulders, D.L., Gilchrist, H.G., Smith, P.A., & Dickson, D.L., March 2006, Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut, 3rd. Ed., Occasional Paper, Canadian Wildli

<sup>&</sup>lt;sup>129</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

The zone is used for hunting, fishing, trapping, and harvesting of migrating waterfowl (particularly snow geese) in the spring. In the summer some families set up fish camps.

During the fur trade era, several independent fur traders established cabins in the area. The site was named after a group of prospectors from Chicago stopped in the area on their way to the Klondike to trap. <sup>131</sup>

#### Socio-cultural features:

- 1. A number of heritage sites including grave sites, camp sites and archaeological sites
- 2. A cultural site and two extensive recreational areas
- 3. Abandoned cabins and an outpost camp
- 4. A strong presence of traditional trails
- 5. Special Harvesting Area (as per SDMCLCA) for fish and birds
- 6. Barren-ground caribou harvest area
- 7. The majority of the zone is a furbearer harvesting area
- 8. A number of fish harvesting areas
- 9. The entire zone used for moose harvesting

The Rakekée Gok'é Godi: Places We Take Care Of and Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001 reports suggested:

- Territorial Historic Park designation in partnership with Fort Good Hope to assure continued subsistence use by communities;
- Oral history and archaeological research to document and protect heritage resources;
- Architectural and historical documentation of buildings to examine potential for preservation and restoration; and
- Surface protection of documented sites.

#### **Economic Importance**

Oil and Gas Potential: Moderate

Oil and Gas Rights: Exploration licence in the western half of the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: A number of infrastructure sites including a barge landing site, airstrip and staging area. No identified hydroelectric potential

### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>131</sup>Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

# 4. ONTARATUE RIVER Special Management Zone

Dene Place Name:Besala NilineSize:66 km²Elevation (min, max, average):21 m; 165 m; 103 m

### **Reasons for Special Management**

- The community of Fort Good Hope requested that a number of rivers and large creeks in the K'asho Got'ine District be given a 1 km buffer along each side of the shores to protect a combination of recreational and subsistence uses.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.

#### **Location and Boundaries**

A 1 km special management buffer has been applied on both shores of the portion of Ontaratue River that extends north of the Ts'ude niline Tu'eyeta, Ramparts proposed NWT PAS boundary.

#### **Land Ownership**

The zone is on Crown Land.

# **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Arctic Red Plain HS; Arctic Red Plain LS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Lower Mackenzie Ontaratue

Regional Watershed(s): Lower Mackenzie Ontaratue

Burn History: The entire zone was burned in the 1990s and a small segment in the 1980s

### **Ecological features**:

- 1. Fish habitat site at the eastern portion
- 2. Moose Important Wildlife Area throughout the entire river and zone

#### **Socio-Cultural Importance**

# Socio-cultural features:

1. A number of traditional trails use the Ontaratue River to travel from the Mackenzie River into the northern portion of Ts'ude niline Tu'eyeta, Ramparts

- 2. Bear and caribou harvest occur at its confluence with the Mackenzie River
- 3. Log timber harvest takes place at its confluence with the Mackenzie River

### **Economic Importance**

Oil and Gas Potential: Western end – high; Eastern end – moderate to high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

# 24. TRAVAILLANT UPLANDS Conservation Zone (Yeltea Lake, Manuel Lake, Boil Betuwe, Onhda Lake)

Dene Place Name:	To be determined
Size:	187 km <sup>2</sup>
Elevation (min, max, average):	152 m; 320 m; 199 m

#### **Reasons for Conservation**

- The community of Fort Good Hope requested that a number of fish lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the fish and to ensure their continued harvest.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.

#### **Location and Boundaries**

The lakes included in the Travaillant Uplands CZ are located in the north-western corner of the K'asho Got'ine District, just east of the Mackenzie River.

## **Land Ownership**

The K'asho Got'ine District holds surface title to the lands around both Yeltea and Manuel Lake. All other land is Crown land. The Crown also holds all subsurface rights.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

<u>Level IV Ecoregion(s)</u>: Travaillant Uplands HS

Major Watershed(s): Southern Beaufort Sea; Lower Mackenzie

<u>Regional Watershed(s)</u>: ; Lower Mackenzie – Ontaratue

<u>Burn History</u>: A large burn occurred in the 1960s between Yeltea and Manuel Lakes. A burn occurred in the 1970s around Boil Betuwe and Onhda Lakes.

#### Ecological features:

1. Important Wildlife Area for furbearers 132

- 2. Yeltea and Manuel Lakes have been identified as important breeding duck habitat 133
- 3. Important area for ecological representation between Yeltea and Manuel Lakes; eskers (valuable wildlife habitat, serves as prime denning areas) also appear in this area
- 4. Bluenose West barren-ground caribou herd occur around Manuel Lake in the winter from December to March

## **Socio-Cultural Importance**

### Socio-cultural features:

- 1. Traditional trails occur in high concentration across all of the lakes
- 2. Outpost camps lie along all lakes and cabins are found on both Yeltea and Manuel Lakes
- 3. Both Yeltea and Manuel Lakes make up significantly large recreational areas
- 4. Waterfowl and bird harvest takes places around all the lakes
- 5. Fish harvesting take place on Yeltea and Manuel Lakes
- 6. Furbearer harvesting takes place around all the lakes
- 7. Barren-ground caribou harvest takes place around all of the lakes

#### **Economic Importance**

Oil and Gas Potential: Manuel & Yeltea – moderate; Boil Betuwe & Onhda – moderate to high Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: One significantly large mineral claim at the southern end of Manuel Lake

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined, Yeltea Lake is a water source

## **Applicable Conditions**

All General and Special Management Terms apply

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Vellowknife, NT

<sup>&</sup>lt;sup>133</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

# Map 12. NW Corner – 2

# 5. LOON RIVER TO FORT ANDERSON TRAIL Special Management Zone

Dene Place Name:	Sihonilįne ?ehtene
Size:	329 km <sup>2</sup>
Elevation (min, max, average):	36 m; 248 m; 135 m

#### **Reasons for Special Management**

The primary reason for the Loon River to Fort Anderson Trail is to preserve its heritage and cultural values. The trail was used for generations as one of the main routes to the barrenlands for summer and fall caribou hunting. Many stories, heritage sites and named places are associated with this trail and occur along its path.

#### **Location and Boundaries**

The trail begins at the mouth of the Loon River, at its confluence with the Mackenzie River. The trail heads northeast to Loon Lake, on to Rorey Lake, following the west shore, overland to Round Lake (by the west shore), on to Carcajou Lake, Canot Lake, and overland to the Carnwath River. It then follows the bank of the river to Anderson Forks and down the right bank of the Anderson River to Fort Anderson. 134

#### **Land Ownership**

The southern half of the trail until and encompassing Carcajou Lake, falls under K'asho Got'ine owned surface lands. The rest of the trail and all of the subsurface are held by the Crown.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Anderson Plain HS, and briefly crosses Colville Uplands HS and Travaillant Uplands HS

Major Watershed(s): Lower Mackenzie; Southern Beaufort Sea

Regional Watershed(s): Lower Mackenzie – Ontaratue;

<u>Burn History</u>: Small sections of the trail burned in the 1970s or 1980s but for the most part the trail is free of recent fire history

#### **Ecological features:**

Canot, Carcajou, Rorey and Loon Lakes are all fish lakes

<sup>&</sup>lt;sup>134</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

- A furbearer Important Wildlife Area<sup>135</sup> is located at the northern end of Loon Lake and the southern portion of the trail from the Mackenzie River to the northern end of Rorey Lake is a general area for furbearer habitat
- A rare or possibly at risk plant, *Pedicularis verticillata*, is found along the trail
- Important breeding duck habitat is located around each of the lakes and along the trail
- Bluenose west caribou herd occur:
  - throughout the central portion of the zone, especially around Canot, Carcajou,
     Rond and Rorey Lakes during the fall post-rut in November
  - throughout the central portion of the zone, especially around Carcajou, Rond,
     Rorey and Loon Lakes during the winter from December to March

# **Socio-Cultural Importance**

The primary importance of this trail is due to its cultural significance. Traditional stories are associated with the trail. A sky burial took place at Round Lake where approximately 6 people starved to death. This is a sensitive place for the descendents of those who passed away.

#### Socio-cultural features:

- A number of outpost camps, cabins and archaeological sites located along the length of the trail
- Moose harvesting takes place around and between Carcajou and Rorey Lakes
- Rorey and Round Lake are fish lakes where moose and caribou are hunted
- Gravesites are located at both Rorey and Round Lake
- All of Rorey lake is used as a recreational area
- Berry and plant harvest sites are located around Rorey lake
- Fishing takes place on all of the lakes, Canot, Carcajou, Rorey and Loon
- Furbearer harvesting takes place all along the trail
- A high concentration of documented traditional trails occur throughout the area
- Barren-ground caribou are harvested all along the trail and is highly concentrated around the lakes from just north of Canot Lake to the Mackenzie River
- Waterfowl are harvested around the lakes along the trail

The Rakekée Gok'é Godi: Places We Take Care Of report suggested:

- Oral history and archaeological research to inventory, document and protect heritage resources;
- Surface protection of documented sites with commemoration of specific sites;
- Cultural revival projects (eg. walking the trail with youth and elders) to recreate trail experience; and
- Special consideration in the land use planning process.

# **Economic Importance**

Oil and Gas Potential: Moderate throughout but most northern segment is moderate to high Oil and Gas Rights: None

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<sup>&</sup>lt;sup>135</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

Mineralization: Undetermined

Mineral Rights: A small mineral claim north of Loon Lake, on the western shore

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Loon Lake is a water source; Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

# 25. FORT ANDERSEN TRAIL LAKES Conservation Zone (Canot Lake, Carcajou Lake, Rond Lake, Rorey Lake, Loon Lake)

· · · · · · · · · · · · · · · · · · ·			
Dene Place Name:	To be determined		
Size:	218 km <sup>2</sup>		
Elevation (min, max, average):	67 m; 241 m; 121 m		

#### **Reasons for Conservation**

- The primary reason for the Loon River to Fort Anderson Trail is to preserve its heritage and cultural values. The trail was used for generations as one of the main routes to the barrenlands for summer and fall caribou hunting. Many stories, heritage sites and named places are associated with this trail and the lakes that occur along its path.
- The community of Fort Good Hope requested that the large fish lakes along the trail be given a 500 m conservation buffer to protect the fish and to ensure their continued harvest.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.

#### **Location and Boundaries**

Canot Lake, Carcajou Lake, Rond Lake, Rorey Lake and Loon Lake are all located along the Fort Andersen Trail in the north-western corner of the K'asho Got'ine District.

#### **Land Ownership**

The K'asho Got'ine District owns surface title to all the lands around Carcajou, Rond, Rorey and Loon Lakes. Canot Lake is the only lake along the trail that is owned by the Crown. The Crown retains all subsurface rights.

# **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Anderson Plain HS, and briefly crosses Colville Uplands HS and Travaillant Uplands HS

Major Watershed(s): Lower Mackenzie; Southern Beaufort Sea

<u>Regional Watershed(s)</u>: Lower Mackenzie – Ontaratue;

<u>Burn History</u>: The area between Rorey and Rond lakes burned in the 1970s and the area between Rond Lake and Carcajou Lake burned in the 1980s

#### Ecological features:

- 1. All of the lakes are considered Important Wildlife Areas for furbearers except Canot Lake
- 2. The lakes occur in general furbearer habitat
- 3. All of the lakes are important breeding duck habitat 136
- 4. Bluenose west barren-ground caribou herd occur:
  - o around Canot, Carcajou, Rond and Rorey Lakes during the fall post-rut in November;
  - o around Carcajou, Rond, Rorey and Loon Lakes during the winter from December to March.

## **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. A number of outpost camps and cabins can be found along the shores of the lakes
- 2. Berry picking and plant harvesting sites are located on the lakeshore
- 3. All of Rorey lake is considered a recreational area
- 4. A very high concentration of traditional trails crosses all of the lakes
- 5. Waterfowl are harvested on Canot and Carcajou Lakes
- 6. Moose are harvested around Rorey, Round and Carcajou Lakes
- 7. Fish are harvested on all of the lakes
- 8. Furbearers are harvested on all of the lakes

The "Rakekée Gok'é Godi: Places We Take Care Of" report recommended the trail be recognized as follows:

- Oral history and archaeological research to inventory, document and protect heritage resources:
- Surface protection of documented sites with commemoration of specific sites;
- Cultural revival projects (eg. walking the trail with youth and elders); and
- Special consideration in the land use planning process.

#### **Economic Importance**

Oil and Gas Potential: majority of trail is moderate; southern edge is moderate to high

<sup>&</sup>lt;sup>136</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: One small mineral claim on the western side of the trail, above Loon Lake

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined; Loon Lake is a water source

# **Applicable Conditions**

All General and Special Management Terms apply

# Map 13. NW Corner – 3

# 26. COLVILLE UPLAND LAKES Conservation Zone (Burnt Lake, Long Lake, Stink Lake, Stump Lake, Trout Lake)

Dene Place Name: To be determined

Size: 113 km²

Elevation (min, max, average): 178 m; 314 m; 245 m

#### **Reasons for Conservation**

- The community of Fort Good Hope requested that a number of fish lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the fish and to ensure their continued harvest.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.
- The lakes are in barren-ground caribou habitat and the Bluenose West herd occurs in the area during times of their lifecycle when they are sensitive to disturbance. The herd is found in the zone during the spring migration and pre-calving period from April to May and during the fall rut, fall post rut and over the winter from October to March.

#### **Location and Boundaries**

The lakes are located in the north-western corner of the K'asho Got'ine District, to the west of Colville Lake.

#### **Land Ownership**

The land is all Crown land except for a small parcel to the east of Stink Lake (the most northern lake), to which the K'asho Got'ine District holds surface title.

## **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Colville Uplands HS; Andersen Plain HS

Major Watershed(s): Southern Beaufort Sea; Lower Mackenzie

Regional Watershed(s): Carnwath, Upper Anderson; Lower Mackenzie – Ontaratue

<u>Burn History</u>: The area south of Trout Lake and Long Lake burned in the 1970s and the north-central portion of Stink Lake burned in the 1980s.

#### Ecological features:

- 1. In an Important Wildlife Area for furbearers 137 and within general furbearer habitat
- 2. Stump Lake and Long Lake have both been identified as important for ecological representation
- 3. A number of eskers are located around Burnt Lake, Trout Lake and Long Lake (valuable wildlife habitat, serve as prime denning areas)
- 4. All of the lakes are considered important breeding duck habitat 138
- 5. The lakes all occur in barren-ground caribou habitat, specifically, the Bluenose west caribou herd occurs:
  - around Stink and Stump Lakes during the spring migration and pre-calving period from April to May;
  - o at Stink Lake during the fall rut in October;
  - o around all of the lakes during the fall post-rut in November;
  - o at Stink, Stump, Long and Trout Lakes during the winter from December to March.

# **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. Outpost camps and cabins are recorded around Stink and Burnt Lake
- 2. Log timber harvest occurs around Stink Lake
- 3. There is a recorded burial site at Trout Lake
- 4. A number of trails cross all of the lakes
- 5. Furbearers are harvested in the areas around the lakes
- 6. Fish harvesting has been recorded on Stink Lake and Burnt Lake
- 7. Barren-ground caribou are harvested around the lakes

#### **Economic Importance**

Oil and Gas Potential: Trout Lake - moderate; Stink, Burnt, Stump & Long Lakes - moderate to

high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>137</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>138</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

# 28. TS'OGA TUÉ (White Muskeg Lake) Conservation Zone

Dene Place Name:	Ts'oga Tué
Size:	13 km <sup>2</sup>
Elevation (min, max, average):	215 m: 240 m: 223 m

#### **Reasons for Conservation**

- The primary reason for Conservation is due to the cultural and traditional significance of the area. Ts'oga Tué is the traditional territory of the Ts'oga Got'ine (White Muskeg People). The Codzi Family are descendents of this group and continue to use the area today.
- Ts'oga Tué which is actually two large lakes joined by a creek is an important whitefish
  fishery and is known as a reliable place to harvest many fish for winter supplies.

#### **Location and Boundaries**

The Ts'oga Conservation Zone is located in the very north of the SSA, directly north of Colville Lake, at the border to the Inuvialuit Settlement Region.

# **Land Ownership**

The Crown holds title to this land.

#### **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Anderson Plain HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

**Burn History**: No recent burns appear in the zone

### **Ecological features**:

1. Waterfowl and bird habitat as recorded by TK sources

2. Important Wildlife Area for furbearers<sup>139</sup> and within general furbearer habitat.

Consistently supports high densities of marten known for their high quality fur.<sup>140</sup> Sahtu

<sup>&</sup>lt;sup>139</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- harvesters have noted that marten are particularly numerous in the area a year or two after a burn. 141
- 3. A number of eskers (valuable wildlife habitat, serve as prime denning areas) are located east of the zone
- 4. The southern portion of the zone is important breeding duck habitat 142
- 5. The zone is in barren-ground caribou habitat. The Bluenose west barren-ground caribou herd occurs for the most part throughout the entire zone during:
  - o the spring migration and pre-calving period from April to May;
  - o the late summer from August to October;
  - the fall rut in October;
  - o the fall post rut in November;
  - o the winter from December to March.

## **Socio-Cultural Importance**

"Ts'oga Tué, White Muskeg Lake is actually two large lakes joined by a creek. It is considered the traditional territory of the Ts'oga Got'ine (White Muskeg People). The regional group is also known as Terahshıdet'ın (Fish Trap Place People) and Koyeléé Got'ıne (Fire Carrier People)." The Codzi family are descendents of a man named Gots'e. The family continues to use the area today. The Codzis have a cabin on the lake.

"The lake is an important whitefish fishery and fish traps were used here in the past. It is known as a "good place to take plenty of fish" and was important in stocking winter fish supplies." 144

#### Socio-cultural features:

- 1. A number of outpost camps, cabins and archaeological sites are located on the shores of the lake or close to the lake
- 2. A number of trails lead to Ts'oga
- 3. Furbearers are harvested in the zone
- 4. Moose are harvested in the zone
- 5. Barren-ground caribou are harvested in the zone

The Rakekée Gok'é Godi: Places We Take Care Of report suggested:

- Critical Wildlife Area for whitefish:
- Oral history and archaeological research to document and protect heritage resources;
- Surface protection of documented sites;
- Special consideration in the land use planning process.

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Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 ibid

<sup>&</sup>lt;sup>142</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>143</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews. P. 70 144 ibid

# **Economic Importance**

Oil and Gas Potential: very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

# Map 14. NW Corner – 4

# 27. AUBREY LAKE AND DUNEDELATUE LAKE Conservation Zone

**Dene Place Name:** Aubrey Lake - Tué Sho

Dunedelatue Lake – to be determined

**Size**: 611 km<sup>2</sup>

Elevation (min, max, average): 240 m; 327 m; 249 m

#### **Reasons for Conservation**

• The community of Colville Lake requested that a number of lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the shorelines, provide some protection to water quality and fish and to allow traditional and cultural uses of the lakes to continue.

• Aubrey and Dunedelatue Lakes are in important barren-ground caribou habitat, especially for the Bluenose West herd that occur in the area during sensitive times in their lifecycle. The herd is concentrated in this zone from April to May during spring migration and pre-calving and from October through to March during the fall rut, post fall rut and during their overwintering times.

#### **Location and Boundaries**

The Aubrey Lake and Dunedelatue Lake Conservation Zone includes a 500 m buffer around both lakes and small areas within the lakes. It is located north of the community of Colville Lake.

#### **Land Ownership**

The K'asho Got'ine District owns surface title to the northern portions of both lakes. The rest is Crown land.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Colville Uplands HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

<u>Burn History</u>: Two small areas burned in the 1970s on the eastern end of Aubrey Lake and one area burned on the south-eastern shore of Dunedelatue Lake.

#### Ecological features:

- 1. In an Important Wildlife Area for furbearers 145 and within general furbearer habitat
- 2. Moose habitat is identified by TK sources at the southern end of Dunedelatue Lake
- 3. The entire area around both lake shores is considered very important for ecological representation
- 4. Eskers (valuable wildlife habitat, serve as prime denning areas), are located on the northern end of Aubrey Lake
- 5. Both lakes are important breeding duck habitat
- 6. Both lakes are in barren-ground caribou habitat. The Bluenose West barren-ground caribou herd travel occur:
  - around both lakes during the spring migration and pre-calving period from April to May;
  - o at the northern end of Aubrey Lake during the fall rut in October;
  - o around both lakes during the fall post-rut in November;
  - o around both lakes from December to March during the winter.

# **Socio-Cultural Importance**

This area consistently supports high densities of marten that are known for their high quality fur. <sup>146</sup> Sahtu harvesters have noted that marten are particularly numerous in the area a year or two after a burn. <sup>147</sup>

### Socio-cultural features:

- 1. Many burial and archaeological sites are located along the shores of both lakes
- 2. Cabins, tent frames and outpost camps are plentiful on both lakes
- 3. A number of recreational areas are located on both lakes
- 4. The southern end of Aubrey Lake is also a log timber harvest area
- 5. Traditional trails occur throughout both lakes
- 6. Good recorded timber for houses
- 7. Old time stories associated with the area
- 8. Prehistoric dinosaurs in the area
- 9. Fish spawning area and fish are harvested on both lakes
- 10. Waterfowl and birds are harvested on both lakes
- 11. Furbearers are harvested around both lakes
- 12. Moose are harvested on and around both lakes

#### **Economic Importance**

Oil and Gas Potential: Dunedelatue Lake mostly moderate to high; Aubrey Lake -very high

Oil and Gas Rights: None

Mineralization: Undetermined

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<sup>&</sup>lt;sup>145</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>146</sup> ibid

<sup>147</sup> ibid

<u>Mineral Rights</u>: Six small mineral claims by Aubrey Lake – two to the east, two to the south, one to the south-west and one to the west

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

## **Applicable Conditions**

All General and Special Management Terms apply

29. MAUNOIR DOME/LAC MAUNOIR Conservation Zone	
Dene Place Name:	Ayonıkı
Size:	563 km <sup>2</sup>
Elevation (min, max, average):	248 m; 587 m; 281 m

#### **Reasons for Conservation**

- Ayonıkı, or Maunoir Dome, is a sacred place and the location of the creation of the Sahtu Dene and Métis. The primary reason for protection is to preserve the area due to its cultural significance.
- The zone is in barren-ground caribou habitat. Both the Bluenose East and Bluenose West caribou herds use this zone at sensitive times in their lifecycles, from spring migration and pre-calving to overwintering. This is also an ecological component of high value.

#### **Location and Boundaries**

The Maunoir Dome/Lac Maunoir Conservation Zone includes a 500 m buffer around Lac Maunoir as well as Maunoir Dome on the northern portion of the lake. Maunoir Dome is a large bedrock hill located approximately 90 km north-east of the community of Colville Lake.

#### Land Ownership

The K'ahso Got'ine District holds surface title to the zone. The subsurface title is held by the Crown.

### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Colville Plain HS; Colville Hills HS; Anderson Plain HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

<u>Burn History</u>: There is virtually no recent burning in the area however a speck on the northwestern shore was subject to a burn in the 1980s.

#### **Ecological features:**

- 1. Within waterfowl and bird habitat
- 2. Important Wildlife Area for furbearers<sup>148</sup> and within general furbearer habitat. Consistently supports high densities of marten known for their high quality fur.<sup>149</sup> Sahtu harvesters have noted that marten are particularly numerous in the area a year or two after a burn.<sup>150</sup>
- 3. Maunoir Dome is an Important Wildlife Area for muskox and large numbers of muskoxen are consistently found in the area<sup>151</sup>
- 4. TK sources have identified Maunoir Dome as bear habitat
- 5. Areas to the east of the zone and the whole south-western areas adjacent to the zone have been identified as areas important for ecological representation 152
- 6. The entire shore of Maunoir Lake, excluding Maunoir Dome is important breeding duck habitat<sup>153</sup>
- 7. The entire area is in barren-ground caribou habitat.

The Bluenose East herd occurs:

- o in the eastern tip of the zone during the winter season from December to March;
- o in the southern half of the zone during the fall post rut in November.

The Bluenose West herd occurs in the region at the following times:

- o during spring migration and pre-calving from April to May:
- o during the late summer from August to October but only occurs in the northeastern portion of the zone;
- o during the fall rut in October:
- o during the post fall rut in November;
- o during winter from December to March.

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<sup>&</sup>lt;sup>148</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 ibid

<sup>&</sup>lt;sup>151</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>152</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. http://www.sahtulanduseplan.org/ftpfiles/p

<sup>&</sup>lt;sup>153</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

#### Socio-Cultural Importance

Ayoniki, or Maunoir Dome, is an important landmark. It is a heritage site with strong cultural history. It is associated with the K'ahsho Got'ina legend of the creation of the Sahtu Dene and Métis. According to this legend, Ayoniki was the place where different peoples originated. This legend has been passed on through oral tradition from generation to generation since the time of pre-contact. The story in full is recounted in *Rakekée Gok'é Godi: Place We Take Care Of* (1999):

In the ancient days everyone lived together – the Inuit, the Gwich'in and the Dene ... The big war that happened... was so fierce that there was a lake of blood that formed on that hill. Finally an Elder stood and asked the people to stop fighting. Everyone went their separate ways, and even the languages changed with time...

#### Socio-cultural features:

- 1. Several cabins currently in use, tent frames, a number of outpost camps
- 2. Grave sites and archaeological sites
- 3. Locations where fish traps were used in the past
- 4. Heritage and historic sites
- 5. A number of recreational areas along the shore
- 6. Furbearers are harvested in the zone
- 7. Medicinal plants are harvested
- 8. A number of traditional trails
- 9. Fish are harvested at different locations
- 10. Maunoir Dome is used for barren-ground caribou harvest

The reports Rakekée Gok'é Godi: Places We Take Care Of and Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001 recommend:

- National Historic Site with protection of surface and subsurface against future development;
- Management plan development carried out with community of Colville Lake.

#### **Economic Importance**

Oil and Gas Potential: western 34 - very high; eastern 14 moderate to high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

## **Applicable Conditions**

All General and Special Management Terms apply

31. DENE DI GON'E Conservation Zone	
Dene Place Name:	Dene Di Gon'e
Size:	11 km <sup>2</sup>
Elevation (min, max, average):	272 m; 276 m; 274 m

# **Reasons for Special Management**

- Dene Di Gon'e is a culturally significant area that was used as a dance circle meeting place.
- Barren-ground caribou migrate through the area and both the Bluenose West and Bluenose East herds occur in the area during the post fall rut.

#### **Location and Boundaries**

The Dene Di Gon'e Conservation Zone includes a 500 m buffer around the Dene Di Gon'e lake and a small parcel at the northern tip. It is south of Whitefish Lake, at the southern end of the Anderson River Conservation Zone. It is south-east of the community of Colville Lake.

#### **Land Ownership**

All title is owned by the Crown.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Colville Plain HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

Burn History: The southern end of the zone burned in the 1980s

#### **Ecological features**:

1. Within waterfowl and bird habitat

2. Important Wildlife Area for furbearers<sup>154</sup> and within general furbearer habitat.

Consistently supports high densities of marten known for their high quality fur. <sup>155</sup> Sahtu

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Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 February 2010, Environment and Natural Resources, Government of the Northwest Territories,
 Yellowknife, NT
 ibid

harvesters have noted that marten are particularly numerous in the area a year or two after a burn. 156

- 3. Within muskox habitat
- 4. The entire zone is surrounded by important breeding duck habitat
- 5. The entire area surrounding the zone is identified as important for ecological representation
- 6. Barren-ground caribou migrate through the area. The Bluenose East caribou herd occur in the zone during the post fall rut in November. The Bluenose West caribou herd occur in the zone during the fall rut and fall post rut in October and November, respectively.

#### Socio-Cultural Importance

#### Socio-cultural features:

- 1. Traditional trails exist in high concentration through the zone
- 2. It is a culturally significant area and dance circle meeting place
- 3. Furbearers are harvested in the zone

#### **Economic Importance**

Oil and Gas Potential: moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: A significantly large mineral claim extends throughout the zone

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

32. LAC DES BOIS Conservation Zone	
Dene Place Name:	Tashín Tué
Size:	520 km <sup>2</sup>
Elevation (min, max, average):	296 m; 319 m; 298 m

#### **Reasons for Special Management**

• Lac des Bois is the home territory of the Tashin Got'ine regional group. Aside from the traditional activities like hunting and trapping that take place around the lake, many

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<sup>&</sup>lt;sup>156</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

stories and place names are associated with the area and several burial sites are known to exist along its shores.

- The community of Colville Lake requested that a number of lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the shorelines, provide some protection to water quality and fish and to allow traditional and cultural uses of the lakes to continue.
- Lac des Bois is in important barren-ground caribou habitat, especially for the Bluenose West herd that occur in the area during sensitive times in their lifecycle. The herd is concentrated in this zone from April to May during spring migration and pre-calving, in October during the fall rut and in November during the post fall rut.

#### **Location and Boundaries**

The Lac des Bois Conservation Zone includes a 500 m buffer around the lake, located east of the community of Colville Lake.

## **Land Ownership**

The K'ahso Got'ine District holds surface title to lands on the lake's western shore and subsurface title to a small corner on the far west. The remainder is Crown land.

# **Ecological Importance**

During a Colville Lake meeting it was mentioned that oil and gas and tar are known to exist under the lake and there is some concern about underground seepage.

Geological Province: Interior Platform

Permafrost Type(s): continuous permafrost

Level IV Ecoregion(s): Colville Plain HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

<u>Burn History</u>: The southern end of the lake burned in the 1970s and its most western edge burned in the 1990s.

### **Ecological features**:

- 1. Within waterfowl and bird habitat
- 2. Important Wildlife Area for furbearers<sup>157</sup> and within general furbearer habitat.

  Consistently supports high densities of marten known for their high quality fur. <sup>158</sup> Sahtu

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<sup>&</sup>lt;sup>157</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

harvesters have noted that marten are particularly numerous in the area a year or two after a burn. 159

- 3. The most southern tip of the lake is in muskox habitat
- 4. The entire lake is important breeding duck habitat
- 5. The entire zone is considered important for ecological representation
- 6. Eskers are found around the outskirts of the zone (valuable wildlife habitat, serve as prime denning areas)
- 7. The entire zone is in barren-ground caribou habitat. The Bluenose West caribou herd occurs throughout the zone during:
  - o the spring migration and pre-calving from April to May;
  - o the fall rut in October;
  - o the fall post rut in November;
  - o and overwinter in the northern portion from December to March.

### **Socio-Cultural Importance**

Lac des Bois is a major fish lake and trapping area. It is located on a caribou migration route and is known as the home territory of the Tashin Got'ine regional group which consists of the Boucan, Oudzi, Orlias, and Gully families. Many stories and place names are associated with the lake and several burials are known to exist along the shores.

#### Socio-cultural features:

- 1. A number of traditional trails criss-cross the lake
- 2. Special Harvesting Area for fish on northern section of lake. Fish are especially harvested at the northern and southern ends of the lake
- 3. Significant Site according to Mapping Our Future Survey
- 4. Burial and other historic sites
- 5. A number of outpost camps are located along the shore
- 6. Important community hunting, fishing and trapping area
- 7. Medicinal plant harvest
- 8. Waterfowl and bird harvest occurs along the western shores of the lake
- 9. The Lake itself is considered a Heritage Sites
- 10. Furbearers are harvested along the western and southern shores of the lake
- 11. The entire zone is used to harvest barren-ground caribou

The Rakekée Gok'é Godi: Places We Take Care Of (2000) report recommends:

- Caribou Protection Measures to protect seasonal migration;
- Critical Wildlife Are to protect fishery and marten;
- Oral history and archaeological research to document and protect existing heritage resources and burials;
- Surface protection of documented sites.

#### **Economic Importance**

<sup>158</sup> ibid

<sup>159</sup> ihid

<sup>&</sup>lt;sup>160</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

Oil and Gas Potential: the western portion of the lake is very high; the eastern portion of the

lake is moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: A number of mineral claims cover the south-eastern shore of the lake, the

southern tip of the lake and the south-western shore

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

33. LAC BELOT Conservation Zone	
Dene Place Name:	Nılın Tué
Size:	406 km <sup>2</sup>
Elevation (min, max, average):	251 m; 684 m; 285 m

#### **Reasons for Special Management**

- The community of Colville Lake requested that a number of lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the shorelines, provide some protection to water quality and fish and to allow traditional and cultural uses of the lakes to continue.
- Lac Belot sits on a divide and is fed by precipitation. The community of Colville Lake states that it has a slow recharge rate and that water should only be withdrawn for domestic use.
- Lac Belot is in important barren-ground caribou habitat, especially for the Bluenose West herd that occur in the area during sensitive times in their lifecycle. The herd is concentrated in this zone from April to May during spring migration and pre-calving, in October during the fall rut and in November during the post fall rut.

#### **Location and Boundaries**

The Lac Belot Conservation Zone includes a 500 m buffer around the lake and a conservation area around the northern tip and along its western shore. It is south of Colville Lake.

#### **Land Ownership**

The large majority of surface title is held by the K'ahso Got'ine District. The remainder, which is the northern tip of the lake, is Crown land.

#### **Ecological Importance**

Residents of Colville Lake indicate that Lac Belot sits on a divide. The lake is fed only by precipitation and has a slow recharge rate. As a result they do not want the water to be withdrawn for industrial uses such as road making.

**Geological Province**: Interior Platform

Permafrost Type(s): continuous permafrost

Level IV Ecoregion(s): Colville Plain HS; Colville Hills HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

Burn History: A small portion on the mid-western shore burned in the 1970s

#### **Ecological features:**

1. Important Wildlife Area for furbearers and within general furbearer habitat. Consistently supports high densities of marten known for their high quality fur. Sahtu harvesters noted that marten are particularly numerous in the area a year or two after a burn. 161

- 2. Fish bearing lake
- 3. The entire zone is important breeding duck habitat 162
- 4. The entire zone is identified as important for ecological representation 163
- 5. The zone is in barren-ground caribou habitat. The Bluenose West caribou herd occurs throughout during:
  - o the spring migration and pre-calving period from April to May;
  - o the fall rut in October:
  - the fall post rut in November;
  - the winter from December to March.

#### Socio-Cultural Importance

There is a legend that tells about how the mountain watches over the lakes for the people of the area.

#### Socio-cultural features:

1. Traditional trails run along the edges of the river and across it including the traditional trail from Fort Good Hope to Colville Lake

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 February 2010, Environment and Natural Resources, Government of the Northwest Territories, YK, NT
 Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.
 http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>163</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>

- 2. A number of cabins and outpost camps are recorded
- 3. Recreational sites are located along the eastern shore
- 4. Burial and archaeological sites are recorded on the shores
- 5. Important hunting and fishing area
- 6. Spring camps for subsistence use
- 7. Ducks, beavers, muskrats are plentiful
- 8. Medicinal plants are harvested in the vicinity
- 9. The water is good to drink but the lake is very shallow and should be limited to residential use
- 10. Waterfowl and birds are harvested
- 11. Furbearers are harvested throughout the zone
- 12. High concentration of fish harvested
- 13. Moose are harvested on the eastern shore of the lake
- 14. Muskoxen are harvested
- 15. Barren-ground caribou are harvested throughout the zone

#### **Economic Importance**

Oil and Gas Potential: very high

<u>Oil and Gas Rights</u>: A large exploration licence is held in the north-western tip of the lake and beyond the zone and as well as in the southern tip of the zone; a significant discovery licence is held directly east of the zone

Mineralization: Undetermined

Mineral Rights: A significantly large mineral claim is held on the western shore

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; An access roads is located to its east and south of the lake

#### **Applicable Conditions**

All General and Special Management Terms apply

#### **Zone-Specific Conditions**

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## Map 15. NW Corner – 5

30. ANDERSON RIVER Conservation Zone	
Dene Place Name:	Sihonilįne
Size:	415 km <sup>2</sup>
Elevation (min, max, average):	240 m; 327 m; 249 m

#### **Reasons for Conservation**

- The Anderson River CZ includes wetland areas and Whitefish Lake which provide high quality wildlife habitat to a number of species such as waterfowl and migratory birds, barren-ground caribou, fish, furbearers, bears, muskoxen, moose and more.
- Segments of the zone are important subsistence use areas and traditional territory for the T'ashin Got'ine. T'agaan, a narrowing section of the Anderson River has traditionally been used as a camp for fishing, hunting and trapping. Whitefish Lake was their home territory and has many burials, camping locations, fish traps and caribou fences. The area is still in use today.
- Whitefish Lake is a critical waterfowl staging and nesting area.
- The river lies in the barren-ground caribou migration path. The Bluenose East herd is found in the zone during the post fall rut and overwinters in the area. The Bluenose West herd occupies the zone during sensitive times in its lifecycle specifically, during pre-calving, late summer, the fall rut, post fall rut and over winter.

#### **Location and Boundaries**

The Anderson River Conservation Zone is a 1 km buffer around the River as it extends from the Inuvialuit Settlement Region into the SSA. The trail extends throughout the length of the river and ends at Whitefish Lake. It is to the east of the community of Colville Lake.

#### Land Ownership

Surface title is held by the K'asho Got'ine District for the majority of the zone.

#### **Ecological Importance**

The zone includes numerous lakes with many small streams constituting important wetlands for waterfowl, wildlife and fish. The zone is habitat for Bluenose East and West barren-ground caribou herds, muskox, grizzly bear, wolf, wolverine, arctic fox, marten and migratory waterfowl. Waterfowl in the zone include geese, swans, and numerous other bird species including birds of prey.

The zone is a migratory waterfowl staging area as well as a nesting area for migratory birds that use the Anderson River flyway. The zone is habitat for trout, whitefish, inconnu and grayling as well as pike and walleye. Traditional knowledge indicates that there are several locations in the zone that are critical for fish spawning.

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Anderson Plain HS; Colville Plain HS; Colville Hills HS

Major Watershed(s): Southern Beaufort Sea

Regional Watershed(s): Upper Anderson

**Burn History**: There are no recorded burns in the recent past

#### **Ecological features:**

1. The zone is in waterfowl and bird habitat

- 2. Important Wildlife Area for furbearers<sup>164</sup> and within general furbearer habitat. Consistently supports high densities of marten known for their high quality fur.<sup>165</sup> Sahtu harvesters have noted that marten are particularly numerous in the area a year or two after a burn.<sup>166</sup>
- 3. The large majority of the zone is within muskox habitat
- 4. The northern half of the zone is recorded as moose habitat by a number of TK sources
- 5. The entire length of the zone was identified as important for ecological representation
- 6. A number of eskers are located along the length of the trail and at its southern end (valuable wildlife habitat, serve as prime denning areas)
- 7. The western centre of the zone and the area above the lake are important breeding duck habitat<sup>167</sup>
- 8. Bear habitat occurs along the northern half of the zone
- 9. Barren-ground caribou habitat.

Bluenose West caribou herd occur in the zone during:

- o the spring migration and pre-calving season from April to May;
- o the late summer from August to October;
- o the fall rut in October;
- o the fall post-rut in November;
- o the winter from December to March.

The Bluenose East caribou herd occur in the zone during:

- o the fall post rut in November;
- o the winter from December to March.

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<sup>&</sup>lt;sup>164</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>165</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>166</sup> ibid

<sup>&</sup>lt;sup>167</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

#### Socio-Cultural Importance

The zone was identified during the planning process as an important local travel corridor, heritage place and subsistence use location.

"T'agan is a section along the Anderson River where it narrows. It is known for its richness in fish and is considered a place to find food in difficult times. Families would often camp here while the men were away hunting or trapping on the barrenlands. The area is also known for its hunting and trapping. This area was of particular importance to the T'ashin Got'ine for subsistence." 168

At the headwaters of the Anderson River is Whitefish Lake, a noted camping location with many burials and the home territory of the T'ashin Got'ine. The whitefish is of high quality and the area is an important caribou hunting area as it is located on a caribou migration route as mentioned above. "There are ancient caribou fences in the area and several currently used cabins on the lake. A site of many ancient and recent stories, Whitefish Lake was also used as a stopover camping area for families travelling through the area." <sup>169</sup>"It is considered a critical waterfowl staging and nesting area and is still used today." <sup>170</sup>

#### Socio-cultural features:

- 1. Outpost camps and cabins are located along the length of the zone
- 2. Whitefish Lake is a cultural site and also has a burial site
- 3. The southern end of the river that ends at a lake is used for waterfowl and bird harvesting as well as the harvest of furbearers
- 4. Moose harvest occurs throughout the northern half of the zone and at the southern end where it meets a lake
- 5. Fish are harvested mostly in the southern half of the zone and especially at the lake at the zone's southern end
- 6. Barren-ground caribou are harvested at the southern end of the zone, on the lake
- 7. Significant traditional trails follow the length of the zone
- 8. Whitefish Lake at the end of the Anderson River Conservation Zone is a Heritage Site.
- 9. Participants have reported that there is a lot of good fishing, trapping, hunting and harvesting of medicinal plants in the zone

The reports *Rakekée Gok'é Godi: Places We Take Care Of* (Sahtu Heritage Places and Sites Joint Working Group, (December 1999) and/or *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001* recommended the following:

- T'agan, a narrow section of the Anderson River and Lugéwa Tué, Whitefish Lake, be given special consideration in the land use planning process;
- Caribou Protection Measures for Whitefish Lake (see GNWT 1998 in Rakekee report)
- Whitefish Lake be designated a Critical Wildlife Area for fish and waterfowl;
- Oral history and archaeological research be carried out to document and protect heritage resources;

<sup>&</sup>lt;sup>168</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews. P. 64

<sup>&</sup>lt;sup>169</sup> Ibid, P. 54

<sup>&</sup>lt;sup>170</sup> Ibid, P. 54

- Protection of documented sites;
- Designate the zone a Critical Wildlife Area.

#### **Economic Importance**

Oil and Gas Potential: the majority of the river is moderate and there is a segment of low to

moderate but the northern segment is very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: Adjacent to the southern tip of the zone is a significantly large mineral claim

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

## 6. HARE INDIAN RIVER Special Management Zone

Dene Place Name: To be determined

Size: 501 km²

Elevation (min, max, average): 15 m; 382 m; 126 m

#### **Reasons for Special Management**

- The community of Fort Good Hope requested that a number of rivers and large creeks in the K'asho Got'ine District be given a 1 km buffer along each side of the shores to protect a combination of recreational and subsistence uses.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.
- The Hare Indian River has been identified as an Important Wildlife Area for both moose and muskox at different locations.

#### **Location and Boundaries**

A 1 km buffer is applied around the main branch of the Hare Indian River from its confluence with the Mackenzie River to Tirato (Smith Arm), of Great Bear Lake. Mid-way, the zone connects with the Underground River south of Belot Lake.

#### **Land Ownership**

The large majority of land is Crown land. The K'ahso Got'ine District holds surface title to fragments of the Hare Indian River and has subsurface ownership of its most western tip as it flows into Great Bear Lake.

#### **Ecological Importance**

The zone was requested to provide added ecological protection to the shoreline of subsistence use areas and to the water body itself.

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: the large majority occurs in continuous permafrost, only the eastern end of the Hare Indian River is located in discontinuous permafrost

Level IV Ecoregion(s): North Mackenzie Plain LS; Great Bear Upland LS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Hare Indian

<u>Burn History</u>: The western section was burned in the 1970s and on the eastern side, burns occurred in the 1980s and recently in 2000s

#### **Ecological features**:

- 1. The western portion is an Important Wildlife Area for muskox
- 2. The eastern portion is muskox range as identified by wildlife range mapping project<sup>171</sup>
- 3. Important Wildlife Areas for furbearers are located in the middle of the zone as it approaches the northern segment of Lac a Jacques and in the portion that connects to the Underground River
- 4. The western portion is furbearer habitat
- 5. Fish habitat sites
- 6. Moose Important Wildlife Area 172 throughout the zone
- 7. Important breeding duck habitat is located at the western end of the zone
- 8. An esker and a karst feature are located at the eastern tip of the zone
- 9. Areas along the zone are important for ecological representation 173
- 10. Bluenose West caribou herd occur:
  - o in the eastern part of the zone during the fall rut in October
  - o through most of the zone during the fall post-rut in November;
  - o throughout the entire zone during the winter from December to March.

#### Socio-Cultural Importance

The zones were mainly requested to ensure the continuation of cultural and subsistence uses along and on the water bodies.

#### Socio-cultural features:

#### Hare Indian River:

- 1. Recreation sites, outpost camps and cabins located along the river
- 2. A number of traditional trails lead to the Mackenzie River, Great Bear Lake and to Tunago Lake
- 3. Some waterfowl harvest sites along the river lie adjacent to the zone
- 4. Furbearer harvest is prevalent throughout the western portion and takes place throughout the rest of the zone
- 5. Fish harvest along the zone
- 6. Moose harvest takes place throughout the western half of the zone
- 7. Bear harvest occurs at its confluence with the Mackenzie River and in the western portion of the zone
- 8. Barren-ground caribou harvest occurs throughout the western portion of the zone

#### **Economic Importance**

Oil and Gas Potential: East to West – low to moderate; very high; moderate to high; moderate

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<sup>171</sup> SLUPB-RWED Wildlife Mapping Project

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>173</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>

Oil and Gas Rights: An exploration licence at the K'asho Got'ine and Déline border

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

## 9. UNDERGROUND RIVER Special Management Zone

Dene Place Name:	Neyádalín
Size:	308 km <sup>2</sup>
Elevation (min, max, average):	66 m; 402 m; 243 m

#### **Reasons for Special Management**

- The Underground River is important for the story and cultural value that it represents. It is associated with the "Legend of Neyádalín" which recounts how the people of Colville Lake came into contact with the people of Fort Good Hope.
- The Underground River is a karst feature formed of soft, porous rock that erodes to form caves, sinkholes and other sensitive landforms. Karst features are unstable and can be dangerous for development. Protecting karst also protects drinking water quality as it provides 20-25% of the world's population with water.

#### **Location and Boundaries**

The Underground River Special Management Zone is located to the south of Lac Belot, near the community of Colville Lake. The zone captures the Underground River with a 500m buffer, from Lac Belot to its confluence with the Hare Indian River.

#### Land Ownership

The crown holds surface rights to the majority of the zone and subsurface rights to all land. The K'ahso Got'ine District holds surface title to a small portion at the northern end of the zone.

#### **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Colville Plain HS; Great Bear Upland LS; crosses Colville Hills HS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Hare Indian

Burn History: A portion of the southern end was burned in the 1970s and the 1980s.

#### **Ecological features**:

- This zone consistently supports high densities of marten that are known for their high quality fur.<sup>174</sup> The Colville Lake area is known to support some of the highest quality marten pelt to the fur industry. Harvesters have noted that marten are particularly numerous in the area a year or two after a burn.<sup>175</sup>
- The zone is habitat for the barren-ground Bluenose West caribou herd, muskox, grizzly bear, wolf, wolverine, arctic fox, and marten
- Waterfowl in the zone include geese, swans, and numerous other bird species in including birds of prey
- Fish species include trout, whitefish, grayling and walleye
- The entire zone falls within an Important Wildlife Area 176 for furbearers
- Most of the zone was identified as important for ecological representation
- A specific karst point feature was identified in the zone
- Lakes and streams in the zone constitute important wetland for waterfowl, wildlife and fish. The northern half of the zone consists of important breeding duck habitat
- Bluenose west caribou herd occur:
  - o in the northern half of the zone during spring, spring migration and calving from April to May;
  - throughout the zone during the fall rut in October;
  - o throughout the zone during the fall post-rut in November;
  - o throughout the zone during the winter from December to March.

In *Report Upon a Survey of Karst Landforms around Norman Wells, NWT*<sup>177</sup>, Dr. Derek Ford, a specialist in world-class karst reported that topographic maps appear to show that Lac Belot drains underground towards Belot Ridge. He identified the Ridge as one of the most remarkable karst features east of the Mackenzie, reaching about 60-80 m in height. There are large karst sinkholes depicted on the topographic maps to the southwest, around the springs of the Neyádalín legend. Dr. Ford recommended further studies to delineate the course of the underground river and adjoining karst topography with the intent of considering this area for protection.

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<sup>&</sup>lt;sup>174</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>175</sup> ibid

<sup>&</sup>lt;sup>176</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>177</sup> "Report upon a Survey of Karst Landforms around Norman Wells, Northwest Territories" March 2008. Derek Ford, PGeo., PhD, FRSC., Professor Emeritus, Geography and Earth Sciences, McMaster University, For the NWT Protected Areas Strategy, ENR, GNWT

#### Socio-Cultural Importance

The story of Neyádalín<sup>178</sup> recounts how two brothers living at Odarah Tue near Belot Lake found the people of Fort Good Hope. The brothers had never been far from the Colville Lake area but one day as they were chasing waterfowl they paddled their canoes into an underground creek and emerged kilometers away, from a spring in the cliffs. Finding themselves in a strange land, they continued paddling along what was the Hare Indian River until it met up with the Mackenzie River. The brothers eventually came across the people of Fort Good Hope and realized that they spoke the same language. They lived with the Fort Good Hope group for about two years, took wives, had children, and returned to find their parents. After the family reunited they moved to live with the other families.

The exact location of the Underground River is unknown the Colville Lake community has a general idea of its course and is considering a GPS project to delineate it.

#### Socio-cultural features:

- A number of Fort Good Hope and Colville Lake traditional trails
- Barren-ground caribou harvest takes place throughout the zone
- The K'ahso Got'ine use the zone to hunt caribou, muskox, beaver, muskrat, and waterfowl
- Several cabins in the zone are currently in use
- A number of TK sources indicate that furbearer harvest occurs throughout the zone

The complete Legend of Neyádalín is recounted in *Rakekée Gok'é Godi: Places We Take Care of* <sup>179</sup>. The report recommends special consideration in the land use planning process.

#### **Economic Importance**

Oil and Gas Potential: Very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined; an access road cuts through the zone

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>178</sup> Information extracted from Dr. Derek Ford's "Report upon a Survey of Karst Landforms around Norman Wells, Northwest Territories" for the NWT Protected Areas Strategy, ENR, GNWT, March 2008 <sup>179</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews. P. 56

34. TUNAGO LAKE Conservation Zone	
Dene Place Name:	Turatlın Tué
Size:	108 km <sup>2</sup>
Elevation (min, max, average):	269 m; 281 m; 271 m

#### **Reasons for Special Management**

- The community of Colville Lake requested that a number of lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the shorelines, provide some protection to water quality and fish and to allow traditional and cultural uses of the lakes to continue.
- Tunago Lake is in important barren-ground caribou habitat, especially for the Bluenose West herd that occur in the area during sensitive times in their lifecycle from October through to March during the fall rut, fall post rut and during over the winter.

#### **Location and Boundaries**

The Tunago Lake Conservation Zone includes a 500m buffer around the lake. It is located within the Great Bear Lake Watershed Special Management Area, directly south of Colville Lake.

#### **Land Ownership**

The K'asho Got'ine District and the Dél<sub>1</sub>ne District hold surface title to the entire zone and hold some subsurface title. The zone is 2/3 in the K'asho Got'ine District and 1/3 in the Dél<sub>1</sub>ne District.

#### **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

<u>Level IV Ecoregion(s)</u>: Great Bear Upland LS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Hare Indian

<u>Burn History</u>: There are no recently recorded burns in the zone

#### **Ecological features**:

- 1. Important Wildlife Area for furbearers <sup>180</sup> and within general furbearer habitat. Consistently supports high densities of marten known for their high quality fur. <sup>181</sup> Sahtu harvesters have noted that marten are particularly numerous in the area a year or two after a burn. <sup>182</sup>
- 2. Fish bearing lake
- 3. In waterfowl and bird habitat
- 4. Good trapping and strong presence of furbearers (beaver, muskrat, marten, mink, fox)
- 5. Caribou feeding area
- 6. Within muskox habitat
- 7. The entire zone is important breeding duck habitat 183
- 8. The entire zone has been identified as important for ecological representation 184
- 9. The zone is in barren-ground caribou habitat. The Bluenose West caribou herd occurs in the zone during:
  - o the fall rut in October;
  - the fall post rut in November;
  - the winter from December to March.

#### **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. A number of trails cross the zone
- 2. Several cabins and a number of outpost camps are located on the northern shore
- 3. Archaeological sites are documented
- 4. Hunting, fishing and trapping year-round
- 5. Moose-hunting in summer
- 6. Trout and whitefish in the lake
- 7. Medicinal plants
- 8. Burial sites
- 9. Waterfowl and bird harvest occurs in relative density on the northern portion of the lake
- 10. Fish are harvested on the lake
- 11. Barren-ground caribou are harvested throughout the zone

#### **Economic Importance**

Oil and Gas Potential: very high

Oil and Gas Rights: None

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<sup>&</sup>lt;sup>180</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>181</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>182</sup> ibid

<sup>&</sup>lt;sup>183</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.

http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>184</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. http://www.sahtulanduseplan.org/ftpfiles/p

Mineralization: Undetermined

Mineral Rights: There are no mineral claims in the zone but one large claim lies to the east

<u>Tourism and Outfitting Potential</u>: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

## **Applicable Conditions**

All General and Special Management Terms apply

## Map 17. NW Corner – 7

## 7. BLUEFISH CREEK TO TSINTU RIVER Special Management Zone

## 8. SNAFU CREEK Special Management Zone

Dene Place Names:		ek to Tsintu Rive — to be determi		mined
Zone Name	Size	Minimum Elevation	Maximum Elevation	Average Elevation
Bluefish Creek to Tsintu River	121 km²	65 m	275 m	156 m
Snafu Creek	74 km <sup>2</sup>	54 m	124 m	86 m

#### **Reasons for Special Management**

- The community of Fort Good Hope requested that a number of rivers and large creeks in the K'asho Got'ine District be given a 1 km buffer along each side of the shores to protect a combination of recreational and subsistence uses.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.
- Bluefish Creek connects the Mackenzie River to a number of small lakes where bluefish den and overwinter. The lakes at the western end of the Creek are a source for bluefish populations.
- Snafu Creek is habitat for sucker fish which are harvested.

#### **Location and Boundaries**

A 1 km special management buffer has been applied on both shores of the rivers and creeks.

**Bluefish Creek to Tsintu River:** The buffer begins around Bluefish Creek from its confluence with the Mackenzie River and ends at Tsintu River.

**Snafu Creek:** Snafu Creek is also known as Sucker Creek due to the sucker fish that can be found in the lake located at its eastern edge.

#### **Land Ownership**

Both zones lie on Crown Land.

#### **Ecological Importance**

The zones were requested to provide added ecological protection to the shorelines of subsistence use areas and water bodies with special values.

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

#### Level IV Ecoregion(s):

Bluefish Creek to Tsintu River – North Mackenzie Plain LS; Great Bear Upland LS Snafu Creek – North Mackenzie Plain LS

#### Major Watershed(s):

Bluefish Creek to Tsintu River – Central Mackenzie Snafu Creek – Central Mackenzie

#### Regional Watershed(s):

Bluefish Creek to Tsintu River – Central Mackenzie - Ramparts Snafu Creek – Central Mackenzie - Ramparts

#### **Burn History**:

Bluefish Creek to Tsintu River – the majority of the zone has not undergone recent burn but a small segment in the north burned in the 1960s

Snafu Creek – almost the entire zone burned in the 1960s and the eastern most tip burned in the 1980s

#### Ecological features:

#### Bluefish Creek to Tsintu River and Snafu Creek:

- 1. The eastern segments of Bluefish Creek to Tsintu River and Snafu Creek as they meet the Mackenzie River make up a significant area for waterfowl, moose and furbearer habitat and are significant for ecological representation
- 2. Fish habitat sites occur
- 3. Important breeding duck habitat is found at the eastern end of Snafu Creek

#### Socio-Cultural Importance

The zones were mainly requested to ensure the continuation of cultural and subsistence uses along and on the water bodies.

#### Socio-cultural features:

#### **Bluefish Creek to Tsintu River:**

- 1. A few archaeological sites and an outposts camp are located along the creek.
- 2. A number of traditional trails cross Bluefish Creek mid-way and at its eastern end. Small lakes located at the eastern end of the creek are known to harbour populations of bluefish.
- 3. Furbearer harvest takes place intensively throughout the zone
- 4. Moose harvest takes place through the central portion of both zones
- 5. Barren-ground caribou harvest takes place in the eastern ends of both zones and at Snafu Creek's confluence with the Mackenzie River

#### **Snafu Creek:**

- 1. Sucker fish are harvested along the creek and at Chick Lake. Both are subsistence use and recreation area
- 2. An archaeological site is documented at the eastern end of Snafu Creek, at Chick Lake
- 3. Furbearer harvest takes place intensively throughout the zone
- 4. Bear harvest occurs at Snafu Creek's confluence with the Mackenzie River

#### **Economic Importance**

Oil and Gas Potential:

Bluefish Creek to Tsintu River: mostly moderate to high with some high

Snafu Creek: moderate to high

Oil and Gas Rights: Exploration licence in a fragment of the Hare Indian River at the K'asho

Got'ine and Déline border

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

36. NEREHTENE Conservation Zone	
Dene Place Name:	To be determined
Size:	12 km <sup>2</sup>
Elevation (min, max, average):	51 m; 100 m; 61 m

#### **Reasons for Conservation**

The community of Fort Good Hope requested that Nerehtene crossing be a conservation zone for cultural reasons. Nerehtene is used for cultural gatherings where camping, fishing, and traditional Dene games and activities stake place. It is used by the community at different times of the year.

#### **Location and Boundaries**

Nerehtene is a small area found along the winter road between Fort Good Hope and Colville Lake. It is referred to as the crossing because it is located where the winter road crosses the Hare Indian River.

#### **Land Ownership**

The Crown holds both surface and subsurface lands.

#### **Ecological Importance**

<u>Geological Province</u>: Interior Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): North Mackenzie Plain LS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Hare Indian

**Burn History**: The area around Nerehtene burned in the 1970s

#### **Ecological features**:

1. The area is in furbearer habitat

- 2. The Hare Indian River is an Important Wildlife Area<sup>185</sup> for both moose and muskox. Nerehtene is right off the Hare Indian River
- 3. The Bluenose West barren-ground caribou herd overwinters over a large segment of the Hare Indian River, Nerehtene included

#### **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. The traditional trail from Fort Good Hope to Colville Lake, the "Colville Lake Trail", crosses Nerehtene
- 2. Furbearers are harvested in the vicinity
- 3. Fish are harvested at Nerehtene
- 4. Moose are harvested all along the Hare Indian River but in especially high concentration around Nerehtene
- 5. Barren-ground caribou are harvested all along the Hare Indian River and near Nerehtene
- 6. A large amount of harvest of wildlife species occurs at Nerehtene since camps are often set up there by the community for cultural gatherings

#### **Economic Importance**

Oil and Gas Potential: moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

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<sup>&</sup>lt;sup>185</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<u>Tourism and Outfitting Potential</u>: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

## **Applicable Conditions**

All General and Special Management Terms apply

## Map 18. Great Bear Lake and Area - Overview

# Great Bear Lake NEH KARILA K'ETS'EDI (CONSERVATION ZONES AND PROTECTED AREAS) 186

#### **ELDERS' TEACHING**

Déline's elders have passed down a system of values, beliefs and codes of conduct to the present generation. Central to this worldview are several prophecies about the future. These prophecies are very old and are based on the visions of key elders in Déline's past, including Ayha, Neodzo, André and Bayha. These prophecies are taken very seriously.

They do not set out what *must* happen but what *may* happen in the future if our society does not change its relationship with the natural world. The predictions are similar to recent warnings from the scientific community about the degradation of ecosystems.

For decades, the prophecies have predicted increased negative impacts on the natural world and predicted gradual encroachment on the Sahtu. The prophecies compare the world to a living organism. They foresee the degradation of the Great Lakes and southern Canadian water bodies, the gradual elimination of forests, the reduction or elimination of wildlife species and the spread of roads (likened to scars on the organism) through much of North America.

The elders relate the prophecies to their belief in a "universal law" which dictates that we treat other beings with the utmost respect. This universal law emphasizes the need for all three levels of government to work together.

All of the GBLW is important to the Sahtugot'ine however wildlife and the Sahtugot'ine are particularly dependent on certain places. The elders use a special phrase for these places. They are "sore benegodi": so real, of such fundamental value, so beautiful or so splendid that they are embedded in the mind and cannot be dismissed. They are part of the Sahtugot'ine.

<sup>&</sup>lt;sup>186</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A Management Plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

# 15. GREAT BEAR LAKE WATERSHED (GBLW) Special Management Zone

(includes some Du K'ets'Edi (Sentinel Islands), and Somba K'e (Port Radium)

Dene Place Name:	Sahtu
Size:	70,045 km <sup>2</sup>
Elevation:	140 m; 679 m; 240 m

ELDERS' TEACHING: The Water Heart 187

The elders of Dél<sub>i</sub>ne have passed down a story through many generations19. In times past, their spiritual teachers were often "mystically tied" to different parts of the environment: some to the caribou, some the wolf, some the northern lights and some the willow.

Kayé Daoyé was one such person. He lived all around Great Bear Lake or "Sahtu" in the Slavey language, but made his home primarily in Edaııla (the Caribou Point area), on the northeast shores of the Lake. Kayé Daoyé was mystically tied to the loche.

One day, after setting four hooks, he found one of them missing. This disturbed him — in those days hooks were rare and very valuable — and that night he traveled in his dreams with the loche in search of the fish that had taken his hook. As he traveled through the centre of GBL he became aware of a great power in the lake - the heart of the lake or the "water heart". Contemplating this heart, he became aware that it is connected to all beings — the land, the sky, plants, other creatures, people — and that it helps sustain the entire watershed of GBL.

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The elders of Dél<sub>I</sub>ne stress that the interconnectedness of all things includes all people — Dene and non-Dene alike. From this "universal law" of the interconnectedness of things flows the responsibility of people to care for the world in which we live. The water heart sustains the watershed of GBL and we in turn have a responsibility to sustain it. We do this by treating it and other beings with the utmost respect.<sup>188</sup>

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The elders see the GBLW as one organism. They see the many rivers, streams and creeks that flow into and out of GBL as fulfilling the same functions as the veins, capillaries and arteries in the bodies of all creatures. Water unites and flows through and among all creatures. It plays an essential role both in the

<sup>&</sup>lt;sup>187</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A Management Plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt. P. 27 of 104 lab ihid

larger ecosystem and in the smaller ecosystems that comprise each creature. The maintenance of water quality in the GBLW is as essential as the maintenance of the quality of the blood of any person or other creature.

The elders assert that the health of people and the land are directly connected — and that people are not in reality separate from the land and other creatures. Our "minds", "souls" and "hearts" are directly tied to the health of the land. The use that we make of the land and other creatures — and the respect with which we treat them — will have a direct bearing on the health not only of ourselves but also of all aspects of the land.

If we do not support the land, give it strength and treat it with utmost respect, the heart of Sahtu will not survive. The GBLW is a special place for the people of Déline. Their ancestors have been part of and have cared for this place for countless generations. The elders assert that we in turn have a responsibility to treat this watershed with respect — to keep it alive. They want to protect it so that it can be used by the present generation and by future generations. 189

#### **Reasons for Special Management**

- The GBLW is the foundation of Sahtugot'ine cosmology, history and traditional law, of the transmission of the culture from elders to the younger generation, and of Déline's renewable resource economy. The land "contains" the people of Déline; they are part of it, and they define themselves largely by their relationship with it. For these reasons, the watershed, the land, the home of the people of Déline must be kept healthy. The special management of the watershed is one way to ensure this. 190
- The eastern shore of Great Bear Lake previously hosted a number of mines. There are a number of known mineral deposits as well as mineral claims and mineral leases on the eastern shore. The SMZ allows for a greater range of economic development opportunities.

#### **Location and Boundaries**

The Great Bear Lake Watershed (GBLW) SMZ encompasses the entire watershed found in the Sahtu Settlement Area (SSA) that has not been provided with protection through other zones or initiatives. The zone is located in the Déline District and includes Port Radium (Somba K'e) and the Sentinel Islands (Du K'ets'Edi) where the District of Déljne holds surface and/or subsurface rights. All Sentinel Islands that are on Crown land are part of the Du K'ets'Edi Conservation Zone.

<sup>&</sup>lt;sup>189</sup> Great Bear Lake Working Group, May 31, 2005, "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

190 ibid

Great Bear Lake (GBL) is the ninth largest lake in the world, both in terms of surface area and volume. It is the largest lake entirely within the borders of Canada, the world's largest mass of cold fresh water, and the 19<sup>th</sup> deepest lake in the world (maximum depth 446 m). <sup>191</sup>

The watershed sits astride the Arctic Circle. It is in the northern continental climatic regime, the main features of which are long, cold winters, short cool summers, large annual ranges in temperature, and little precipitation. <sup>192</sup>

GBL is close to the tree line. Forests to the south and west begin to thin. The tundra is to the north where trees are only found in sheltered areas. 193

The Camsell and Johnny Hoe Rivers are the main inflows to GBL, contribute 21% and 12% respectively, of the total inflow to the lake. The Dease, Haldane, Whitefish and Sloan Rivers are the other major inflows. GBL is drained by the Great Bear River, which flows into the Mackenzie River and then the Arctic Ocean. 194

#### **Land Ownership**

The large majority of the zone is Crown land but the Dél<sub>l</sub>ne Land Corporation holds surface rights to small parcels south of Edaííla, in the Hottah Lake region, at the northern end of the Johnny Hoe River region and around Whitefish River. The Dél<sub>l</sub>ne District also has subsurface rights on a few small parcels.

#### **Ecological Importance**

<u>Geological Province</u>: The large majority is in the Interior Platform; north-eastern corner is in the Arctic Platform; the south-eastern corner is in the Bear Province

<u>Permafrost Type(s)</u>: northern half in continuous permafrost; southern half in extensive discontinuous

<u>Level IV Ecoregion(s)</u>: (clockwise around the lake starting in the north-west corner)
Great Bear Upland LS; Great Bear Upland HS; Great Bear Plain HS; (fragment in Colville Plain HS); Grandin Plain HS; Grandin Upland HS; (fragment in Coppermine Upland HS); Radium Hills HS; Radium Hills LS; Calder Upland LS; Camsell Plain LS; Great Bear Plain LS; Lac Grandin Plain LS; Lac Grandin Upland HS; Keller Plain LS

Major Watershed(s): Great Bear

<u>Regional Watershed(s)</u>: Great Bear Lake – Northwestern, Great Bear Lake – Northeastern, Great Bear Lake – Camsell, Great Bear Lake – Johnny Hoe

<sup>&</sup>lt;sup>191</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>192</sup> ibid

<sup>&</sup>lt;sup>193</sup> ibid

<sup>194</sup> ibid

<u>Burn History</u>: A number of burns have taken place in the watershed over the last few decades but the majority have been small. Sizeable burns occurred around Tunago Lake in the 1990s and 1970s. A few burns south of Edaííla occurred in the 1970s as well as two larger areas north of Johnny Hoe River that also burned in the 1970s. Finally, there are three sizeable burns near Whitefish Lake in the 1970s, 1980s and 1990s.

The diverse ecoregions of the Great Bear Lake Watershed (GBLW) provide habitat for a wide range of terrestrial plant and animal species.

GBL's unique characteristics make it the subject of management interest and concern: 195

- The lake has a relatively small drainage basin in relation to its area, a low water replacement rate, and a relatively long water residence time (124 years).
- GBL has very little stratification or variation in temperature, surface to bottom, and the lake is thus able to "turn over" or mix waters relatively easily.
- GBL has very clear, transparent waters (maximum recorded Secchi depth 30 m). This is related to its low productivity. GBL's standing crops of phytoplankton and zooplankton (microscopic plants and animals) are among the lowest found in freshwater systems and mainland lakes in North America.
- The GBL food web is relatively simple with benthic (bottom dwelling) invertebrates as an important food source for fish species.
- The lake's low productivity, low inflows of nutrients from surrounding areas, and simple food web suggest a vulnerability to disturbance activities and a potentially slow recovery.
- GBL is the last of the Great Lakes to contain a wide diversity of "morphotypes" or different forms of lake trout. Morphological and genetic diversity allow populations to better adapt to environmental changes over the long term. This diversity has been extinguished or greatly reduced in the other Great Lakes due to over-harvesting and the introduction of non-native species. GBL provides one of the only remaining areas to study how lake trout populations naturally function in a large lake ecosystem.

The GBLW provides habitat to three important herds of barren-ground caribou.

- o The Bathurst herd, the largest in the NWT, uses the area between GBL and Great Slave Lake.
  - Population estimates (2003):  $186,000, \pm 39,700$ .
  - Population estimates (1996): 350,000, ± 95,000.
  - Causes for change in herd size are uncertain.

<sup>&</sup>lt;sup>195</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

- o The Bluenose-East herd is of particular value to the Sahtu Settlement Area (SSA) and in particular, to the community of Déline.
  - Based on the Sahtu Harvest Study, ENR estimates that every year, people of the Sahtu harvest about 2500 animals from this herd.

#### **Ecological features:**

- 1. Muskox range and habitat extend throughout the northern portion of the watershed and three Important Wildlife Areas<sup>196</sup> for muskox have been identified
- 2. Waterfowl habitat can be found in the north-western portion of the watershed where it meets Tunago Lake, Lac des Bois, Dene Di Gon'e and the Anderson River CZs
- 3. Moose habitat exists at different locations in the watershed
- 4. Furbearer habitat exists throughout the zone. Three Important Wildlife Areas for furbearers are located: all around Whitefish River until the Great Bear Lake shoreline, around the north-western portion of the lake and around the tip of Tugacho (Dease Arm)
- 5. Déline elders report that boreal woodland caribou move along the Mackenzie River corridor, west of Déline
- 6. Eskers are found located throughout the zone
- 7. A few areas were identified as important for ecological representation: the area around Tunago Lake, the most north-eastern corner of the watershed and a portion of the most southern end of the zone, directly west of Johnny Hoe CZ
- 8. The shoreline is almost entirely identified as important breeding duck habitat with a large concentration of habitat by the shoreline around the Sentinel Islands. Other inland areas have also been identified as important habitat
- 9. Barren-ground caribou habitat is identified in a number of areas

The Bluenose East barren-ground caribou herd occurs:

- o in the eastern portion of the zone and around Edajį́la from August to October during the late summer
- o in the northern area, around Edajíla, to the far east of the zone and around the Johnny Hoe area during the fall rut in October
- o around Edajjla and in the north-west during the fall post rut in November
- o north of Edajįla, all around Saoyú, south of Whitefish River, around Johnny Hoe area and east of it during the winter from December to March

<sup>&</sup>lt;sup>196</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

The Bluenose West barren-ground caribou herd occurs:

- o in the far north-eastern corner during the spring/pre-calving season in April/May
- o in the north-eastern corner and by Edaįį́la during fall calving in October
- o in the north-western area of the watershed during the fall post run in November
- o in the western area of the watershed during the winter from December to March

#### **Socio-Cultural Importance**

GBL's subsistence fishery is very important. While several species are harvested, lake trout is the most heavily-harvested. Lake cisco and whitefish also form a significant component of the subsistence fishery. 197

SRRB Harvest Studies indicate that Sahtu hunters and trappers commonly harvest approximately 20 large and small mammal species and 30 bird species of which barren-ground caribou are the most economically important. Between 2000 and 2003, the annual harvest in Déljne was approximately 1200 to 1600 barren-ground caribou.

#### Socio-cultural features:

- 1. A number of traditional trails occur throughout the watershed especially along the shoreline. One trail of significance is that of Yamoria and the Giant Beavers that crosses the northern area of the watershed
- 2. Waterfowl are harvested at different locations around the watershed
- 3. Moose are harvested at various locations
- 4. Fish are harvested all along the shore
- 5. Barren-ground caribou are harvested at many locations throughout
- 6. Furbearers are harvested throughout
- 7. Boreal woodland caribou are at times harvested in the western end of the watershed by Whitefish River
- 8. A number of Special Harvesting Areas for fish are located in the watershed: at the Neregah shoreline, at Edaįį́la's shore, at the end of the Turili (McVicar Arm), at the mouth of the Great Bear River, on either side of ?ehdacho by the shore and at the very tip of Tirato (Smith Arm), at the mouth of Whitefish River, and along the shore between Déljne and Edajį́la

A number of areas listed in *Rakekée Gok'é Godi: Places we take care of*, lie in the GBLW: Saoyú and ?ehdacho, Edajíla, Whitefish River, Johnny Hoe Fishery, Port Radium, Caribou Point, Fort Confidence, Neregah - North Shore of Great Bear Lake

#### **Economic Importance**

#### Oil and Gas Potential:

The far western corner is of low potential and the far eastern corner is of very low potential West of centre is high to very high potential

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<sup>&</sup>lt;sup>197</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

The central area is moderate

Oil and Gas Rights: Four sizeable exploration licences exist in the zone:

- o one north-east of Tunago Lake,
- o one directly west of ?ehdacho,
- o one directly south of the eastern half of Whitefish River and
- o one covers the Déline community and extends far beyond its borders, north and south

<u>Mineralization</u>: All known mineral deposits are located east of, or south of Edaįį́la and are unclassified or are IOCG and related deposits

Mineral Rights: A number of large mineral leases and some mineral claims occur in the zone:

- o a number of mineral leases:
  - concentrated in the north-western corner of the zone, east of Tunago Lake
  - in the northern portion of the zone east of Neregah and north of Edaįį́la
  - east of Edajjla
  - south of Edajjla, along the watershed's eastern coast
  - mid-way along the eastern side of the watershed
- o mineral claims on the Sentinel Islands and on the mainland, south of Edajjla

<u>Tourism and Outfitting Potential</u>: Undetermined; Two fishing lodges (Plummer's and Trophy Lodge) currently operate on Great Bear Lake, operated by the same company. GBL's trophy-size lake trout and trophy grayling have been identified as having potential economic importance for sport fishing.

- GBL's trophy-size lake trout and grayling are economically important given the
  importance of the fishery to the local economy. Notwithstanding the apparent
  abundance of trophy-size fish, the very slow growth rate of these fish and the low
  primary productivity of GBL mean that their harvest mortalities must be kept at a low to
  moderate level.
- 2. Muskox is another other large mammal that is harvested around GBL but it is used largely for sport hunting purposes.

<u>Hydroelectric Potential and Infrastructure</u>: One potential hydroelectric power project site was identified as Camsell River – White Eagle Falls without Diversion An airstrip is located on the eastern shore of GBL near the old mines

#### **Applicable Conditions**

All General and Special Management Terms apply

#### **Zone Specific Conditions**

CR #16

CR #17

CR #18

## 18. EDAJLA (Caribou Point) Proposed Conservation Initiative

Dene Place Name:	Edaį́įla
Size:	8,840 km <sup>2</sup>
Elevation:	152 m; 721 m; 348 m

#### **Reasons for Conservation**

- Edajíla provides important habitat for a number of wildlife species but its primary conservation reasons relate to its significance for the Bluenose-East barren-ground caribou herd that regularly aggregates on and close to Edajíla during the mid-July to mid-October period.
- Edajjla is an extremely important cultural and ecological area for the people of Déline, as well as the people of other communities in the NWT and Nunavut who rely on the Bluenose-East caribou herd.
- Edajjla contains important heritage resources (Caribou Point Heritage Area and Fort Confidence Heritage Area), several Sahtu Dene and Métis Special Harvesting Areas, and important caribou and fish habitat.
- Edajíla has been identified as an International Biological Programme Site and as an Important Wildlife Area for barren-ground caribou.

#### Size, Location and Boundaries

Edajjla is located in the north-eastern part of the Great Bear Lake Watershed (GBLW). Its nearest point is approximately 200 km from Déline. The boundaries of Edaííla encompass all of Caribou Point, several associated islands, and T'echo cho deh t'a tlaaa (Fort Confidence). T'echo cho deh t'a tlaaa is approximately 86 km<sup>2</sup>. It includes the lower reaches of the Dease River, a considerable area of GBL shoreline and a small part of Ritch Island. 198

#### **Land Ownership**

Most of Edajjla consists of Crown lands but the Déline Land Corporation holds the surface title to three parcels of settlement lands: relatively small parcels in the northern, T'echo cho deh t'a tlaaa part of the site and in its south-eastern, McTavish Arm/Kwita part, and a larger parcel along the eastern boundary. 199

<sup>&</sup>lt;sup>198</sup> Great Bear Lake Working Group, May 31, 2005, "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

199 ibid

#### **Conservation Initiative Status**

Edaí(la was put forward for protection by the Déline Land Corporation. Sahtu Secretariat Incorporate (SSI) also supports the permanent protection of Edaí(la. It is an area of interest in the PAS process.

Edaí(la is currently in Step 3 of the PAS process. The Déline Renewable Resource Council, the local lead on this file, submitted a proposal to the Canadian Wildlife Service to sponsor the area as a National Wildlife Area in February 2009. CWS did not accept this site, choosing to advance other areas instead. Déline is currently looking for a new sponsoring agency and designation for this site.

#### **Ecological Importance**

Phase 1 and 2 ecological assessments have been developed for the area as part of the PAS process. Readers are referred to these reports for more detailed information on this area.<sup>200</sup>

Geological Province: Bear Province; tiny fragment in the Arctic Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Grandin Upland HS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear Lake – Northeastern

Burn History: For the most part the zone remains untouched by recent fires but a fragment of the southern end burned in the 1990s.

#### Ecological features:

- 1. According to the elders of Déline, Edaííla is an important place for wildlife. It contains very productive wildlife habitat and is important to the life cycles of a wide range of wildlife species including: barren-ground caribou (the Bluenose-East herd), moose, grizzly bear, black bear, musk ox, fox (four species), beaver, marten, mink, muskrat, lynx, wolverine, arctic hare, ground hog and wolf<sup>201</sup>
- Edajíla is also very important for fish species, including lake trout, herring, pike, grayling, whitefish and "jumbo" whitefish<sup>202</sup>

<sup>&</sup>lt;sup>200</sup> Phase 1 Ecological and Renewable Resources Assessment, Caribou Point Candidate Protected Area, Northwest Territories, EBA Engineering Consultants Ltd., May 2006.

Phase II Ecological Assessment Edaííla Candidate Protected Area, EBA Engineering Consultants Ltd., March 2009.

<sup>&</sup>lt;sup>201</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt. <sup>202</sup> ibid

- 3. ENR research confirms that the Bluenose-East barren-ground caribou herd regularly aggregates in or close to Edajjla during the mid-July to mid-October period suggesting that this zone is a very important area for the herd<sup>203</sup>
- 4. Several International Biological Programme Sites are found here:
  - Caribou Point.
  - Cape MacDonald,
  - Melville Creek and
  - Fort Confidence<sup>204</sup>
- 5. A number of important duck breeding sites<sup>205</sup> are located all along the shoreline and in the zone itself, around lakes and water bodies
- 6. A significant area at the point consists of general Furbearer habitat and the northern shore is specifically identified as an Important Wildlife Area<sup>206</sup> for furbearers. An Important Wildlife Area for marten is located on the northern shore of the zone (Caribou Point Marten Area)<sup>207</sup>

The entire zone is general caribou habitat and is also an Important Wildlife Area for barren-ground caribou. Residents throughout the NWT and the western parts of Nunavut depend economically, socially and culturally on Bluenose-East and Bluenose-West caribou herds. The area from Edayla through the eastern and southern parts of the GBLW to Déline is important to the rut, fall migration, overwintering and spring migration of the Bluenose-East herd.

Bluenose-west barren-ground caribou herd occur in the north-western corner during the fall rut in the month of October<sup>208</sup>

Bluenose-east barren-ground caribou herd occur:

- o throughout the zone in the late summer from August to October and during the fall rut in the month of October;
- o in the northern half of the zone during the mid-summer from July to August and in November during the fall post-rut;
- o in the most northern section of the zone from April to May during spring migration (pre-calving) and during the winter from December to March<sup>209</sup>

<sup>&</sup>lt;sup>203</sup> ibid

<sup>&</sup>lt;sup>204</sup> IBP

<sup>&</sup>lt;sup>205</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.

http://www.sahtulanduseplan.org/website/web-content/index.html 206 Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>207</sup> ibid

<sup>&</sup>lt;sup>208</sup> Nagy, J.A. Wright, W.H. Slack, T.M. and Veitch, A.M. 2005. Seasonal Ranges of the Cape Bathurst. Bluenose-West and Bluenose East Barren-Ground Caribou Herds, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories <sup>209</sup> ibid

Rakekee Goke Godi: Places we take care of recommended designating Edaííla as a Critical Wildlife Area to protect caribou, while permitting access to local hunters.

#### Socio-Cultural Importance

A Phase 1 Cultural Assessment has been developed for this area as part of the Protected Areas Strategy. Readers are referred to this report for additional details.<sup>210</sup>

#### Socio-cultural features:

- 1. Edajį́la has been used by the Sahtugot'ine for centuries. It preserves much of the physical heritage of the Sahtugot'ine:
  - o grave sites,
  - o caribou herding fences,
  - o quarries for the making of stone tools,
  - traditional trails,
  - o camping sites,
  - o cabins,
  - o an old mission,
  - o river crossings,
  - o other gathering places,
  - o other archaeological sites,
  - o sites of contact (often violent) between the Sahtugot'ine and the Copper Inuit, and the implements associated with all of the above. Edaííla is another of the "natural museums" of the Sahtugot'ine<sup>211</sup>
- T'echo cho deh t'a tlaaa (Fort Confidence) and the remnants of explorations and dwellings of Franklin, Dease, Simpson, Hornby, D'arcy and others are located here. These early explorations are important for several reasons, including their early relationship with the Sahtugot'ine<sup>212</sup>
- 3. Edaįį́la is important for the many stories associated with places and events within it and for the cosmology, history, values and law of the Sahtugot'ine that these stories preserve. It is considered a place of very strong medicine power. It is another of the "natural libraries" and spiritual places of the Sahtugot'ine<sup>213</sup>

<sup>&</sup>lt;sup>210</sup> Compilation and Review of Existing Cultural Research and Documentation Relating to Edailla (Caribou Point), Great Bear Lake, NWT: Final Report, Prepared by Marc G. Stevenson, All Nations Services for INAC, March 2007.

<sup>&</sup>lt;sup>211</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>212</sup> ibid

<sup>&</sup>lt;sup>213</sup> ibid

- 4. Continues to be important to the Sahtugot'ine for hunting fishing and trapping of the above species and for gathering of a variety of plants and berries. It is particularly important for summer caribou hunting<sup>214</sup>
  - o Moose harvesting sites are located along the shoreline and at the point
  - o Furbearer harvesting takes place at the point
  - o Fish harvest sites are located all along the shoreline
  - o Barren-ground caribou harvest sites occur throughout
- 5. Considered an emergency fishing area since places within or adjacent to it remain icefree year-round<sup>215</sup>
- 6. Special Harvesting Area for fish on the western tip of Edajíla

Rakekee Goke Godi: Places we take care of recommended oral history and archaeological research to document and protect extant heritage resources, and that the surface of documented sites be protected, with commemoration of specific sites to be negotiated following completion of the inventory.

# **Economic Importance**

A Phase 1 Non-Renewable Resource Assessment has been developed for this area as part of the Protected Areas Strategy. Readers are referred to this report for additional details. <sup>216</sup>

<u>Oil and Gas Potential</u>: Very low; see PAS non-renewable resource assessment Phase 1 <u>Oil and Gas Rights</u>: None

<u>Mineralization</u>: Undetermined; see PAS non-renewable resource assessment Phase 1 Mineral Rights: A high concentration of unclassified and sandstone hosted uranium deposits

<u>Tourism and Outfitting Potential</u>: Undetermined; one fishing lodge on the north-western shore

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

#### **Zone Specific Conditions**

CR #16 and CR #17

<sup>&</sup>lt;sup>214</sup> ibid

<sup>215</sup> ibio

<sup>&</sup>lt;sup>216</sup> Edaiila Area of Interest Non-renewable Resource Assessment (Phase 1) Great Bear Lake Area, Northwest Territories Parts of NTS 86K, L, M, N and 96I, NWT Open File (NTGO Publication), Author: Gebert JS, Jackson JE, O'Neil CE, October 2007

# 59. DU K'ETS'EDI, SENTINEL ISLANDS CONSERVATION ZONE

**Dene Place Name:** Du K'ets'Edi **Size:** 211 km<sup>2</sup>

**Elevation:** 143 m; 437 m; 213 m

#### **Reasons for Conservation**

- The Du K'ets'Edi are protected due to their cultural significance. Many are considered to have mythical significance and to have been formed when mythical beings turned into islands as they were crossing Great Bear Lake (GBL). Some islands require acts of respect when one passes them and some are considered to have supernatural powers.
- These islands also support subsistence use as they were primarily used for safety purposes during travel (storms, docking and temporary use year round, particularly during the open water season).

#### **Location and Boundaries**

Du K'ets'Edi ("the islands taking care of themselves") are located at strategic points all around Great Bear Lake Watershed (GBLW). They lie at various distances from Déljne.

#### **Land Ownership**

The Crown holds surface and subsurface rights to all of the Du K'ets'Edi Conservation Zone.

#### **Ecological Importance**

The ecological importance of the islands comprising Du K'ets'Edi lies in their location in GBL. These islands are to be protected in a natural, undeveloped state primarily to protect the water quality of GBL.

Geological Province: Bear Province; Interior Platform

<u>Permafrost Type(s)</u>: N/A (excluded from permafrost data set)

Level IV Ecoregion(s): Radium Hills HS; Great Bear Plain LS

Major Watershed(s): Great Bear

<u>Regional Watershed(s)</u>: Great Bear Lake – Northeastern, Great Bear Lake – Camsell, Great Bear

Lake – Johnny Ho

Burn History: No areas were recorded as having been burned in the recent past

#### **Ecological features:**

- 1. The ecological importance of the islands comprising Du K'ets'Edi lies in their location in GBL. These islands are to be protected in a natural, undeveloped state primarily to protect the water quality of GBL<sup>217</sup>
- 2. Barren-ground caribou habitat. Bluenose East barren-ground caribou herd occur:
  - o on the southern islands during the winter from December to March
  - o just east of the islands during the fall run in October
  - o just south of the islands during fall post rut in November

# Socio-Cultural Importance

#### Socio-cultural features:

- 1. The Sahtugot'ine have used Du K'ets'Edi for as long as they have used GBL. They used these islands primarily for safety purposes when traveling on GBL (safety from GBL storms, docking and temporary use year round, particularly during the open water season)<sup>218</sup>
- 2. The Sahtugot'ine consider many Du K'ets'Edi to have mythical significance, and to have been formed when mythical beings turned into islands when crossing GBL. Du K'ets'Edi thus have many stories associated with them. Some Du K'ets'Edi require special acts of respect when passing them and some are considered still to have supernatural powers<sup>219</sup>
- 3. Important for their educational value and the transmission of Sahtugot'ine culture from the elders to the younger generation. They are places where the telling of some of the fundamental creation stories of the Sahtugot'ine is appropriate<sup>220</sup>
- 4. A number of wildlife species are harvested on the islands. Traditional knowledge projects have recorded the harvest of:
  - moose on the Islands
  - o fish throughout the zone
  - o furbearers harvested along the shoreline
  - o Barren-ground caribou are harvest on the islands
- 5. Traditional trails exist throughout the islands
- 6. Log timber harvest occurs on some of the islands
- 7. Cultural sites are present

<sup>220</sup> ibid

<sup>&</sup>lt;sup>217</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>218</sup> ibid

<sup>&</sup>lt;sup>219</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

# **Economic Importance**

Oil and Gas Potential: the eastern islands are in very low potential; the remaining are in low to

moderate potential Oil and Gas Rights: None

Mineralization: A number of unclassified and IOCG and related deposits

Mineral Rights: A high concentration of mineral claims and some mineral leases in the eastern

islands near Edajíla

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

# **Zone Specific Conditions**

CR #16

CR #17

CR #19

# Map 19. Great Bear Lake and Area - 1

# 17. HORTON LAKE Special Management Zone

Dene Place Name: Arakíe Tué

Size: 1,178 km²

Elevation (min, max, average): 323 m; 480 m; 381 m

#### **Reasons for Special Management**

- Horton Lake is used every late summer/fall by the Sahtu Dene and Métis for caribou harvest. The zone is put in place to manage for continued harvest. The entire zone is an Important Wildlife Area for barren-ground caribou and is used extensively by the animals. Both the Bluenose east and Bluenose west herds occur in the zone at different times during their lifecycle.
- The District of Déline holds both surface and subsurface title to lands around Horton Lake. The SMZ will allow for future economic development.

#### **Location and Boundaries**

The Horton Lake Conservation Zone includes a large buffer area around the lake and some of the small bodies of water in the area. It is north-east of the community of Colville Lake, at the north-eastern boundary of the SSA, north the Great Bear Lake Watershed.

# **Land Ownership**

The Dél<sub>l</sub>ne District holds surface title to portions on the western and northern shores of Horton Lake. The remainder of the zone is Crown land.

# **Ecological Importance**

Conservation will ensure its pristine character and preserve its ecological integrity. The lake has low biological productivity, with slow rates of growth and is ecologically fragile. The zone is a very important place for wildlife including caribou, muskox, grizzly bear, wolf, wolverine, arctic fox, marten and migratory waterfowl. According to traditional knowledge, wildlife in this zone require large bodies of water. This large body of water attracts and supports the prey that they depend on. Fish species include trout, whitefish, and pike. For the Dene and Métis, it is important that wildlife in the zone not be unnecessarily disturbed.

**Geological Province**: Interior Platform

Permafrost Type(s): continuous permafrost

Level IV Ecoregion(s): Anderson Plain HS

Major Watershed(s): Amundsen Gulf

Regional Watershed(s): Horton

# Burn History: no recent burns recorded

#### **Ecological features**:

- 1. Large area of wolf denning habitat
- 2. In general muskox habitat and two muskox Important Wildlife Areas<sup>221</sup> occur in the zone
- 3. The western side is an Important Wildlife Area<sup>222</sup> for furbearers
- 4. An area adjacent to the north-west of the zone is considered important for ecological representation
- 5. An esker (valuable wildlife habitat, serves as prime denning areas) is located on the western edge of the zone
- 6. The entire zone is an Important Wildlife Area<sup>223</sup> for barren-ground caribou. In the fall there is a high concentration of barren-ground caribou around Horton Lake.<sup>224</sup> Bull caribou have been documented to stay within the treeline of the area during the fall migration.<sup>225</sup>
- 7. Bluenose East barren-ground caribou occur: in the southern portion of the zone during the late summer from August to October
- 8. Bluenose West barren-ground caribou occur:
  - In the north-eastern corner of the zone during the winter from December to March;
  - o Throughout the entire zone during the fall rut in October.

# **Socio-Cultural Importance**

The zone is in the Dél<sub>1</sub>ne District and was traditionally used by the people of Dél<sub>1</sub>ne. Dél<sub>1</sub>ne elders recount that families would boat on Great Bear Lake up to Neregah, the North Shore and then hunt on Horton Lake. Today it is primarily used by the K'asho Got'ine people of Colville Lake and at times Fort Good Hope, as an important caribou hunting area. <sup>226</sup>

Today the area is used as a summer retreat. People return there each summer by floatplane for spiritual renewal and to hunt caribou. Conservation will preserve the physical heritage such as grave sites, traditional trails, camping sites, cabins, and archaeological sites. Caribou corrals are located near the lake indicating that the harvest of caribou around Horton Lake has been taking place for many years.

Horton Lake is important for the stories that are associated with the lake, and for the history, values and law of the K'asho Got'ine and for the Sahtugot'ine. Arakíe Tué is important for its educational value and the transmission of culture from the elders to the younger generation. It continues to be used to teach history, values, law and land based skills.

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<sup>&</sup>lt;sup>221</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>222</sup> ibid

<sup>&</sup>lt;sup>223</sup> ibid

<sup>&</sup>lt;sup>224</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>225</sup> ibid

<sup>&</sup>lt;sup>226</sup> ibid

It is a place of spiritual renewal for the K'asho Got'ina to strengthen their relationship with land and one another as a people. It is a very important for hunting, fishing, trapping and the gathering of plants and berries — for food and the preservation of the hunting, fishing, trapping and gathering way of life. The treeline serves as the interface for caribou, muskox, wolf, wolverine community hunting.

The community of Dél<sub>l</sub>ne continues to have an interest in the area as they hold surface title to some of the land which will provide opportunities for future economic development.

#### Socio-cultural features:

- 1. Traditional trails
- 2. Fish harvesting takes place
- 3. Archaeological sites and old corals for hunting caribou
- 4. Berry and plant harvesting also takes place
- 5. Barren-ground caribou are harvested in this location every year by the community of Colville Lake. The community also engages in late summer/fall time community hunts over a number of days

# **Economic Importance**

Oil and Gas Potential: moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

# Map 20. Great Bear Lake and Area - 2

# 16. NEREGAH (NORTH SHORE) Special Management Zone

**Dene Place Name:** Neregah **Size:** 4,792 km<sup>2</sup>

**Elevation (min, max, ave.):** 146 m; 640 m; 254 m

# **Reasons for Special Management**

- The Sahtugot'ine have used Neregah for centuries. Its primary importance lies in the area's heritage values.<sup>227</sup>
- According to the elders of Déline, Neregah is a very important place for wildlife. It is productive habitat and is important to the life cycles of a wide range of wildlife species.<sup>228</sup>

#### **Location and Boundaries**

Neregah is located on the north-western shore of Great Bear Lake. Its nearest point is approximately 125 km from Dél<sub>1</sub>ne. Neregah's boundaries include the north shore of Dease Arm/Tucho.

# **Land Ownership**

The Déline Land Corporation holds the surface title to most of the shoreline. The Crown holds the surface title to the remainder of the shoreline and most of the interior and all subsurface title.

### **Ecological Importance**

<u>Geological Province</u>: <sup>3</sup>/<sub>4</sub> of the zone is in the Interior Platform; the most eastern <sup>1</sup>/<sub>4</sub> is in the Arctic Platform

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Great Bear Upland HS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear Lake - Northwestern

<u>Burn History</u>: Few recent fires have occurred in the area. The western tip of the zone burned in the 1960s and in the 1980s there was an adjacent burn. Two small central areas burned in the 1960s and in the 1990s

<sup>228</sup> ibid

<sup>&</sup>lt;sup>227</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

#### **Ecological features**:

- According to the elders of Déline, Neregah is a very important place for wildlife. It is very productive wildlife habitat, and it is important to the life cycles of a wide range of wildlife species including: barren-ground caribou, moose, grizzly bear, muskox, fox species, beaver, marten, mink, muskrat, lynx, wolverine, arctic hare, wolf and waterfowl<sup>229</sup>
- 2. Neregah is also very important for fish species, including lake trout, herring and whitefish<sup>230</sup>
- 3. A rare or potentially at risk plant species, Arabis caldera occurs along the shore 231
- 4. Important area for ecological representation of all Sahtu ecoregions<sup>232</sup>
- 5. The entire zone has been identified as muskox habitat.<sup>233</sup> Two Important Wildlife Areas<sup>234</sup> for muskox have been identified in the zone
- 6. The western portion of the zone has been identified as waterfowl habitat and the shoreline is important breeding duck habitat<sup>235</sup>
- 7. Two segments of the zone are Important Wildlife Areas for furbearers<sup>236</sup>
- 8. Based on a number of TK reports, furbearer habitat occurs throughout the zone
- 9. Barren-ground caribou habitat occurs throughout the zone<sup>237</sup>

Bluenose-East barren-ground caribou herd occur in the zone during:

- the mid- and late-summer months from July to August and from August to October when the herd travels into the eastern edge of the zone
- o the fall rut in October when the herd is in the eastern portion

<sup>&</sup>lt;sup>229</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>230</sup> ibid

<sup>&</sup>lt;sup>231</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a> <sup>232</sup> ihid

<sup>&</sup>lt;sup>233</sup> SLUPB-RWED Wildlife Mapping Project

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, muskox

<sup>&</sup>lt;sup>235</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, furbearers

<sup>&</sup>lt;sup>237</sup> SLUPB-RWED Wildlife Mapping Project

o the post-rut in November when the herd travels into the middle portion of the zone and is very close to the eastern end.

Bluenose-West barren-ground caribou herd occurs in the zone during:

- the fall rut in October
- o the fall post-rut in November when it travels very close to the western edge.

Rakekee Goke Godi: Places we take care of recommended designating Neregah as a Critical Wildlife Area for caribou and muskox.

## Socio-Cultural Importance

#### Socio-cultural features:

- 1. The Sahtugot'ine have used Neregah for centuries. Its primary importance lies in its heritage values:
  - o grave sites,
  - traditional trails,
  - o landmarks,
  - o cabins, camping sites,
  - natural harbours,
  - o gathering places,
  - o other archaeological sites, (including old tools and canoes, etc.).

Numerous archaeological and burial sites are located along the shoreline. Two documented historical sites are located in the zone. A high concentration of traditional trails occur throughout. It is one of the "natural museums" of the Sahtugot'ine. <sup>238</sup>

- 2. It was an important place for ancient contacts with Inuit venturing inland<sup>239</sup>
- 3. It is important for the many stories associated with particular places and events, and for the cosmology, history, values and law of the Sahtugot'ine that these stories preserve. It is one of the "natural libraries" of the Sahtugot'ine<sup>240</sup>
- 4. It is important for its educational value and the transmission of Sahtugot'ine culture from the elders to the younger generation. It continues to be used for educational trips involving Dél<sub>2</sub>ne elders and school-aged children in the spring and summer, and for the teaching of the Sahtugot'ine legends, history, values, law and land based skills. It remains one of the "natural schools" of the Sahtugot'ine<sup>241</sup>
- 5. Continues to be important for hunting, fishing, trapping of the species listed above takes and for gathering of a variety of plants and berries (plant harvest area at western end)

<sup>&</sup>lt;sup>238</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>239</sup> ibid

<sup>&</sup>lt;sup>240</sup> ibid

<sup>&</sup>lt;sup>241</sup> ibid

- 6. Several natural harbours allow safe moorage of boats and several productive fisheries<sup>242</sup>
- 7. Important for summer hunting of ungulates<sup>243</sup>
- 8. Log timber harvest occurs along the shoreline
- 9. A Special Harvesting Area (as per SDMCLCA) for fish near the western end

Rakekee Goke Godi: Places we take care of recommended surface protection and oral history and archaeological research to document and protect extant heritage resources.

# **Economic Importance**

### Oil and Gas Potential:

Western third - moderate to high middle portion – moderate eastern portion - moderate/low to very low

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: A small mineral claim at the far western tip, one in the north-western end and another mineral claim of a significant size at the far eastern end

# Tourism and Outfitting Potential:

Potential development for the Déline Land Corporation (DLC) and Déline Renewable Resource Council (DRRC) with respect to commercial big game hunts for caribou, muskox and grizzly bear Potential development for the DLC investment in sports fishing lodges

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

## **Zone Specific Conditions**

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<sup>&</sup>lt;sup>242</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt. <sup>243</sup> ibid

#### 58. LUCHANILINE (WHITEFISH RIVER) Conservation Zone Dene Place Name: Luchaniline $1.443 \text{ km}^2$ Size:

Elevation: 154 m; 543 m; 246 m

#### **Reasons for Conservation**

- Luchaniline is widely recognized as a critical whitefish spawning area.<sup>244</sup>
- According to the elders of Déline, Luchaniline is a very important place for wildlife. It is productive habitat and is important to the life cycles of a wide range of wildlife species. 245

#### **Location and Boundaries**

Luchaniline is located in the north-western part of the Great Bear Lake Watershed (GBLW). Its nearest point is approximately 40 km from Déline. Its boundaries include all of the Whitefish River and the downstream reaches of the River's watershed. It extends 10 km on either side of the river.

# **Land Ownership**

The Déline Land Corporation (DLC) holds surface title to most of the land. The DLC also holds the subsurface title to a parcel of land near the mid-point of Luchaniline (Parcel M25). The Crown holds the subsurface title to the remainder of land and the surface title to relatively small portions of Luchaniline.

#### **Ecological Importance**

Geological Province: Interior Platform

Permafrost Type(s): extensive discontinuous permafrost

Level IV Ecoregion(s): Great Bear Upland LS, Great Bear Plain LS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear Lake - Northwestern

Burn History: Three areas of recent burn occurred. Two took place in the 1980s mid-zone and on eastern corner and one in the 1960s occurred close to the middle of the zone

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<sup>&</sup>lt;sup>244</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt. <sup>245</sup> ibid

# **Ecological features**:

- 1. According to the elders of Déline, Luchaniline is a very important place for wildlife. It is productive wildlife habitat and it is important to the life cycles of a wide range of species including: beaver, muskrat, mink, otter, black and brown bear, moose, whitefish, jackfish, loche, grayling, sucker and geese, waterfowl and other migratory bird species. Elders assert that it is important that wildlife using Luchaniline be treated with respect, and not be unnecessarily disturbed.<sup>246</sup>
- 2. Luchaniline is widely recognized as a critical whitefish spawning area. Whitefish are found the throughout the length of the river.<sup>247</sup>
- 3. The western part of the zone is an Important Wildlife Area<sup>248</sup> for muskox
- 4. Furbearer habitat is found extensively throughout
- 5. Important breeding duck habitat<sup>249</sup> occurs throughout
- 6. An esker is located in the northern end
- 7. Residents throughout the NWT and the western parts of Nunavut depend economically, socially and culturally on Bluenose-East and Bluenose-West caribou herds. The area from Edajjla through the northern and western parts of the GBLW to the Luchaniline/Whitefish River area is important to the rut, fall migration, overwintering and spring migration of the Bluenose-West herd. <sup>250</sup>

Bluenose-West barren-ground caribou herd occur during the post-fall rut in November and throughout the zone during the winter from December to March<sup>251</sup>

Bluenose-East barren-ground caribou herd: are located adjacent to, and south of the zone during the fall post rut in November and occur in the southern portion of the zone during the winter from December to March<sup>252</sup>

<sup>&</sup>lt;sup>246</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>24</sup> ibid

<sup>&</sup>lt;sup>248</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>249</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>250</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>251</sup> Nagy, J.A, Wright, W.H, Slack, T.M, and Veitch, A.M. 2005. Seasonal Ranges of the Cape Bathurst, Bluenose-West and Bluenose East Barren-Ground Caribou Herds, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories
<sup>252</sup> ibid

Rakekee Goke Godi: Places we take care of recommended the area be given special consideration in planning and that it be designated a Critical Wildlife Area to protect the whitefish spawning grounds.

# **Socio-Cultural Importance**

## Socio-cultural features:

- 1. The Sahtugot'ine have used Luchaniline for centuries. It preserves much of the physical heritage of the Sahtugot'ine including:
  - o grave sites,
  - o traditional trails, (extensive trails blanket the zone demonstrating extensive use)
  - o cabins, camping sites, (a number of outpost camps and cabins exist)
  - o river crossings,
  - o other gathering places,
  - o other archaeological sites and the implements associated with them. It is one of the "natural museums" of the Sahtuqot'ine
- 2. Important for the many stories associated with specific places and events, and for the cosmology, history, values and law of the Sahtugot'ine that these stories preserve. It is one of the "natural libraries" of the Sahtugot'ine
- 3. Important for its educational value and the transmission of Sahtugot'ine culture from the elders to the younger generation. It continues to be used for educational trips involving Dél<sub>Į</sub>ne elders and school-aged children in the spring and summer, and for the teaching of the Sahtugot'ine legends, history, values, law and land based skills. It is one of the "natural schools" of the Sahtugot'ine
- 4. Continues to be used as a place of spiritual renewal a place where the Sahtugot'ine can better "know who we are"
- 5. Important for hunting, fishing, trapping and the gathering of a variety of plants and berries. Running north to south in the western portion of the zone, berry picking and plant harvest occurs. Fish harvesting is most highly concentrated at the mouth of the Whitefish River but also occurs in other areas. A number of TK sources reported:
  - Waterfowl harvesting takes place in the zone
  - o Furbearer harvesting occurs extensively throughout the zone
  - o Moose harvesting takes place throughout the western half on the zone
  - Barren-ground caribou harvest area
- 6. A Special Harvesting Area for fish and migratory birds was designated at the mouth of the Whitefish River, where the River flows into the western reaches of Smith Arm
- 7. The entire zone is a log timber harvest area

Rakekée Gok'é Godi: Places we take care of recommended surface protection and oral history and archaeological research to document and protect extant heritage resources102. It also recommended that it be designated a Heritage River.

# **Economic Importance**

Oil and Gas Potential: The central half of the zone in very high potential; western edge and

eastern portions in high potential

Oil and Gas Rights: An exploration licence is located in the south-eastern end of the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Potential local commercial renewable resource harvesting

Hydroelectric Potential and Infrastructure: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

# **Zone Specific Conditions**

CR #16

CR #17

# Map 21. Great Bear Lake and Area - 3

# 14. GREAT BEAR RIVER Special Management Zone

Dene Place Name:	Sahtu Deh	
Size:	910 km <sup>2</sup>	
Elevation (min. max. average):	40 m: 477 m: 169 m	

#### **Reasons for Special Management**

- Great Bear River serves heavy traditional and cultural uses by the communities of Déline and Tulita for recreation, fishing, harvesting of other wildlife and for other cultural uses. The intent is to maintain community access to the shoreline and to provide added protection to the water quality.
- The community of Tulita has its water intake on Great Bear River as a result, maintaining or enhancing the water quality of the river is a primary concern.
- The water body is an important travel route between the Mackenzie River and Great Bear Lake.
- Five potential hydroelectric development sites exist on the River. NT Hydro has been meeting with the communities of Tulita and Déline to discuss potential options for small-scale hydroelectric developments to support residential energy demands.
- The Bluenose East barren-ground caribou herd occurs in the area during some of its more vulnerable times, specifically during the fall post-rut in November and from December through to March, during the overwintering period.

#### **Location and Boundaries**

The Great Bear River Special Management Zone begins at the south-eastern end of Great Bear Lake, at Dareli (Keith Arm), near Délıne, creating a buffer around Great Bear River until it meets the Mackenzie River near Tulita.

#### Land Ownership

The Great Bear River lies within both the Délıne and Tulita districts. Both Districts hold surface rights to parcels of land in the zone. The remainder of the land is held by the Crown as are the subsurface rights.

# **Ecological Importance**

The Great Bear River provides water to the community of Tulita. It is an important travel route between the Mackenzie River and Great Bear Lake. Barren-ground caribou of the Bluenose-East herd use areas just south of Dél<sub>Į</sub>ne, off Dareli (Keith Arm), during their migration. There is moose habitat in the zone.

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Keller Plain LS; Great Bear Plain LS; Great Bear Plain LS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear - Mouth

Burn History: A tiny fragment of the zone burned in the 1990s

#### Ecological features:

1. Important breeding duck habitat<sup>253</sup> throughout portion of zone located in the Tulita District

- 2. On the District line, the southern portion of the zone is considered important for ecological representation
- 3. Furbearer habitat in the western half of the zone
- 4. Bluenose east caribou herd occur:
  - o in most of the zone during the fall post-rut in November;
  - o in half of the zone during the winter from December to March.

# **Socio-Cultural Importance**

The Great Bear River Special Management Zone is an important local travel corridor, heritage place, and subsistence use location.

#### Socio-cultural features:

- 1. A portion of the Heritage Trail from Tulita to Déline and across Great Bear Lake
- 2. High concentration of traditional trails used by the communities of Déline and Tulita
- 3. Special fish Harvesting Areas at the mouth to Great Bear Lake, mid-way to Tulita, and where Willow Lake meets Great Bear River
- 4. Special Harvesting Area for moose where the river meets Great Bear Lake
- 5. A number of recreation sites
- 6. Burial sites
- 7. Cabins, tent frames and camp site, roughly halfway from Great Bear River to Tulita
- 8. Moose Special Harvest Area at the mouth of Great Bear Lake and fish Special Harvesting Areas along the river
- 9. Waterfowl and bird harvest
- 10. Barren-ground caribou harvested throughout
- 11. Furbearer harvest in high concentration throughout
- 12. Fish harvest throughout length of river
- 13. Moose harvest all along river
- 14. High concentration of traditional trails
- 15. Timber log harvest occurs all along the river

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<sup>&</sup>lt;sup>253</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

- 16. Berry picking and plant harvest occurs along the river and occurs intensively along both shores in the Déljne District portion of the zone
- 17. Cabins and outpost camps are located along the shores
- 18. Burial sites and archaeological sites are found along the river

The reports *Rakekée Gok'é Godi: Places We Take Care Of* (Sahtu Heritage Places and Sites Joint Working Group, (December 1999) and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001<sup>254</sup>* recommend that the following be undertaken:

- Heritage River designation
- Oral history and archaeological research to document and protect existing heritage resources and burial sites
- Protection of the surface of documented sites.

#### **Economic Importance**

<u>Oil and Gas Potential</u>: Western half is moderate to high; eastern half is very high <u>Oil and Gas Rights</u>: Exploration licences throughout most of the zone, on both the western and the eastern ends

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

#### Hydroelectric Potential and Infrastructure:

Five potential hydroelectric development sites exist:

- o Great Bear River Lower Brackett
- o Great Bear River Upper Brackett
- Great Bear River Head of Rapids (Upper Site)
- Great Bear River Wolverine Creek HPP
- Great Bear River Wolverine Creek HPP A

Sahtu Winter Road runs the length of Great Bear River

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>254</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

# 57. TEHKAICHO DÉ (JOHNNY HOE RIVER) Conservation Zone

Dene Place Name: Tehkaicho Dé

**Size:** 4184 km<sup>2</sup>

**Elevation:** 151 m; 443 m; 247 m

#### **Reasons for Conservation**

- According to the elders of Déline, Tehkaicho Dé is a very important place for wildlife. It contains productive wildlife habitat and is important to the life cycles of a wide range of species. It is also a critical whitefish spawning area. Whitefish are plentiful in the area.<sup>255</sup>
- The zone lies along the Bluenose-East barren-ground caribou migration path in the late fall/early winter as they travel to their over-wintering grounds. 256
- Elders believe Tehkaicho Dé to be one of the most important places used by their ancestors around GBL and one of the most important for their ancestors' survival. It represents significant cultural value to the people of Déline and preserves much of the physical heritage of the Sahtugot'ine.<sup>257</sup>

#### **Location and Boundaries**

Located in the south-western part of the Great Bear Lake Watershed (GBLW), its nearest point is approximately 100 km from Dél<sub>2</sub>ne. Its boundaries include Lac Ste Therese, Birch Lake and a significant part of the Johnny Hoe River watershed.

#### **Land Ownership**

The Déline Land Corporation (DLC) hold surface title to the settlement lands on northern reaches. The Crown holds the subsurface title and the majority of the surface title.

# **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Keller Plain LS, Lac Grandin Plain LS; Great Bear Upland LS; Great Bear

Plain LS

Major Watershed(s): Great Bear

<sup>&</sup>lt;sup>255</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>256</sup> ibid

<sup>&</sup>lt;sup>257</sup> ibid

Regional Watershed(s): Great Bear Lake - Johnny Ho

<u>Burn History</u>: The south-eastern corner and a small section in the north-western corner experienced burned in the 1990s. The western corner burned in the 1980s and a small section in the centre burned in the 1970s.

# **Ecological features:**

- According to the elders of Déline, Tehkaicho Dé is a very important place for wildlife. It contains very productive wildlife habitat, and it is important to the life cycles of a wide range of wildlife species including: beaver, muskrat, caribou, moose, black bear, whitefish, broad whitefish, geese, waterfowl and other migratory bird species<sup>258</sup>
- 2. The area is widely recognized as a critical whitefish spawning area. Whitefish are found the throughout the length of the river<sup>259</sup>
- 3. There is extensive furbearer habitat throughout, including two Important Wildlife Areas<sup>260</sup> for furbearers
- 4. A moose Important Wildlife Area<sup>261</sup> has been identified
- 5. A number of important breeding duck habitats<sup>262</sup> exist, especially around a few of the lakes in the zone
- 6. Eskers are located in the zone
- 7. The Bluenose-East herd moves through the entire zone and crosses several rivers during the late fall/early winter migration to its overwintering grounds. The zone is considered to be particularly sensitive during these times<sup>263</sup>

Bluenose-East barren-ground caribou herd occupy:

- the eastern portion during the fall rut in October
- the entire section during the fall post-rut in November
- the northern half of the zone during the winter season from December to March<sup>264</sup>

<sup>&</sup>lt;sup>258</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>259</sup> ibid

<sup>&</sup>lt;sup>260</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, furbearers

<sup>&</sup>lt;sup>261</sup> Ibid. moose

<sup>&</sup>lt;sup>262</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.

http://www.sahtulanduseplan.org/website/web-content/index.html <sup>263</sup> ibid

Rakekee Goke Godi: Places we take care of recommended the area be given special consideration during land use planning and designating Tehkaicho Dé as a Critical Wildlife Area for fish and moose.

#### **Socio-Cultural Importance**

The elders believe Tehkaicho Dé to be one of the most important places used by their ancestors around GBL and one of the most important for their ancestors' survival.

#### Socio-cultural features:

- 1. Tehkaicho Dé is important for its preservation of much of the physical heritage of the Sahtugot'ine:
  - burial and grave sites,
  - o extensive traditional trails exist throughout the zone,
  - o historic portage across the neck of Sahyoue and other traditional trails,
  - o hundreds of camping sites, cabins, gathering places, (cabins and outposts are located in the zone but many are concentrated in the north)
  - o other archaeological sites and the implements associated with them. Like Luchaniline, it is one of the "natural museums" of the Sahtugot'ine<sup>265</sup>
- 2. Important for the many stories associated with places and events within it, and for the cosmology, history, values and law of the Sahtugot'ine that these stories preserve. It is another of the "natural libraries" of the Sahtugot'ine 266
- 3. Important for its educational value and the transmission of Sahtugot'ine culture from the elders to the younger generation. It continues to be used for educational trips involving Dél<sub>Į</sub>ne elders and high school children, and for the teaching of the Sahtugot'ine legends, history, values, law and land based skills. It is one of the land based "schools" of the Sahtugot'ine<sup>267</sup>
- 4. The elders of Dél<sub>1</sub>ne consider Tehkaicho Dé a very powerful or spiritually deep area. It continues to be used as a place of spiritual renewal by Dél<sub>1</sub>ne residents<sup>268</sup>
- 5. Continues to be important for hunting, fishing, trapping and the gathering of a variety of plants and berries. Even though the fish in Lac Ste-Therese have been found to be

<sup>&</sup>lt;sup>264</sup> Nagy, J.A, Wright, W.H, Slack, T.M, and Veitch, A.M. 2005. Seasonal Ranges of the Cape Bathurst, Bluenose-West and Bluenose East Barren-Ground Caribou Herds, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories

<sup>&</sup>lt;sup>265</sup> Great Bear Lake Working Group. May 31, 2005. "The Water Heart": A management plan for Great Bear Lake and its Watershed. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt.

<sup>&</sup>lt;sup>266</sup> ibid

<sup>&</sup>lt;sup>267</sup> ibid

<sup>&</sup>lt;sup>268</sup> ibid

contaminated by natural sources of mercury<sup>269</sup> the area continues to be used for harvest.

- Waterfowl are harvested in the zone
- Extensive furbearer habitat exists throughout the zone
- o Moose harvesting occurs in the western portion
- o A number of fish harvesting sites are located in the northern section and around the smaller lakes in the zone
- o Barren-ground caribou harvest takes places in different locations
- o Berry and plant harvest take place throughout the northern section
- 6. A Special Harvesting Area (as per *SDMCLCA*) is located at the mouth of the Johnny Hoe River
- 7. Log timber harvest occurs throughout the northern section

Rakekee Goke Godi: Places we take care of recommended surface protection and oral history and archaeological research to document and protect extant heritage resources 104.

# **Economic Importance**

<u>Oil and Gas Potential</u>: the southern half of the zone is low; the northern half is moderate <u>Oil and Gas Rights</u>: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

#### **Zone Specific Conditions**

CR #16

CR #17

<sup>269</sup> ibid

# Map 22. South Central – Overview

# 10. NORMAN RANGE Special Management Zone

Dene Place Name:	To be determined
Size:	6,134 km <sup>2</sup>
Elevation (min, max, average):	16 m: 1033 m: 315 m

# For more details on the Conservation Zones located within this zone, see the respective Zone Descriptions:

- 37. Yamoga Rock CZ
- 38. Chick Lake CZ
- 40. Sam McRae Lake CZ
- 41. Turton Lake CZ
- 45. Kelly and Lennie Lake CZ
- 46. Kelly Lake Protected Area CZ
- 47. Oscar Lake CZ.

#### Note:

- Zone Descriptions for Zones 37, 38, 40, 41, and 47 are grouped together.
- Zone Descriptions for Zones 45 and 46 are grouped together

# **Reasons for Special Management**

- The Norman Range Special Management Zone encompasses a number of traditional and cultural use areas. The zone is intended to ensure continued enjoyment of subsistence uses and practices on the land and to protect cultural sites such as archaeological and burial sites.
- The entire Level IV Norman Range Ecoregion has been taken as the zone boundary to protect wildlife habitat and harvest locations.
- The SMZ allows for the protection of specific values while allowing for the development of a range of economic development opportunities.

#### **Location and Boundaries**

The zone encompasses the entire Level IV Norman Range Ecoregion. It includes Sam McRae Lake, Turton Lake, Chick Lake, Oscar Lake, Kelly Lake, Lennie Lake, a number of other small lakes and Yamoga Rock. It is bound to the north by Yamoga Rock and Lac a Jacques, to the west by the Mackenzie River Special Management Zone, and to the south by the Willow Lake Wetland Special Management Zone. To the east are General Use lands.

#### **Land Ownership**

The zones lies in both the K'asho Got'ine and Tulita Districts. The K'asho Got'ine District holds surface rights to land surrounding Chick Lake, a corner on the far north-western side of the zone and an area around Sam McRae Lake.

The Tulita District holds surface rights to lands west of Oscar Lake, the southern tip of Turton Lake, lands east of Kelly and Lennie Lake and lands in the southern portion of the zone. All subsurface title is held by the Crown except for a small parcel to the east of Kelly and Lennie Lake. The remainder is Crown land.

# **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: the majority of the zone lies in extensive discontinuous permafrost; the north-eastern corner, including the northern tip of Turton Lake and farther north, lies in continuous permafrost

<u>Level IV Ecoregion(s)</u>: Norman Range LS

Major Watershed(s): Central Mackenzie – The Ramparts; Lower Mackenzie; Great Bear

<u>Regional Watershed(s)</u>: Central Mackenzie – Ramparts; Hare Indian; Central Mackenzie – Little Bear; Great Bear - Mouth

Burn History: A number of burns have taken place over the years

Yamoga Rock: The western end burned in the 1980s; south-eastern end burned in the 2000s

Chick Lake: The entire area burned in the 1990s

Sam McRae Lake: Areas to the east and to the west of the lake burned in the 1980s

**Turton Lake:** North-western parts burned in the 1980s; southern tip burned in the 1970s

**Kelly and Lennie Lake:** The northern tip burned in the 1980s; central-eastern shores burned in the 1970s and 1960s and the western shore adjacent to the protected area burned in 1990s

Kelly Lake Protected Area: The south-western edge of the zone burned in the 2000s

Oscar Lake: The eastern portion burned in the 1980s

#### Ecological features:

- 1. TK sources reported that boreal woodland caribou can be found around Moon Lake and west of Oscar Lake
- 2. A number of TK sources recorded that the large majority of the zone is waterfowl habitat, especially around the lakes and on the eastern end of Yamoga Rock
- 3. Seven Important Wildlife Areas<sup>270</sup> for muskox have been identified throughout the zone
- 4. TK sources have identified moose habitat throughout the zone, especially around Kelly and Lennie Lake

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<sup>&</sup>lt;sup>270</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- 5. All of the large lakes bear fish (Moon Lake, Sam McRae Lake, Turton Lake, Chick Lake, Oscar Lake, Kelly and Lennie Lake)
- 6. TK sources identified furbearer habitat throughout the entire zone
- 7. The southern end of Turton Lake, an eastern fragment of Oscar Lake and the northern and south-western edges of the Kelly Lake Protected Area are all important for ecological representation
- 8. A significant number of karst features are found throughout the zones and at Yamoga Rock, on Sam McRae Lake, At Kelly and Lennie Lake and around the Kelly Lake Protected Area
- 9. Important breeding duck habitat<sup>271</sup> has been found throughout the zone on all large lakes (Sam McRae, Turton, Chick, Moon, Kelly, Lennie and Oscar Lakes) and on the eastern end of Yamoga Rock
- 10. Bear habitat can be found in the western side of the zone
- 11. Bluenose west caribou herd occur in the zone during the:
  - o fall rut in October;
  - o fall post-rut in November;
  - winter from December to March.

# **Socio-Cultural Importance**

A number of traditional trails criss-cross this zone and show frequent use of Sam McRae, Turton and Chick Lakes. Additional trails lead north to Lac a Jacques and south to Kelly and Lennie Lake. Trails also lead to Yamoga Rock, a sacred site.

#### Socio-Cultural features of this zone:

- 1. High concentration of cultural and recreation sites along the shores of the lakes, especially at the southern end of Kelly and Lennie Lake
- 2. Cabins, tent frames, camp and outpost sites along the lakes
- 3. Burial sites and archaeological sites around the shores of the lakes
- 4. Turton Lake, Oscar Lake, and Kelly and Lennie Lake are all Special Harvesting Areas for migratory birds
- 5. Documented berry picking and plant harvest sites around lakes
- 6. Log timber harvest takes place at Oscar Lake
- 7. Yamoga Rock is an important sacred site (see zone description 37 for details)
- 8. Moose harvest occurs extensively throughout the zone
- 9. Fish harvest is significant in all of the lakes but especially concentrated around Kelly and Lennie Lake
- 10. Furbearers are harvested around all of the large lakes (Sam McRae, Turton, Chick, Moon, Kelly, Lennie and Oscar Lakes)
- 11. Bear harvest around Sam McRae and Turton Lake, at the Kelly Lake Protected Area and south of Oscar Lake
- 12. Barren-ground caribou have been harvested throughout the zone at Yamoga Rock, Sam McRae Lake and east of the Kelly Lake Protected Area

<sup>&</sup>lt;sup>271</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

# **Economic Importance**

<u>Oil and Gas Potential</u>: A wide range of potentials exist throughout the zone. About half of the zone lies in moderate and low potential. The other half of the zone lies in very high potential.

Yamoga Rock: moderate

Chick Lake: high

Sam McRae Lake: very high; moderate to high

Turton Lake: very high

Kelly and Lennie Lake: half is very high and half is low

Kelly Lake Protected Area: a combination of low, moderate and very high

Oscar Lake: moderate

Oil and Gas Rights: Exploration licence in the eastern corner of the zone, east of Turton Lake

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; a communications line cuts through

the zone, Chick Lake is a water source

# **Applicable Conditions**

All General and Special Management Terms apply

# Map 23. South Central – 1

35. LAC A JACQUES Conservation Zone				
Dene Place Name:	Nofee K'odah Tué			
Size:	123 km <sup>2</sup>			
Elevation (min, max, average):	53 m; 268 m; 68 m			

#### **Reasons for Special Management**

- The community of Fort Good Hope requested that a number of lakes in the K'asho Got'ine District be given a 500 m conservation buffer along their shores to protect the shorelines, provide some protection to water quality and fish and to allow traditional and cultural uses of the lakes to continue.
- Lac a Jacques is an important subsistence use area. Hunting, trapping, fishing and recreational uses take place in high concentration around the lake. A number of burial sites are also located around the lake.

#### **Location and Boundaries**

The Lac a Jacques Conservation Zone is a 500 m buffer around the lake which is located just north of the Norman Range, within the K'asho Got'ine District.

# **Land Ownership**

All surface title is held by the K'asho Got'ine District. All subsurface land is held by the Crown.

## **Ecological Importance**

Geological Province: Interior Platform

Permafrost Type(s): continuous permafrost

Level IV Ecoregion(s): Great Bear Upland LS

Major Watershed(s): Lower Mackenzie

Regional Watershed(s): Hare Indian

Burn History: A small segment to the mid-east of the zone burned in 1980s

#### **Ecological features**:

- 1. Southwest end of lake, moose concentrations around the wetlands are high all year<sup>272</sup>
- 2. Wetlands north of lake are known for their beaver concentrations and have been documented as being "intermediate quality" to "very critical habitat" for beaver<sup>273</sup>

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<sup>&</sup>lt;sup>272</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>273</sup> ihid

- 3. The northern end of the lake touches an Important Wildlife Area<sup>274</sup> for furbearers
- 4. An Important Wildlife Area<sup>275</sup> for moose is located on the south-western shore
- 5. The southern half of the zone is in muskox habitat and the northern end of the lake touches an Important Wildlife Area for muskox<sup>276</sup>
- 6. The entire zone is important breeding duck habitat
- 7. The zone is in barren-ground caribou habitat. The Bluenose West caribou herd occurs in the zone during:
  - the fall post rut in November;
  - o the winter season from December to March.

# **Socio-Cultural Importance**

During the planning process this zone was identified as an important heritage area and subsistence use location. Important fish, wildlife and waterfowl habitats exist within this area.

# Socio-cultural features:

- 1. Large number of cabins, tent frames, camp and outpost sites along the lake
- 2. Significant subsistence use trails
- 3. A high number of burial sites
- 4. Waterfowl and birds are harvested all around the lake
- 5. Furbearers are harvested all around the lake
- 6. Fish are harvested
- 7. Moose are harvested throughout the whole zone
- 8. Barren-ground caribou are harvested throughout the zone

# **Economic Importance**

Oil and Gas Potential: moderate to high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>274</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>275</sup> ibid

<sup>&</sup>lt;sup>276</sup> ibid

# 37. YAMOGA ROCK Conservation Zone

# 38. CHICK LAKE Conservation Zone

# 40. SAM MCRAE LAKE Conservation Zone

# 41. TURTON LAKE Conservation Zone

# 47. OSCAR LAKE Conservation Zone

Dene Place Name: Yamoga Rock - Yamoga Fee

Chick Lake – to be determined Sam McRae Lake – to be determined Turton Lake – to be determined

Oscar Lake – Datzımı Tué

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Zone Name	Size	Minimum Elevation	Maximum Elevation	Average Elevation		
Yamoga Rock	92 km²	153 m	840 m	387 m		
Chick Lake	36 km²	109 m	170 m	128 m		
Sam McRae Lake	59 km²	93 m	359 m	140 m		
Turton Lake	79 km <sup>2</sup>	138 m	310 m	157 m		
Oscar Lake	67 km <sup>2</sup>	172 m	298 m	211 m		

Note: These Conservation Zones are located within the larger 10. Norman Range Special Management Zone. For details on the larger zone, see Zone Description 10.

#### **Reasons for Conservation**

- Yamoga Rock is a sacred site as it is the location of a legendary battle.
- Chick Lake, Sam McRae Lake and Turton Lake are all given 500 m conservation buffers to protect a combination of recreational and subsistence uses. The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.
- Oscar Lake has a 2.5 km buffer for the same reasons. The buffer is significantly larger to incorporate the wetland area and smaller water bodies adjacent to the lake.

#### **Location and Boundaries**

All of these Conservation Zones occur within the Norman Range Special Management Zone.

The entire landform of raised rock was selected for the Yamoga Rock zone. Chick Lake, Sam McRae Lake and Turton Lake have 500 m buffers around their shores. Oscar Lake has a 2.5 km buffer around its shores to capture a number of small adjacent lakes.

# **Land Ownership**

The Tulita District holds a significant amount of surface rights around all of the lakes but all subsurface ownership is held by the Crown.

Yamoga Rock: Crown land

Chick Lake: The Tulita District holds surface rights all around the lake

**Sam McRae Lake**: The Tulita District holds surface rights on the western shore **Turton Lake**: The Tulita District holds surface rights to the southern tip of the lake **Oscar Lake**: The Tulita District holds surface lands on the western side of the lake

# **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>:

Yamoga Rock: extensive discontinuous permafrost Chick Lake: extensive discontinuous permafrost Sam McRae Lake: continuous permafrost

**Turton Lake**: extensive discontinuous permafrost

Oscar Lake: majority in extensive discontinuous permafrost; northern corner in continuous

Level IV Ecoregion(s): Norman Range LS

Major Watershed(s):

Yamoga Rock, Chick Lake, Oscar Lake: Central Mackenzie – The Ramparts

Sam McRae Lake and Turton Lake: Lower Mackenzie

Regional Watershed(s):

Yamoga Rock and Chick Lake: Central Mackenzie – Ramparts

Sam McRae Lake and Turton Lake: Hare Indian

Oscar Lake: Central Mackenzie – Little Bear

Burn History: A number of burns have taken place over the years.

Yamoga Rock: The western end burned in the 1980s; south-eastern end burned in the 2000s

Chick Lake: The entire area burned in the 1990s

**Sam McRae Lake:** Areas to the east and to the west of the lake burned in the 1980s **Turton Lake:** North-western parts burned in the 1980s; southern tip burned in the 1970s

Oscar Lake: The eastern portion burned in the 1980s

#### **Ecological features:**

1. A number of TK sources indicate that furbearer habitat exists around all of the lakes

2. All of the lakes are fish bearing

- 3. Important breeding duck habitat<sup>277</sup> is located around each of the lakes including the eastern end of Yamoga Rock
- 4. All of the lakes are considered waterfowl habitat including the eastern half of Yamoga Rock

# Yamoga Rock:

- 1. Important Wildlife Areas for muskox
- 2. The zone is a large, bedrock ridge which may be important habitat for birds of prey
- 3. Large numbers of muskoxen are found in the area<sup>278</sup>
- 4. Karst features

#### **Turton and Sam McRae Lakes:**

- 1. Important Wildlife Areas for muskox on eastern side of Sam McRae Lake
- 2. The bottom part of Turton Lake is CWS<sup>279</sup> identified terrestrial habitat for migratory birds
- 3. Karst features on Sam McRae Lake
- 4. Bluenose west caribou herd occur at both lakes during the fall post-rut in November
- 5. Turton is a Special Harvesting Areas for migratory birds
- 6. Southern end of Turton Lake was identified as important for ecological representation

#### Oscar Lake:

- 1. Special Harvesting Area for migratory birds
- 2. Eastern fragment of the lake has been identified as important for ecological representation
- 3. The community of Tulita has identified it as an area high in moose, beaver and muskrat

# **Socio-Cultural Importance**

A number of socio-cultural values occur throughout the conservation zones:

- 1. Harvest of moose takes place on all of the lakes
- 2. Traditional trails occur throughout the zones
- 3. Furbearers are harvested around all of the lakes
- 4. A significant amount of fish harvesting occurs on all of the lakes

#### Yamoga Rock

Yamoga Rock is a culturally sacred K'asho Got'ine landmark. The final battle between Yamoga, a legendary warrior and his enemy Konadi took place at Yamoga Rock. According to legend, a formation on the northern face of the ridge is said to be the form of Yamoga. The site is also an area where barren-ground caribou are harvested.

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<sup>&</sup>lt;sup>277</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 Latour, P.B., Leger, J., Hines, J.E., Mallory, M.L., Mulders, D.L., Gilchrist, H.G., Smith, P.A., & Dickson,
 D.L., March 2006, Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut,
 3rd. Ed., Occasional Paper, Canadian Wildlife Service

Details of the story of Yamoga Fee can be found in *Rakekée Gok'é Godi Places We Take Care of*, Report of the Sahtu Heritage Places and Sites Joint Working Group" (December 1999). The report recommends surface and subsurface protection for the zone.

Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001 recommends:

- National Historic Site and Territorial Historic Park designation;
- Oral history and archaeological research to document and protect heritage resources;
- Architectural and historical documentation of buildings to examine potential for preservation and restoration;
- Surface and subsurface protection of documented sites.

#### Chick Lake:

- 1. Many archaeological and cultural sites
- 2. Cabins present

# Sam McRae and Turton Lakes:

- 1. Outpost camps and berry harvest areas
- 2. Bears are harvested at the meeting of the two lakes
- 3. Barren-ground caribou harvested at Sam McRae Lake

#### Oscar Lake

- 1. Cabins and outpost camps
- 2. Special Harvesting Area for fish, jackfish, or pike is plentiful
- 3. Waterfowl in the area
- 4. Berry picking areas
- 5. Old dwellings and archaeological sites
- Bear harvest

In the *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*, participants requested surface and subsurface protection for Oscar Lake to protect trapping, waterfowl, berry picking and archaeological sites in the area.

#### **Economic Importance**

Oil and Gas Potential: Yamoga Rock: moderate Chick Lake: very high

Sam McRae Lake: western half moderate to high; eastern half very high

Turton Lake: very high Oscar Lake: moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; a communications line crosses the north-western portion; Chick Lake is a water source

# **Applicable Conditions**

All General and Special Management Terms apply

42. DOCTOR LAKE Conservation Zone	
Dene Place Name:	To be determined
Size:	21 km <sup>2</sup>
Elevation (min, max, average):	340 m; 373 m; 350 m

#### **Reasons for Conservation**

The Tulita community requested a conservation buffer around Doctor Lake in order to protect fish stocks and to allow traditional harvest activities to continue. Doctor Lake was identified as an excellent fish lake and as a community hunting area for woodland and barren-ground caribou.

#### **Location and Boundaries**

The Doctor Lake Conservation Zone includes a number of small bodies of water as well as Doctor Lake, north-east of Norman Wells.

#### **Land Ownership**

All land is held by the Crown.

#### **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

Level IV Ecoregion(s): Great Bear Upland LS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear Mouth

Burn History: No recent fires have been recorded in the area

#### **Ecological features**:

1. The area is surrounded by moose habitat

2. Within muskox habitat

- 3. Within furbearer habitat
- 4. Extensive karst features located south of the zone
- 5. The entire zone is important breeding duck habitat  $^{280}$
- 6. The zone is part of barren-ground caribou habitat. The Bluenose West caribou herd is present in throughout the zone during the fall rut in October and the fall post rut in November

# Socio-Cultural Importance

During a meeting in Tulita, Doctor Lake was identified as an excellent fish lake (whitefish) and a community hunting area for woodland and barren-ground caribou.

#### Socio-cultural features:

- 1. A high concentration of traditional trails occur throughout the zone
- 2. Camp and tent sites
- 3. Boreal woodland caribou harvested around lake
- 4. Moose harvested around lake
- 5. Fish harvest takes place
- 6. Furbearers harvested in zone

# **Economic Importance**

Oil and Gas Potential: very high

Oil and Gas Rights: Exploration licence to the north of Doctor Lake, adjacent to the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>280</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

# Map 24. South Central – 2

# 11. WILLOW LAKE WETLANDS Special Management Zone

Dene Place Name:	To be determined
Size:	1,347 km <sup>2</sup>
Elevation (min, max, average):	63 m; 450 m; 150 m

For more details on the Willow Lake Conservation Zone located within this zone, see Zone Description 44.

# **Reasons for Special Management**

- The Willow Lake Wetland area encompasses Willow Lake and a number of other tiny lakes. This zone is a key breeding area, nesting area, and fall staging area for waterfowl populations of international significance. It is the location of a duck banding program and one of four areas in the Sahtu identified by the Canadian Wildlife Service (CWS) as Terrestrial Habitat Sites for migratory birds.
- The wetland is also a rich habitat for a number of wildlife species including moose, black bear, lynx, arctic hare, muskrat, beaver, mink, and marten.<sup>281</sup>
- The zone is a traditional hunting and fishing area and should allow continued subsistence uses of the land. Numerous stories tell of the lake's importance.
- The SMZ allows for the protection of specific values while allowing for the development of a range of economic development opportunities.

#### **Location and Boundaries**

Directly south of the Norman Range Special Management Zone, this zone includes the Willow Lake Conservation Zone and the wetland areas around the lake. To the south, the zone is bounded by the Great Bear River Special Management Zone.

#### **Land Ownership**

The large majority of the zone is surface land owned by the Tulita District. Subsurface ownership is held by the Crown.

#### **Ecological Importance**

For more detail please see the Willow Lake Conservation Zone description (as it is located within this Special Management Zone)

**Geological Province**: Interior Platform

Permafrost Type(s): extensive discontinuous

<sup>281</sup> IBP report, P. 64

Level IV Ecoregion(s): North Mackenzie Plain LS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear - Mouth

<u>Burn History</u>: Three patches were burned in the 1990s (south-west corner, eastern portion and a portion of the north)

#### **Ecological features:**

- 1. Boreal woodland caribou are found in the Willow Lake Conservation Zone located within this zone
- 2. The entire zone is a CWS terrestrial habitat site for migratory birds and general waterfowl habitat as documented by TK sources
- 3. TK sources and wildlife biologists 282 report moose habitat in the zone
- 4. The entire zone is an Important Wildlife Area<sup>283</sup> for furbearers and according to TK reports, furbearer habitat
- 5. A number of karst areas occur throughout the zone
- 6. The majority of the zone is an International Biological Programme Site<sup>284</sup>, Site 24
- 7. The majority of the zone is an important breeding duck habitat area
- 8. Bluenose east caribou herd occur: in the eastern end of the zone during the fall post-rut in November
- 9. The Important Wildlife Area<sup>285</sup> report considered the wetlands a "unique area", characterized as areas that are unique and important to certain wildlife species at some point in their lifecycle (see report for further details)
- 10. The wetlands around Willow Lake provide high quality beaver habitat and support high beaver densities. <sup>286</sup> Surveys conducted in 1989, 1997 and 2001 reported densities from 41 69 active beaver lodges per 100 km<sup>2</sup> in a portion of the area<sup>287</sup>

#### Socio-Cultural Importance

For more details on the Willow Lake Conservation Zone values see its description under zone 44. Many stories are associated with Willow Lake. 288

<sup>&</sup>lt;sup>282</sup> ENR biologists wildlife range mapping report

<sup>&</sup>lt;sup>283</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>284</sup> IBP report

<sup>&</sup>lt;sup>285</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>286</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>287</sup> inid

<sup>&</sup>lt;sup>288</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2nd Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews. P. 92.

#### Socio-cultural features:

- 1. Burial and historic sites
- 2. Log timber harvest area all along Willow Lake in the northern section
- 3. Berry and plant harvest sites
- 4. High concentration of traditional trails throughout
- 5. Moose are harvested throughout the zone
- 6. Fish harvest takes place
- 7. Furbearer harvest occurs throughout
- 8. Barren-ground caribou are harvested
- 9. Bears are harvested

# **Economic Importance**

Oil and Gas Potential: The northern half of the zone is low to moderate potential and the

southern half is moderate to high or high potential

Oil and Gas Rights: Exploration licence in the south-western corner of the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Two potential hydroelectric development areas, Great Bear River – Lower Brackett and Great Bear River – Upper Brackett, both are at the south-western corner of the zone: no identified infrastructure

#### **Applicable Conditions**

All General and Special Management Terms apply

43. MAHONEY LAKE (Massacre Site) Conservation Zone	
Dene Place Name:	Tuwí Tué
Size:	232 km <sup>2</sup>
Elevation (min, max, average):	259 m; 391 m; 265 m

# **Reasons for Conservation**

- Mahoney Lake is an important subsistence use area for the people of Tulita. It is widely known as an area plentiful in whitefish and is used for barren-ground and woodland caribou harvest. It is also plentiful in waterfowl and birds, furbearers and moose.
- On the north-western shore of the lake is the Mahoney Massacre Site, Tuwí Tué, the location of a fight between three Hudson's Bay Company employees and a Dene family that resulted in the death of 11 Dene men, women and children. The story is still recounted in the oral tradition of Tulita and the area should be treated with respect.

#### **Location and Boundaries**

The Mahoney Lake Conservation Zone is located 74 km north of Tulita, directly north of Willow Lake.

#### **Land Ownership**

All the land is selected land with surface title held by the Tulita District. The subsurface is held by the Crown.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

Level IV Ecoregion(s): Great Bear Upland LS

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear Mouth

Burn History: The entire northern and western side of the lake was burned in the 1990s

#### **Ecological features**:

- 1. TK studies have identified an area of waterfowl and bird habitat
- 2. Moose habitat has been identified along the shore
- 3. Furbearer habitat occurs all around the zone
- 4. Important areas for ecological representation are located both east and west of the zone
- 5. A significantly extensive karst feature is located just south-west of the zone
- 6. The entire zone is important breeding duck habitat<sup>289</sup>
- 7. Within barren-ground caribou habitat. The Bluenose West caribou herd occurs:
  - o throughout the zone during the fall post rut in November;
  - o in the northern portion of the zone during the winter from December to March.

# Socio-Cultural Importance

Tuwí Tué, the Mahoney Lake Massacre Site, is located on the north-western end of Mahoney Lake. In December 1835, three Hudson's Bay Company employees left from their Fort Norman (Tulita) post to collect a cache of fish at Mahoney Lake. A Dene family were encamped near the lake and employed to provide meat and fish for the HBC post. Partly as a result of earlier problems between one of these men and a young married Dene woman, a terrible fight ensued, and the three Hudson's Bay employees murdered eleven men, women and children. The men were later tried. One was sent to England for trial and then transported back to Canada,

<sup>&</sup>lt;sup>289</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

another was sentenced to hang but died while jailed and awaiting transportation and the last was set free after testifying against his accomplice.<sup>290</sup>

This story is still recounted in the oral tradition of Tulita. A description of the event and trail proceedings can be found in Foster (1989), as referenced in *Rakekée Gok'é Godı: Places We Take Care Of*, Report of the Sahtu Heritage Places and Sites Joint Working Group, December 1999.

#### Socio-cultural features:

- 1. A large number of trails occur in the zone
- 2. Two archaeological sites on eastern and southern shores of lake
- 3. Number of cabins at southern end of lake
- 4. Camp, heritage, and burial sites
- 5. Moose harvesting takes place along the shore
- 6. Community hunting area for woodland and barren-ground caribou
- 7. Furbearers are harvested within and around the zone
- 8. Important fish lake with large quantities of whitefish, extensive fish harvesting takes place

The Rakekée Gok'é Godi: Places We Take Care Of and Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001 recommend:

- National Historic Site designation of the Massacre Site with surface and subsurface protection;
- Oral history and archaeological research be undertaken to document and protect existing heritage resource and burials;
- Special consideration in the land use planning process.

#### **Economic Importance**

Oil and Gas Potential: low to moderate

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

<sup>&</sup>lt;sup>290</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

# 44. WILLOW LAKE Conservation Zone Dene Place Name: K'áálo Tué Size: 245 km² Elevation (min, max, average): 94 m; 274 m; 115 m

Note: This zone is located within Zone 11 - Willow Lake Wetlands Special Management Zone. For details on larger zone, see Zone Description 11.

#### **Reasons for Conservation**

- Willow Lake is the site of an important seasonal camp and is considered the home of the K'áálo Got'ıne or Willow Lake People. A small community of several cabins is located on the lake.
- The Willow Lake Conservation Zone encompasses Willow Lake and a number of other tiny lakes. This zone is part of a key breeding area, nesting area, and fall staging area for waterfowl populations of international significance. It is the location of a duck banding program and one of four areas in the Sahtu identified by the Canadian Wildlife Service (CWS) as Terrestrial Habitat Sites for migratory birds.
- The wetland is also a rich habitat for a number of wildlife species including moose, black bear, lynx, arctic hare, muskrat, beaver, mink, and marten.<sup>291</sup>
- The zone is a traditional hunting and fishing area and should allow continued subsistence uses of the land. Numerous stories tell of the lake's importance.

#### Location and Boundaries

The Willow Lake Conservation Zone includes a small buffer around Willow Lake and other small bodies of water.

# **Land Ownership**

The area of land in this zone is selected land with surface title held by the Tulita District.

# **Ecological Importance**

Geological Province: Interior Province

Permafrost Type(s): extensive discontinuous

Level IV Ecoregion(s): North Mackenzie Plain LS

<sup>&</sup>lt;sup>291</sup> International Biological Program (IBP) Ecological Sites in Subarctic Canada, Areas recommended as Ecological Sites In Region 10, Yukon and Northwest Territories Boreal Forest to the Treeline, 1975, Edited by Dorothy K.B. Beckel, Coordinator Region 10 (Subarctic) Panel, Lethbridge, Alberta, The University of Lethbridge Production Services, CCIBP/CT, P. 64

Major Watershed(s): Great Bear

Regional Watershed(s): Great Bear - Mouth

**Burn History**: Small segments of the zone have burned in fires in the 1960s and 1990s

This area has a long history as an important place for hunting, fishing, and trapping. The lake and nearby wetlands support relatively large populations of a wide range of species, particularly beaver, moose, and waterfowl. This site is a key breeding area, nesting area, and fall staging area for waterfowl populations of international significance.

#### Ecological features:

- 1. Willow Lake is a bird sanctuary
- 2. Boreal woodland caribou throughout zone
- 3. One of four important areas in the Sahtu identified by CWS as a terrestrial habitat site for migratory birds and is also a general waterfowl and bird habitat area
- 4. A number of TK and scientific reports have identified the zone as moose habitat
- 5. Good fishing place, especially for inconnu
- 6. Important Wildlife Area for furbearers and good general furbearer habitat
- 7. Karst features throughout zone
- 8. Is an International Biological Programme Site<sup>292</sup> (site 24) for a number of reasons including wildlife habitat for a wide variety of species, a staging area for waterfowl and as a traditional hunting and fishing area
- 9. Important breeding duck habitat<sup>293</sup>
- 10. Bluenose west caribou herd occur: in northern segment of zone during the fall post-rut in November
- 11. Bluenose east caribou herd occur: in south-eastern segment of zone during the fall postrut in November
- 12. Important Wildlife Area<sup>294</sup> for beaver
- 13. A Unique Area in the Important Wildlife Area report, characterized as areas that are unique and important to certain wildlife species at some point in their lifecycle

# Socio-Cultural Importance

Willow Lake is also called Brackett Lake on official maps. It is an important seasonal camp. It is the home of the K'aalo Got'ine, the "Willow Lake People". 295 Hunting, fishing, and trapping are

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<sup>&</sup>lt;sup>292</sup> International Biological Program (IBP) Ecological Sites in Subarctic Canada, Areas recommended as Ecological Sites In Region 10, Yukon and Northwest Territories Boreal Forest to the Treeline, 1975, Edited by Dorothy K.B. Beckel, Coordinator Region 10 (Subarctic) Panel, Lethbridge, Alberta, The University of Lethbridge Production Services, CCIBP/CT

<sup>&</sup>lt;sup>293</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>294</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>295</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

good in the area.<sup>296</sup> The Lake and wetlands support large populations of animals. Many traditional stories are associated with this lake, such as the story of Yamoria, when he was pursued by an elderly couple and his father-in-law.<sup>297</sup> This story identifies an area that is important for subsistence fishing on the lake. The full story can be found in *Rakekée Gok'é Godi: Places We Take Care Of.* 

This Zone was identified during the planning process as a very important local travel corridor, heritage place, and subsistence use location. Special features in this Conservation Zone include the Willow Lake Heritage Site and other locations associated with stories and legends. Dene and Métis stories tell of a giant buffalo living in this area. In the summer he sucks up all the water. This is why there is high water in spring and shallow water in the fall.

Willow Lake and surrounding area has long been used for traditional harvesting of jackfish (northern pike), whitefish, waterfowl, muskrat, snowshoe hare, moose, trees for firewood, and berries (particularly blueberries).

# Socio-cultural features:

- 1. Archaeological and burial sites
- 2. Numerous cultural, recreational and community use areas
- 3. Cabins are located around lake
- 4. Berry and plant harvest locations are documented
- 5. Log timber harvest takes place along the entire western edge of the zone
- 6. Traditional trails are extensive throughout the zone
- 7. Moose are harvest throughout the zone
- 8. Fish harvesting takes place in high concentration. The river that comes out at Willow Lake stays open all year and people set nets in December to catch fish throughout the winter
- 9. Furbearer are harvest throughout
- 10. Barren-ground caribou are harvested in area
- 11. Bears are harvested

The reports *Rakekée Gok'é Godi: Places We Take Care Of* (Sahtu Heritage Places and Sites Joint Working Group, (December 1999) and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*<sup>298</sup> recommended:

- Designating Willow Lake as a National Historic Site with surface and subsurface protection;
- Oral history and archaeological research to document and protect heritage resources and burial sites;
- Special consideration in the land use planning process with particular focus on protecting habitat of subsistence species in the area.

<sup>&</sup>lt;sup>296</sup> ihid

<sup>&</sup>lt;sup>297</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

<sup>&</sup>lt;sup>298</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

#### **Economic Importance**

A hydrocarbon assessment was carried out in this area as part of the Protected Areas Strategy. Readers are referred to this report for additional information.<sup>299</sup>

Oil and Gas Potential: northern half is low to moderate; southern half is moderate to high and

very high

Oil and Gas Rights: Exploration licence in southern portion of the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: There are two potential hydroelectric development

sites: Great Bear River - Lower Brackett and Great Bear River - Upper Brackett

# **Applicable Conditions**

All General and Special Management Terms apply

# 45. KELLY AND LENNIE LAKE Conservation Zone

# 46. KELLY LAKE PROTECTED AREA Conservation Zone (land claim)

Dene Place Name: Kelly Lake - Lugedegíl Tué; Lennie Lake - Tuyehíla Tué

Kelly Lake Protected Area - Lugedeail Tué

	Kelly Lake 1100	ected Area - Lugi	edegii rue	
Zone Name	Size	Minimum Elevation	Maximum Elevation	Average Elevation
Kelly and Lennie Lake	205 km <sup>2</sup>	43 m	432 m	104 m
Kelly Lake Protected Area	273 km²	64 m	747 m	462 m

Note: These Conservation Zones are located within the larger Zone 10 - Norman Range Special Management Zone. For details on the larger zone, see the description for Zone 10.

#### **Reasons for Special Management**

Kelly and Lennie Lake are given a 500 m conservation buffer to protect a combination of recreational and subsistence uses. The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.

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<sup>&</sup>lt;sup>299</sup> Hydrocarbon assessment summary report of Willow Lake, Kelly Lake, Bear Rock, and The Smokes areas of interest; Lemieux, Y. Geological Survey of Canada, Open File 5572, 2007; 15 pages, Available at: <a href="http://geopub.nrcan.gc.ca/moreinfo">http://geopub.nrcan.gc.ca/moreinfo</a> e.php?id=224084

The Kelly Lake Protected Area is a parcel of land around the western bank of Kelly Lake which is protected under S.17.4 of the land claim (SDMCLCA). The area is to be preserved for continued traditional and cultural use. The surface will always be protected by the land claim. It is included as a Conservation Zone in the Plan to protect the subsurface as well.

#### **Location and Boundaries**

Both zones are located within the Norman Range Special Management Zone. A 500 m buffer is applied around Kelly and Lennie Lake. The Kelly Lake Protected Area is defined as per the land claim agreement.

# **Land Ownership**

All of the surface title around Kelly and Lennie Lake is held by the Tulita District but the area around the Kelly Lake Protected Area is all Crown land.

# **Ecological Importance**

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Norman Range LS

#### Major Watershed(s):

Kelly and Lennie Lake, Kelly Lake Protected Area: Great Bear

Kelly Lake Protected Area (southern end): Central Mackenzie – The Ramparts

#### Regional Watershed(s):

Kelly and Lennie Lake: Great Bear - Mouth

Kelly Lake Protected Area (southern end): Central Mackenzie – Little Bear

#### **Burn History**:

**Kelly and Lennie Lake:** The northern tip burned in the 1980s; central-eastern shores burned in the 1970s and 1960s and the western shore adjacent to the protected area burned in 1990s **Kelly Lake Protected Area:** The south-western edge of the zone burned in the 2000s

#### Ecological features:

- 1. Upland areas around the lakes are used year-round by muskoxen
- 2. Boreal woodland caribou use the upland areas during late winter when snows are deep in the surrounding boreal forest and in summer to avoid insects and to cool down
- 3. The lakes are known for high-quality fishing (subsistence and recreational angling) however Kelly Lake has been identified as high in natural mercury and fish from the lake should be consumed in moderation
- 4. Moose habitat
- 5. Raptor nesting sites around Lennie Lake

- 6. Important Wildlife Areas for muskox at the northern end of Kelly and Lennie Lake and on the Kelly Lake Protected Area
- 7. Karst features located around the lakes and around the Protected Area
- 8. Fish are plentiful in both lakes but Kelly Lake has been identified as having naturally high mercury (fish harvested from this lake should be consumed in limited quantities and children and women should consume even smaller quantities)
- 9. Bluenose west caribou herd occur around the lakes during the fall post-rut in November
- 10. Special Harvesting Areas for migratory birds on both lakes
- 11. Northern and south-western edges of the Kelly Lake Protected Area are identified as important for ecological representation
- 12. A number of TK sources indicate that furbearer habitat exists around the lake
- 13. Important breeding duck habitat 300 is located around each of the lake
- 14. The lake is waterfowl habitat including the entire Kelly Lake Protected Area

# Socio-Cultural Importance

# Socio-cultural features:

- 1. Archaeological and burial sites at the southern end of the lake
- 2. Cultural site on north-western shore and all along the southern portion of the lake
- 3. Numerous cabins, camp sites and outpost camps along both lakes
- 4. Special Harvesting Area for fish in Kelly Lake
- 5. The Tulita community has expressed interest in having the Kelly Lake heritage trail identified so that people can hike it and use it for cultural programs
- 6. Harvest of moose is very concentrated around both lakes
- 7. Traditional trails occur throughout the zone
- 8. Furbearers are harvested around the lake
- 9. A significant amount of fish harvesting occurs
- 10. Berry and plant harvesting sites
- 11. Bear harvest around Kelly Lake Protected Area
- 12. Barren-ground caribou harvested around the Kelly Lake Protected Area

# **Economic Importance**

A hydrocarbon assessment was carried out in this area as part of the Protected Areas Strategy. Readers are referred to this report for additional information. <sup>301</sup>

#### Oil and gas potential:

Kelly and Lennie Lake: northern half very high; southern half low to moderate Kelly Lake Protected Area: northern half very high; southern half low to moderate

Oil and Gas Rights: None

Mineralization: Undetermined

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<sup>&</sup>lt;sup>300</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>301</sup> Hydrocarbon assessment summary report of Willow Lake, Kelly Lake, Bear Rock, and The Smokes areas of interest; Lemieux, Y. Geological Survey of Canada, Open File 5572, 2007; 15 pages, Available at: <a href="http://geopub.nrcan.gc.ca/moreinfo\_e.php?id=224084">http://geopub.nrcan.gc.ca/moreinfo\_e.php?id=224084</a>

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

The protection provided to the Kelly Lake Protected Area through the Plan adds to the surface protection provided by Section 17.4 of the *Sahtu Dene and Métis Comprehensive Land Claim Agreement*. Should this Conservation Zone ever be removed or modified through future Plan amendments, it will not remove the surface protection provided to the Kelly Lake Protected Areas through the land claim agreement.

56. BEAR ROCK Conservation Zone	
Dene Place Name:	Petınırah
Size:	33 km <sup>2</sup>
Elevation (min, max, average):	79 m; 498 m; 315 m

#### **Reasons for Conservation**

Bear Rock is one of the most important sacred sites in Denendeh and is of cultural value to Dene groups within and outside of the Sahtu. It is the location of a well-known story about Yamoria, a legendary hero who made the land safe for the Dene by chasing away and killing giant beavers that were causing harm to people.

#### **Location and Boundaries**

The Bear Rock Conservation Zone lies within the Mackenzie River Special Management Zone, across from Tulita at the confluence of the Mackenzie and Great Bear Rivers. It is northwest of Tulita.

#### Land Ownership

The zone is selected land with surface title held by the Tulita District.

#### **Ecological Importance**

A Phase 1 ecological assessment was carried out on this area as part of the Protected Areas Strategy. Readers are referred to this report for additional details.<sup>302</sup>

<sup>&</sup>lt;sup>302</sup> Phase 1 Ecological Assessment of Bear Rock and the Smokes, Prepared by Rescan Environmental Services Ltd., March 2007, Availabe at: <a href="http://www.nwtpas.ca/areas/document-2007-bearrock-eaphase1.pdf">http://www.nwtpas.ca/areas/document-2007-bearrock-eaphase1.pdf</a>

**Geological Province**: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

Level IV Ecoregion(s): Norman Range LS

<u>Major Watershed(s)</u>: Central Mackenzie – The Ramparts

Regional Watershed(s): Central Mackenzie – Little Bear

Burn History: The entire area around, including Bear Rock, burned in the 1990s

#### **Ecological features**:

1. Waterfowl and bird habitat, including nesting area for raptors

- 2. Furbearer habitat throughout the zone
- 3. The western side is considered important for ecological representation
- 4. The entire zone is a large karst feature

#### **Socio-Cultural Importance**

Bear Rock is one of the most important sacred sites to the Dene groups that occupy the Mackenzie Region. It has served as a symbol of cultural and political unity of the Dene Nation for many years. Bear Rock is associated with stories about Yamoria, a legendary hero.

Many years ago before white men came to this part of the country, a special man by the name of Yamoria travelled the land and put everything into its rightful place. By doing so he set laws for the people to follow. When Yamoria learned that giant beavers living in Great Bear Lake were causing harm to people, the chased them away and at the confluence of Great Bear River and the Mackenzie River, he killed 3 giant beavers and stretched and nailed their hides on Bear Rock where they can still be seen today. He also shot two arrows at the confluence of the two rivers where two big poles remain. 303

As recounted in a Dene Nation publication, "the symbol of the three beaver pelts on Bear Rock are signs of the land set there as a reminder of the teachings of the legends. If we take the signs set on the land for us as our symbol, we will never have any trouble surviving as a nation." 304

#### Socio-cultural features:

- 1. A number of archaeological sites are located in the north-eastern portion of the zone
- 2. The entire zone is a cultural site
- 3. Traditional trails are present
- 4. Moose harvesting takes place throughout
- 5. Furbearers harvested throughout the zone and area
- 6. Fish harvested all around the zone and on the lake

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<sup>&</sup>lt;sup>303</sup> Rakekée Gok'é Godi: Places We Take Care Of, Report of the Sahtu Heritage Places and Sites Joint Working Group, December 1999

<sup>&</sup>lt;sup>304</sup> ibid, P. 94

The reports *Rakekée Gok'é Godi: Places We Take Care Of* (Sahtu Heritage Places and Sites Joint Working Group, (December 1999) and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*<sup>305</sup> recommended:

- National Historic Site designation with surface and subsurface protection;
- Reviving proposal to commemorate Bear Rock a National Historic Sites in consultation with Tulita residents.

# **Economic Importance**

A hydrocarbon assessment was carried out in this area as part of the Protected Areas Strategy. Readers are referred to this report for additional information. 306

Oil and Gas Potential: high

Oil and Gas Rights: Although there are no Oil and Gas Rights in the zone itself, exploration

licences have been issues to the north, east and south, right adjacent to the zone

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

Hydroelectric Potential and Infrastructure: Undetermined; the winter road

# **Applicable Conditions**

All General and Special Management Terms apply

<sup>&</sup>lt;sup>305</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

Hydrocarbon assessment summary report of Willow Lake, Kelly Lake, Bear Rock, and The Smokes areas of interest; Lemieux, Y. Geological Survey of Canada, Open File 5572, 2007; 15 pages, Available at: <a href="http://geopub.nrcan.gc.ca/moreinfo">http://geopub.nrcan.gc.ca/moreinfo</a> e.php?id=224084

# Map 25. South Central – 3

52. RED DOG MOUNTAIN Conservation Zone	
Dene Place Name:	Tłį Dehdele Dįdlǫ
Size:	27 km <sup>2</sup>
Elevation (min, max, average):	174 m; 657 m; 422 m

#### **Reasons for Conservation**

 Red Dog Mountain is a sacred site for the Mountain Dene. It was subject of an earlier proposal to be commemorated as a National Historic Site. Stories are associated with the mountain and to this day people make offerings as they pass it.

#### **Location and Boundaries**

The Red Dog Mountain Conservation Zone is located in the Mackenzie Valley along the Keele River, south of Tulita.

# **Land Ownership**

All land in this zone is selected land with surface title held by the Tulita District.

#### **Ecological Importance**

Geological Province: northern half – Interior Platform; southern half – Cordilleran Orogen

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

Level IV Ecoregion(s): Mackenzie Foothills LSbs

<u>Major Watershed(s)</u>: Central Mackenzie – Blackwater Lake

Regional Watershed(s): Keele

<u>Burn History</u>: The large majority of the zone was burned in the 1970s and the area just west of the zone burned in the 1990s

#### **Ecological features**:

- 1. Woodland caribou habitat, this zone is specifically in Redstone mountain caribou range
- 2. Furbearer habitat around the zone
- 3. The Keele River is an Important Wildlife Area<sup>307</sup> for moose. Moose habitat and moose winter habitat occur
- 4. The zone is considered important for ecological representation analysis
- 5. The entire zone and surrounding area is important breeding duck habitat

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<sup>&</sup>lt;sup>307</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

#### Socio-Cultural Importance

Red Dog Mountain is on the Keele River. It is a sacred site for the Mountain Dene. People use to portage around Red Dog Mountain because it was said that the Red Dog would take them and eat them if they passed by on the water. One day a medicine man was travelling with a group. He gathered all their possessions including mitts, moccasins, weapons and food. He paddled downt the river past the mountain and a whirlpool opened. He threw all their possessions into the water and the eddy subsided, letting him pass.

Today people make offerings to show respect and to ensure safe passage. They leave matches or other things of value. See *Rakekée Gok'é Godi: Places We Take Care Of,* for the story.

#### Socio-cultural features:

- 1. Traditional trails follow the length of the Keele River
- 2. The entire Keele River is used for log timber harvest
- 3. Cultural and heritage sites are documented
- 4. A recreational site is also located in the zone
- 5. Boreal woodland caribou are harvested
- 6. Waterfowl and birds are harvested in the zone
- 7. Furbearers are harvested in the vicinity
- 8. Concentrated moose harvest
- 9. Fish are harvested in the area
- 10. Dall's sheep harvest

Rakekée Gok'é Godi: Places We Take Care Of and Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001<sup>308</sup> recommended the following:

- National Historic Site designation with surface and subsurface protection;
- Revival of proposal to commemorate Red Dog Mountain in consultation with community.

# **Economic Importance**

Oil and Gas Potential: southern half – low to moderate; northern half – very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Ramhead Outfitters

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; Access roads by the lake

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>308</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

# 53. STEWART LAKE AND TATE LAKE Conservation Zone Dene Place Name: Stewart Lake - Táhlu Tué Tate Lake - Táshín Tué Size: 121 km² Elevation (min, max, average): 215 m; 488 m; 303 m

#### **Reasons for Conservation**

This zone was established during a meeting in Tulita. Stewart Lake and Tate Lake were identified as important fish lakes where people were able to survive off their catch when temperatures were very cold. Both lakes are heavily used for traditional practices such as fishing, camping, hunting, trapping and berry and plant harvesting. The conservation is intended to protect both subsistence uses along the shores and to provide added protection to the fish, the shorelines and the water quality and the level of the lakes.

#### **Location and Boundaries**

The Stewart Lake and Tate Lake Conservation Zone includes both lakes as well as a 1 km buffer zone around them. The zone is located 75 km Northwest of Tulita.

# **Land Ownership**

All land in this zone is selected land with surface title held by the Tulita District.

#### **Ecological Importance**

Geological Province: Interior Platform

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

Level IV Ecoregion(s): Mackenzie Foothills LSbs

<u>Major Watershed(s)</u>: Central Mackenzie – Blackwater Lake

Regional Watershed(s): Keele

<u>Burn History</u>: The western edge of Stewart Lake burned in the 1970s and its southern portion burned in the 2000s. The eastern, northern and western edges of Tate Lake all burned in the 1990s

#### Ecological features:

- 1. The eastern edge of both lakes is known as furbearer habitat
- 2. Both lakes make up moose habitat
- 3. The eastern shore of both lakes is important for ecological representation
- 4. Both lakes are important fish bearing lakes due to harvest concentrations
- 5. Both lakes are important breeding duck habitat

6. Just south of Stewart Lake a rare or possibly at risk plant is found: Symphyotrichum yukonense

#### Socio-Cultural Importance

This zone was established during a meeting in Tulita. Stewart Lake and Tate Lake were identified as important fish lakes where people were able to survive off their catch when temperatures were very cold.

#### Socio-cultural features:

- 1. A number of traditional trails cross both lakes
- 2. A large number of cabins, outpost camps, tent sites and traditional camps on both lakes
- 3. A number of archaeological and burial sites on both lakes
- 4. Both lakes are cultural sites and point specific cultural sites also exist along the shores
- 5. Berry picking and plant harvest sites along the shores
- 6. Log timber is harvested on both lakes
- 7. Woodland caribou are harvested on Tate Lake
- 8. Waterfowl and birds are harvested on both lakes
- 9. Furbearers are harvested on both lakes
- 10. A significant amount of moose harvested occurs on both lakes
- 11. Bears are harvested on both lakes
- 12. Important fish harvest occurs on both lakes
- 13. Availability of small game
- 14. South end of Stewart lake is an important area for family hunting, trapping, fishing

#### **Economic Importance**

Oil and Gas Potential: mostly moderate to high

<u>Oil and Gas Rights</u>: Exploration licences cover all of Stewart Lake and the western side of Tate Lake

Mineralization: Coal has been found along the north-western shore of Stewart and Tate Lakes

and to the west of the zone

Mineral Rights: Five mineral claims lie to the north of Stewart and Tate Lakes

Tourism and Outfitting Potential: Ramhead Outfitters

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

#### **Zone Specific Conditions**

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54. MIO LAKE Conservation Zone	
Dene Place Name:	To be determined
Size:	19 km <sup>2</sup>
Elevation (min, max, average):	120 m; 150 m; 146 m

#### **Reasons for Conservation**

- The Conservation Zone at Mio Lake was requested at a community consultation meeting in Tulita. The main reason for protection is to ensure continued subsistence use of the lake for harvesting of wildlife such as moose, waterfowl and birds.
- The area is also in valuable waterfowl and bird habitat that the community wishes to maintain in its current state.

#### **Location and Boundaries**

The Mio Lake Conservation Zone is a 500 m buffer around the lake which lies within the Mackenzie River Special Management Zone. It is located on the eastern banks of the Mackenzie River, south of Tulita.

# **Land Ownership**

All title is held by the Crown.

# **Ecological Importance**

Geological Province: Interior Platform

Permafrost Type(s): extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Central Mackenzie Valley LSb

Major Watershed(s): Central Mackenzie – Blackwater Lake

Regional Watershed(s): Central Mackenzie - Blackwater

Burn History: The northern, eastern and southern shores were burned in the 1990s

# **Ecological features**:

1. Waterfowl and bird habitat

2. The northern tip and the western shore are important for ecological representation<sup>309</sup>

3. General moose habitat and moose winter habitat

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<sup>&</sup>lt;sup>309</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. http://www.sahtulanduseplan.org/ftpfiles/p

4. The entire Mackenzie River consists of important breeding duck habitat and Mio Lake is located in this area

#### Socio-Cultural Importance

#### Socio-cultural features:

- 1. Traditional trails
- 2. A number of archaeological sites are located just north and just south of the zone
- 3. Moose harvest takes place throughout the zone and in the surrounding area
- 4. Fish are harvested
- 5. Log timber harvest occurs

#### **Economic Importance**

Oil and Gas Potential: moderate to high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; Mio Lake is a water source, a communication line passes by it, the winter road also passes by the lake

# **Applicable Conditions**

All General and Special Management Terms apply

55. MACKAY LAKE, RUSTY LAKE AND YELLOW LAKE Conservation Zone	
Dene Place Name:	To be determined
Size:	18 km <sup>2</sup>
Elevation (min, max, average):	232 m; 424 m; 312 m

#### **Reasons for Special Management**

Tulita identified Rusty Lake and Yellow Lake as important fish lakes where people were able to survive off their catch during extreme and difficult weather. The 500 m conservation buffer is to protect the shorelines, water quality and the fish upon which people have depended for a very long time.

#### **Location and Boundaries**

The MacKay, Rusty and Yellow Lakes Conservation Zone includes all three lakes and a 500 m buffer around each. They lie south of Tulita, west of the Mackenzie River.

#### **Land Ownership**

All land in this zone is selected land with surface title held by the Tulita District.

# **Ecological Importance**

Geological Province: Cordilleran Orogen

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Carcajou Plain LSb (MacKay Lake and Rusty Lake sit on the divide);

Mackenzie Foothills LSbs (Yellow Lake)

Major Watershed(s): Central Mackenzie – The Ramparts

Regional Watershed(s): Central Mackenzie - Little Bear

<u>Burn History</u>: There are no burns near Mackay Lake but the areas around Rusty Lake and Yellow Lake burned in the 1990s

# **Ecological features**:

- 1. All three lakes occur within moose habitat
- 2. The areas around all three lakes are considered important for ecological representation
- 3. Both lakes are important fishing areas
- 4. The whole are around Mackay and Rusty lakes is made up of karst features
- 5. The Mackay Range has a high density of peregrine falcon nest sites<sup>310</sup>
- 6. Mackay and Rusty Lakes occur in furbearer habitat
- 7. Rusty Lake is a raptor nest site and area

#### **Socio-Cultural Importance**

This zone was established during a meeting in Tulita. Rusty and Yellow Lake were identified as important fish lakes where people have been able to survive off their catch when it was very cold. A number of Tulita traditional trails exist in the area and a tent frame can be found at McKay Lake.

#### Socio-cultural features:

- 1. Traditional trails cross the lakes
- 2. A number of cabins are located on Mackay and Rusty Lakes
- 3. Cultural and historic sites are documented
- 4. Berry and plant harvesting areas are recorded
- 5. Waterfowl harvest
- 6. Furbearers are harvested throughout
- 7. Moose harvest occurs around the three lakes
- 8. Fish harvest takes place on Mackay and Rusty Lakes

<sup>&</sup>lt;sup>310</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

# **Economic Importance**

Oil and Gas Potential: very high

Oil and Gas Rights: Exploration licence at and surrounding Yellow Lake

**Mineralization**: Undetermined

Mineral Rights: None

<u>Tourism and Outfitting Potential</u>: Only Yellow Lake is in the Ramhead Outfitters area

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

# **Applicable Conditions**

All General and Special Management Terms apply

# Map 26. Mackenzie Mountains - Overview

# 13. MACKENZIE MOUNTAINS Special Management Zone

Dene Place Name:

Size: 23,639 km²

Elevation (min, max, average): 239 m; 2,599 m; 1410 m

# **Reasons for Special Management**

- The Mackenzie Mountains have been used by centuries by the people of the Sahtu. A number of traditional trails and cultural and heritage values can be found in the zone in the form of archaeological and burial sites and subsistence use areas as the Mountain Dene travelled between the valley and the mountains throughout the seasons. There are many stories of meeting people from the Gwich'in or Yukon along the trails.
- The mountains offer unique habitat that includes calving or lambing, overwintering and general range for a number of wildlife species, including Dall's sheep, goats and mountain woodland caribou. The valleys offer winter habitat for moose.
- A number of ecological features that are of interest for wildlife such as mineral licks occur extensively throughout the mountains. A number of rare or at risk plants have been identified in the area as well as a number of International Biological Programme (IBP) sites.
- A number of mineral deposits have been identified in the Mackenzie Mountains with the possibility of more yet to be found. The SMZ will allow for the exploration and development of these and future mineral deposits.

#### **Location and Boundaries**

The Mackenzie Mountains Special Management Zone is located within the south-eastern portion of the SSA bounded by the north, south and west by the Shuhtagot'ine Nene Conservation Zone. It is south-west of Tulita.

#### **Land Ownership**

Practically all land is held by the Crown except for two tiny fragments.

#### **Ecological Importance**

Geological Province: Cordilleran Orogen

<u>Permafrost Type(s)</u>: the large majority of the zone lies in continuous permafrost; the most north-western edge of the zone lies in extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Northern Backbone Ranges HSas; Shattered Ranges HSas; Canyon Ranges HSsa; Sayunei-Sekwi Ranges LSas; Tigonankweine Range LSas; Canyon Ranges LSsa; Mackenzie Foothills LSbs; Raven Redstone Valley LSsb; Painted Mountains LSsa; Southern Backbone Range LSa; Thundercloud Range LSas

Major Watershed(s): Central Mackenzie – The Ramparts; Central Mackenzie – Blackwater Lake

Regional Watershed(s): Mountain, Carcajou; Keele, Redstone

<u>Burn History</u>: Very few fires have burned in the Mackenzie Mountains. Fires in the 1990s burned an area north-east of the Plains of Abraham and the north-eastern edge of the middle parcel

The Mackenzie Mountains are irregular and primarily made up of limestone, dolomite and shale. <sup>311</sup>Erosion has resulted in unstable rubble slopes, cliffs and steep canyons. The mountain tops average an elevation of 2100 m and subalpine areas are usually found below 1800 m. <sup>312</sup> Mountain goats are the predominant wildlife found in the mountainous areas. Moose are found in the valleys. <sup>313</sup> Dall's sheep and mountain caribou are common. Wolves may also be found. <sup>314</sup>

#### Ecological features:

- 1. Extensive Important Wildlife Areas<sup>315</sup> for woodland caribou throughout the mountains. The whole zone is woodland caribou habitat, specifically:
  - o In the north: Bonnet plume herd migration route, calving grounds and range
  - In the south: Redstone herd migration route, calving grounds and rutting/wintering area
- 2. Moose habitat found in the mountains
- 3. The entire zone is goat habitat
- 4. Furbearer habitat found within the zone
- 5. Certain areas identified for ecological representation<sup>316</sup>
- 6. The entire zone is important Dall's sheep habitat including specific sites for lambing and sheep winter habitat
- 7. Bear habitat
- 8. Karst features
- 9. A number of rare or possibly at risk plants occur:
  - o Minuartia macrocarpa
  - o Papaver mcconnellii
  - Draba ogilviensis
  - o Claytonia megarhiza
  - o Cyprogramma stetteri
- 10. Significant concentrations of mineral licks
- 11. A number of International Biological Programme sites:
  - o Coral Peaks, Site 59

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<sup>&</sup>lt;sup>311</sup> Larter, C. Nicholas, Mountain Goat Survey, Flat River Area, Western Mackenzie Mountains, September 2004, Manuscript Report No. 157, GNWT, Department of Resources, Wildlife, and Economic Development <sup>312</sup> ibid

<sup>313</sup> ibid

<sup>314</sup> ibid

<sup>&</sup>lt;sup>315</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>

- Florence Lake Study Area, Site 31
- o Carcajou Lake Study Area, Site 72
- o Plains of Abraham, Site 26
- Lymnaea Springs Study Site, Site 60
- o Sculpin Springs, Site 70

Moose surveys in the Sahtu have found that riparian areas along the Mackenzie River and its tributaries have high moose densities in the winter.<sup>317</sup> Many of the tributaries run down from the mountains located in this zone and are associated with moose habitat.

#### **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. Traditional trails along the rivers in the valleys of the Mackenzie Mountain, some leading up the Mountains into Yukon Territory
- 2. The Mackenzie River and its tributaries are important moose hunting areas<sup>318</sup>
- 3. Cultural site located just south of Gayna River
- 4. Waterfowl are harvested throughout the zone
- 5. Moose harvest occurs in the mountains
- 6. Archaeological sites exist throughout
- 7. Camps, cabins and tent sites
- 8. Cultural sites
- 9. Traditional trails occur in the zone, especially up the Keele River. Two are of special significance, Trail to the Mountains and the Mountain Dene Trail to the Mountains.

Trail to the Mountains, Shit'a Got'ine Eht'ene, is a "traditional trail that leads from Fort Good Hope to the headwaters of the Arctic Red River in the Mackenzie Mountains. It was used for centuries and was travelled on foot and by dog team. The Mountain River was used as the return route using moose skin boats in the spring. The trail was used to access winter hunting grounds for the Shit'a Got'ine (Mountain People) where they would spend the winter taking moose, caribou and sheep. The trail was last walked in the 1950s." 319

The Rakekée Gok'é Godi: Places We Take Care Of report suggested:

- Territorial Historic Park;
- Undertake oral history and archaeological research to document and protect heritage resources:
- Surface of documented sites be protected with commemoration of specific areas;
- Trail experience be recreated through cultural revival projects (eg. walking the trail with youth and elders).

The Mountain Dene Trail to the Mountains, Shuht'a Got'ıne Eht'ene, starts on the Mackenzie River at Tulita, crosses the Mackenzie Lowlands to Stewart and Tate Lakes, crossing the Keele

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<sup>&</sup>lt;sup>317</sup> Larter, C. Nicholas, *Mountain Goat Survey, Flat River Area, Western Mackenzie Mountains*, September 2004, Manuscript Report No. 157, GNWT, Department of Resources, Wildlife, and Economic Development <sup>318</sup> ibid

<sup>&</sup>lt;sup>319</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition). "Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.P. 62

drainage and on to Drum Lake in the Mackenzie Mountains. From there it joins a network of trails reaching throughout the mountains and into the Yukon. It was used extensively as a walking trail in the fall and by dog team in the winter. In the fall families would move from the valley into the mountains where they would hunt moose, caribou and sheep, to return to the valleys in the springtime by moose skin boats. Many sites along the trail are important in Mountain Dene culture and history and archaeological research shows that the trail area has been used for centuries.

The Rakekée Gok'é Godi: Places We Take Care Of report suggested:

- National Historic Site with surface protection;
- Revive the old National Historic Site proposal;
- Undertake oral history and archaeological research to document and protect heritage resources and burials;
- Surface of documented sites be protected;
- Identify trail for special consideration in the land use planning process.

# **Economic Importance**

Oil and Gas Potential: Very low to low potential

Oil and Gas Rights: None

Mineralization: The mineralization in the Mackenzie Mountains is not very well understood but

from what is known, at least one world-class deposit has been found.

Very high concentration of carbonate hosted zinc-lead Concentrations of red-bed/kupferschiefer-type copper

Mineral Rights: Mineral claims are scattered throughout the Mackenzie Mountain SMZ

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; an airstrip is identified in the mountains

#### **Applicable Conditions**

All General and Special Management Terms apply

# 20. SHÚHTAGOT'INE NÉNÉ (Mountain Dene Trail to the Mountains) Proposed Conservation Initiative

Dene Place Name:Shúhtagot'ine NénéSize:25,574 km²Elevation (min, max, average):246 m; 2607 m; 1338 m

# Reasons for Special Management<sup>320</sup>

- The Shúhtagot'ine Néné, or Mountain Dene Land is an ecologically and culturally important area within the Tulita District, identified by the Métis and Dene from Norman Wells and Tulita.
- Historic traditional trails of the Mountain Dene are throughout this area. The Mountain Dene traveled mainly up the Keele River in the summer to hunt moose, make mooseskin boats and travel back from the mountains in the fall.
- Mountain River is nominated as a National Heritage River.
- The Mountain and Keele Rivers provide important caribou wintering grounds.
- Six International Biological Sites (IBP) have been identified in Shúhtagot'ine Néné.

#### **Location and Boundaries**

Shúhtagot'ıne Néné lies within the Mackenzie Mountains in the south-western portion of the SSA and immediately adjacent to the Yukon boundary. It includes the Mountain River (K'ááchohtíídeé), Keele River (Begáádeé), Ravens Throat River (Tátsǫ́k'áádeé), and Redstone River corridors.

#### **Land Ownership**

The large majority is Crown land but the Tulita District has surface rights to a few parcels of lands surrounding Drum Lake, at the end of the Canol Heritage Trail as it touches the NWT/Yukon Territory border, and within Begáádeé, the Keele River corridor.

#### **Conservation Initiative Status**

In August 2009 the Canadian Wildlife Service agreed to sponsor Shúhtagot'ine Néné as a candidate National Wildlife Area. It is now in Step 4 of the PAS. The PAS process will continue to document the values of the land and will apply for interim protection.

# **Ecological Importance**

<sup>&</sup>lt;sup>320</sup> PAS website: www.nwtpas.org

Phase 1 and 2 Ecological Assessments have been completed on this area as part of the Protected Areas Strategy. Readers are referred to these reports for additional details. 321

Geological Province: Cordilleran Orogen

<u>Permafrost Type(s)</u>: extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Northern Backbone Ranges HSas; Shattered Ranges HSas; Canyon Ranges HSsa; Sayunei-Sekwi Ranges LSas; Tigonankweine Range LSas; Canyon Ranges LSsa; Southern Backbone Range LSa; Painted Mountains LSsa; Raven-Redstone Valley LSsb; Mackenzie Foothills LSbs

Major Watershed(s): Central Mackenzie – The Ramparts; Central Mackenzie – Blackwater Lake

Regional Watershed(s): Mountain; Keele, Redstone

<u>Burn History</u>: Few recorded fires are of a significant size. There are little to no recorded recent fires.

Shúhtagot'ıne Néné, or Mountain Dene Land is ecologically and culturally important to the Dene and Métis from Norman Wells and Tulita. Six International Biological Sites (IBP) have been identified within the zone.

According to a Phase II Ecological Assessment conducted by EBA Engineering Consultants in July 2008, the zone was found to be important for a number of different reasons. It supports several species that are considered to be "at risk" by COSEWIC or SARA. These species are both found within the area all-year round or occur in the area as migrants. Some of these animals are the boreal woodland caribou, northern mountain caribou, wolverine, peregrine falcon, and rusty blackbird. The harlequin duck, bull trout and inconnu fish are also ranked by ENR as May Be at Risk under the general status program.

The zone also covers 11 smaller watersheds and contains 11 International Biological Programme (IBP) Sites, within or adjacent to the area. <sup>325</sup> Palmer Lake is found within this zone. It has a high density of Dall's Sheep and has been called the "best sheep area in the Sahtu" (IWA draft, 2008), <sup>326</sup> based on an annual monitoring program started in 1997. <sup>327</sup>

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<sup>&</sup>lt;sup>321</sup> Phase 1 Ecological Assessment, Tulita Conservation Initiative Mountain Areas, Tulita district, NWT, EBA Engineering Consulting Ltd., March 2007, Available at: <a href="http://www.nwtpas.ca/areas/document-2007-tulita-eaphase1.pdf">http://www.nwtpas.ca/areas/document-2007-tulita-eaphase1.pdf</a>

EBA Engineering Consulting, March 2009, Executive Summary, Shuhtagot'ine Nene, Ecological Assessment II, http://www.nwtpas.ca/areas/document-2009-shuhtagotine-eaphase2-summary.pdf

<sup>322</sup> ibid

<sup>323</sup> ibid

<sup>324</sup> ibid

<sup>325</sup> ibid

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories,
 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
 ibid

Moose surveys in the Sahtu found that riparian areas along the Mackenzie River and its tributaries have high moose densities during the winter.<sup>328</sup>

The Mountain and Keele Rivers are important wintering grounds for caribou. <sup>329</sup> The zone is recorded as having the highest density of grizzly bears in the NWT. <sup>330</sup> Ecological fieldwork was carried out in July 2008 and was projected to be available late March 2009. <sup>331</sup> Relevant information will be included in the Final Draft of the Sahtu Plan.

#### Ecological features:

- 1. Mountain woodland caribou habitat have been identified throughout the mountains and a number of Important Wildlife Areas have been identified throughout the zone
  - o Redstone hard migration route, calving grounds and rutting/wintering grounds
  - o Bonnet Plume herd calving grounds and general range
- 2. Moose habitat identified along the Keele River and an Important Wildlife Area for moose is located along the Redstone River
- 3. Furbearer habitat identified around the Keele River
- 4. Goat and Dall's sheep habitat throughout the mountains. Critical sheep habitat and winter habitat
- 5. Two Important Wildlife Areas for bears, one at the western end of the Canol Trail and one along the Redstone River, an area of general habitat was identified along the Keele River
- 6. A high concentration of ecologically significant areas are occur such as:
  - o mineral licks located throughout the three river corridors
  - hot and warm springs found throughout the zone
  - o karst features located in the Keele River corridor
  - o may-be at risk plants located in:
    - the Keele River corridor: *Claytonia megarhiza, Draba porsildii, Penstemon qormanii*
    - the Mountain River corridor: Drabe porsildii, Draba ogilviensis
- 7. Six International Biological Programme<sup>332</sup> sites are located within the zone:
  - o Raven's Throat, Site 29
  - o Caribou Flats, Site 76
    - With may-be at risk plant: Blysmopsis rufus
  - o Moosehorn Headwaters, Site 57
    - With may-be at risk plant: Oxytropis scammaniana
  - o Cirque Lake Area, Site 55
    - With may-be at risk plant: Leptarrhena pyrolifolia
  - o Mackenzie Mountain Barren, Site 58
    - With may-be at risk plant: Draba albertina

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<sup>&</sup>lt;sup>328</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>329</sup> PAS website: http://www.nwtpas.ca/area-shuhtagotine.asp

EBA Consulting, March 2009, Executive Summary, Shuhtagot'ine Nene, Ecological Assessment II, http://www.nwtpas.ca/areas/document-2009-shuhtagotine-eaphase2-summary.pdf
331 PAS, Sahtu Settlement Area Update: February 2009, 2009

Nagy, J.A, Wright, W.H, Slack, T.M, and Veitch, A.M. 2005. Seasonal Ranges of the Cape Bathurst, Bluenose-West and Bluenose East Barren-Ground Caribou Herds, Department of Resources, Wildlife and Economic Development, Government of the Northwest Territories

- Tuitye Hot Springs, Site 71
- 8. Important breeding duck habitat are located around Drum Lake and at the mouth of the Keele River as it enters the Mackenzie Valley
- A variety of critical wildlife habitat such as: large areas of grizzly denning habitat, very significant woodland caribou winter habitat, goat, Dall's sheep in the mountains and moose habitat in the river valleys
- 10. A number of important fish bearing rivers and lakes such as: Keele River, Drum Lake, Raven's Throat, O'Grady Lake, Redstone River, Stone Knife

#### Socio-Cultural Importance

A Phase 1 Cultural Evaluation has been carried out for this area as part of the Protected Areas Strategy. Readers are referred to this document for greater detail. 333

The Mountain Dene have used historic trails within the area, travelling mostly up the Keele River in the summer to hunt moose, make moose skin boats and to return from the mountains in the spring.<sup>334</sup>

Cultural and subsistence use documentation is currently being carried out by the Tulita District Land Corporation, similar to the research being conducted in Naats'ihch'oh. According to the GNWT, tourism potential for the area is significant and there is currently tourism activity in the area.

#### Socio-cultural features:

- A number of traditional trails follow the river corridors into the mountains. One trail of significance is the Mountain River Trail that is described in greater detail in Zone 59. Mountain River Extension Conservation Zone
- 2. Archaeological and burial sites occur throughout the zone, mostly along the river shores
- 3. Some cabins and outpost camps are located along the rivers but a high concentration can be found around Drum Lake in the Raven's Throat and Redstone River corridor
- 4. A number of cultural and some heritage sites are located along the rivers
- 5. A number of values are located around Drum Lake such as burial sites, plant and berry harvest sites, cultural sites, cabins and very many burial and archaeological sites since the area is a highly used area
- 6. A number of mountain woodland caribou harvested along the main rivers such as Redstone River
- 7. Moose harvest occurs in the most eastern portion of the mountains
- 8. Waterfowl and bird harvest
- Fish are harvested around Drum Lake in the Raven's Throat and Redstone River corridor and along the Keele River
- 10. Occasional furbearer harvested in the part of the mountains closes to the valley
- 11. High concentration of archaeological sites at
  - o Keele River
  - o Drum Lake
  - Along Redstone River

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<sup>&</sup>lt;sup>333</sup> Tulita Conservation Initiative Phase I Cultural Evaluation Executive Summary, 2007, Available at: http://www.nwtpas.ca/areas/document-2007-tulita-culturalphase1.pdf

<sup>&</sup>lt;sup>334</sup> PAS website: http://www.nwtpas.ca/area-shuhtagotine.asp

- o Along Raven's Throat River
- 12. Cultural site at Drum Lake and along Keele River
- 13. Cabins, tent frames and camping sites along the Keele River
- 14. Cabin at Drum Lake
- 15. Tulita traditional trails throughout area

#### **Economic Importance**

A renewable resource assessment and a hydrocarbon assessment have been completed for this area as part of the Protected Areas Strategy. Readers are referred to these reports for greater detail. 335

<u>Oil and Gas Potential</u>: mostly low, some low to moderate areas <u>Oil and Gas Rights</u>: an exploration licence extends into a tiny fragment of the Keele corridor in the Mackenzie Valley

#### Mineralization:

- Mountain River corridor carbonate-hosted zinc-lead deposits
- Keele River corridor coal deposits; carbonate-hosted zinc-lead deposits; red-bed/ kupferschiefer-type copper
- Raven's Throat and Redstone corridor carbonate-hosted zinc-lead deposits; red-bed/ kupferschiefer-type copper

<u>Mineral Rights</u>: a number of mineral claims are held throughout the zone in all three corridors; a few small mineral leases are held, one on the NWT/Yukon border near the end of the Canol Trail and another along Raven's Throat

<u>Tourism and Outfitting Potential</u>: Ramhead, NWT, and Redstone Outfitters operate in the area and a number of recreation and fishing sites as well as outfitting lodges and camps and main lodges are located throughout the area

Hydroelectric Potential and Infrastructure: Two recorded airstrips in the Mountain River corridor

#### **Applicable Conditions**

All General and Special Management Terms apply

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Renewable Resource Assessment of the Shúhtagot'ine Néné Area of Interest, Submitted by Golder Associated Ltd. to INAC, March 2009, Available at: <a href="http://www.nwtpas.ca/areas/document-2009-shuhtagotine-rra.pdf">http://www.nwtpas.ca/areas/document-2009-shuhtagotine-rra.pdf</a>

Hydrocarbon assessment summary report of Mountain River, Keele River, Ravensthroat/Redstone River, and Drum Lake areas of interest; Lemieux, Y. Geological Survey of Canada, Open File 5576, 2007; 11 pages, Available at: <a href="http://geopub.nrcan.gc.ca/moreinfo">http://geopub.nrcan.gc.ca/moreinfo</a> e.php?id=224088

22. NAATS'IHCH'OH Proposed Conservation Initiative		
Dene Place Name:	Naats'ihch'oh	
Size:	7,576 km <sup>2</sup>	
Elevation (min, max, average):	716 m; 2435 m; 1487 m	

#### **Reasons for Special Management**

Naats'ihch'oh is important for a number of wildlife species that inhabit the area. It is
offered protection because it is the headwaters South Nahanni River, offering extended
protection to the Nahanni River which is currently protected by Nahanni National Park in
the Dehcho.

#### **Location and Boundaries**

Naats'ihch'oh lies in the farthest south-western corner of the SSA. It is located in the Mackenzie Mountains and includes the headwaters of the South Nahanni River.

#### **Land Ownership**

All lands are Crown land.

#### **Conservation Initiative Status**

Negotiations between Parks Canada and the Tulita District Land Corporation are currently underway to designate the area a National Park Reserve. <sup>336</sup> It will connect with Nahanni National Park Reserve in the Dehcho Territory, which has been expanded to include the majority of the Greater Nahanni Watershed.

An Interim Land Withdrawal was granted on February 26, 2008, to expire on March 31, 2012. Negotiations for an Impact and Benefit Plan, in accordance with the SLCA, are in place. When and should an agreement be reached, the Minister responsible for Parks Canada will recommend to Parliament the creation of Naats'ihch'oh as a National Park Reserve. 338

#### **Ecological Importance**

Parks Canada has assembled considerable information into an Area of Interest Atlas.<sup>339</sup> Readers are referred to the atlas for more detailed information on the ecological values in the zone.

<sup>&</sup>lt;sup>336</sup> Vandermeer, Jennie, Sahtu Settlement Area Update: February 2009, PAS 2009

<sup>&</sup>lt;sup>337</sup> ibid

<sup>&</sup>lt;sup>338</sup> PAS website: http://www.nwtpas.ca/area-naatsihchoh.asp

Naats'ihch'oh Area of Interest Atlas, Parks Canada, February 2010, Available at <a href="http://www.pc.gc.ca/progs/np-pn/cnpn-cnnp/naatsihchoh/interest.aspx">http://www.pc.gc.ca/progs/np-pn/cnpn-cnnp/naatsihchoh/interest.aspx</a>

#### Geological Province Cordilleran Orogen

<u>Permafrost Type(s)</u>: about 2/3 in continuous permafrost and remaining 1/3 in extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: Sapper Ranges MBas; Ragged Range MBas; Ragged Range Valley MBsb; Natla Plateau MBas; Mt. Pike Ecodistrict Yukon MBa; Itsi Range MBas

Major Watershed(s): Lower Liard

Regional Watershed(s): Upper South Nahanni

<u>Burn History</u>: A few small burns have occurred in the centre of the zone in the 1980s and 1990s

Naats'ihch'oh (Mount Wilson) includes the headwaters of the South Nahanni River. The upper part of the watershed that lies within the Sahtu Settlement Area accounts for about 1/6 of the Greater Nahanni Ecosystem. The area includes an alpine plateau with ridges and summer snow packs that are important habitat for grizzly bears and mountain woodland caribou. Both species are considered to be of "special concern" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Salada (COSEWIC).

In the summer and fall months, mountain woodland caribou calve in the area. The area also potentially includes a resident population of Dall's sheep, thought to be genetically unique to North America as a result of isolation during the last ice age. 343

#### **Ecological features**:

- 1. The entire zone is mountain woodland caribou habitat and two Important Wildlife Areas<sup>344</sup> occur for mountain woodland caribou, covering a large portion of the zone include the north and western areas
  - o More than half of the zone is in the South Nahanni herd's calving grounds
  - The northern section of the zone is in the Redstone herd's general habitat and migration route
  - o The north-western portion of the zone is in the Redstone herd's calving grounds
  - Nahanni woodland caribou habitat and winter habitat
  - o Critical woodland caribou calving habitat
- 2. The north-western corner is in moose habitat including an Important Wildlife Area<sup>345</sup> for moose
- 3. The entire zone is goat habitat and large areas are high value habitat
- 4. A number of eskers occur in the zone

345 ibid

<sup>340</sup> ibid

<sup>341</sup> ibid

<sup>342</sup> ibid

<sup>&</sup>lt;sup>343</sup> PAS website: http://www.nwtpas.ca/area-naatsihchoh.asp

<sup>&</sup>lt;sup>344</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- 5. A may-be at risk plant, Senecio sheldonensis is found in the area
- 6. The entire zone is identified as an Important Wildlife Area for bears<sup>346</sup>
- 7. The entire zone is sheep habitat including critical sheep habitat and sheep winter habitat and an Important Wildlife Area for sheep<sup>347</sup>
- 8. South Nahanni River is a critical fish site

#### **Socio-Cultural Importance**

The area is a long established subsistence use area that is undergoing archaeological investigations through the Prince of Wales Northern Heritage Centre. The Shuhtagot'ine, Mountain Dene people, believe that Naats'ihch'oh produced medicine people with supernatural powers. 348

Cultural and subsistence use within the area is currently being documented through the PAS process.

#### **Economic Importance**

Because this area is being studied for establishment of a National Park, a detailed Mineral and Energy Assessment (MERA) has been conducted to identify the potential of these resources in the area. The results are currently being used to assess boundary options for the park. Readers are referred to this study for more details on the area. <sup>349</sup> The information below is from the broader regional information used in all zone descriptions.

Oil and Gas Potential: low to very low

Oil and Gas Rights: None

<u>Mineralization</u>: very high concentration of SEDEX deposits and Intrusion-related deposits <u>Mineral Rights</u>: a few active mineral claims at the Sahtu/Dehcho border, at the NWT/Yukon border and some active mineral leases at the NWT/Yukon border 2 leased mineral claims south-east of O'Grady Lake

Tourism and Outfitting Potential: Ramhead and Nahanni Safaris with two recreation sites

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

<sup>346</sup> ibid

<sup>347</sup> ibid

<sup>348</sup> ibid

Mineral and energy resource assessment of the Greater Nahanni Ecosystem under consideration for the expansion of the Nahanni National Park Reserve, Northwest Territories; Wright, D F; Lemkow, D; Harris, J R. Geological Survey of Canada, Open File 5344, 2007; 557 pages, Available at: <a href="http://geopub.nrcan.gc.ca/moreinfo\_e.php?id=224425">http://geopub.nrcan.gc.ca/moreinfo\_e.php?id=224425</a>

#### Map 27. Mackenzie Mountains - 1

#### 12. CARCAJOU RIVER Special Management Zone

Dene Place Name:To be determinedSize:369 km²Elevation (min, max, average):90 m; 1032 m; 220 m

#### **Reasons for Special Management**

- The community of Fort Good Hope requested that a number of rivers and large creeks in the K'asho Got'ine District be given a 1 km buffer along each side of the shores to protect a combination of recreational and subsistence uses.
- The buffer was also requested for ecological reasons, namely, to protect the shorelines and to help maintain water quality at current levels.

#### **Location and Boundaries**

A 1 km Special Management buffer has been applied along both sides of the River. Carcajou River is located in both the K'asho Got'ine and Tulita Districts.

#### **Land Ownership**

The K'asho Got'ine District and Tulita Districts own almost all the surface lands along the river's course. Only the southern tip of the river is Crown land but all subsurface title along the zone is held by the Crown.

#### **Ecological Importance**

Geological Province: Interior Platform and Cordilleran Orogen

<u>Permafrost Type(s)</u>: the most northern tip of the river lies in continuous permafrost; the majority of the zone lies in extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Carcajou Plain LSb

<u>Major Watershed(s)</u>: Central Mackenzie – The Ramparts

Regional Watershed(s): Carcajou

<u>Burn History</u>: Very little of the zone has burned but two areas adjacent to the zone burned in the 1990s

#### Ecological features:

1. The southern half of the zone is considered an area of waterfowl and bird habitat

- 2. The entire river is an Important Wildlife Area<sup>350</sup> for moose and identified as moose habitat by a number of TK and scientific sources<sup>351</sup>
- 3. Fish bearing water body
- 4. Furbearer habitat is documented throughout the southern half of the zone by a number of TK sources
- 5. The southern end of the zone is important for ecological representation
- 6. A number of karst features are found mid-way along the river and to the west of it
- 7. The southern portion of the zone is an important breeding duck habitat area
- 8. The southern portion of the zone is bear habitat

#### **Socio-Cultural Importance**

#### Socio-cultural features:

- 1. Two outpost camps are located just south of the zone, mid-way along the length of the river
- 2. A number of traditional trails follow the river
- 3. Moose harvest occurs along the length of the river
- 4. Fish are harvested
- 5. Furbearers are harvested throughout the zone
- 6. Barren-ground caribou are harvested along the river
- 7. Bears are harvested in the southern portion of the zone

#### **Economic Importance**

<u>Oil and Gas Potential</u>: ranges between moderate to high potential and high potential Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: One small mineral claim at the southern end of the zone

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined; Potential hydroelectric development site at Carcajou River – site C2HPP

#### **Applicable Conditions**

All General and Special Management Terms apply

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<sup>&</sup>lt;sup>350</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>351</sup> SLUPB-RWED Range Mapping Report

39. MOUNTAIN RIVER EXTENSION Conservation Zone		
Dene Place Name:	Farfa Nılıne	
Size:	1,393 km <sup>2</sup>	
Elevation (min, max, average):	51 m; 2012 m; 599 m	

#### **Reasons for Conservation**

- The Mountain River was a traditional trail used by the Mountain Dene of Fort Good Hope. There are many named places, camping, hunting, fishing locations, and many stories associated with the River. Many stories recount the trials and tribulations of mooseskin boat travellers as they navigated the dangerous canyons of the river.<sup>352</sup>
- The zone continues to be an important moose hunting area and is known as the shortest route to the highest mountains and sheep hunting areas.<sup>353</sup>

#### **Location and Boundaries**

The Mountain River Extension Conservation Zone is a 5 km buffer around Mountain River which leads from the Mackenzie Mountains into the Mackenzie River, south of Fort Good Hope in the K'asho Got'ine District.

#### **Land Ownership**

The K'asho Got'ine District holds surface title to a small portion at the northern end of the zone. The remainder is Crown land.

#### **Ecological Importance**

Moose use the tributary rivers and riparian areas along Mackenzie River.<sup>354</sup> Harvesters say that in January, cold temperatures and deep snow cause moose to congregate along the major river valleys.<sup>355</sup> Ice and flood action in fast-flowing river drainages keeps vegetation in an early successional stage, providing important food species such as willow and alder.<sup>356</sup>

<u>Geological Province</u>: northern segment - Interior Platform; southern portion – Cordilleran Orogen

<u>Permafrost Type(s)</u>: northern and southern ends are in continuous permafrost; middle of zone is in extensive discontinuous permafrost

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<sup>&</sup>lt;sup>352</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

<sup>&</sup>lt;sup>353</sup> ibid

<sup>&</sup>lt;sup>354</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

<sup>&</sup>lt;sup>355</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT <sup>356</sup> ibid

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Arctic Red Upland Lsb; Carcajou Plain Lsb; Shattered Ranges HSas

Major Watershed(s): Central Mackenzie

Regional Watershed(s): Mountain

Burn History: A portion of the north-eastern segment of the zone was burned in the 1990s

#### Ecological features:

- 1. The southern end of the zone is in the Bonnet plume mountain woodland caribou herd's migration route and habitat
- 2. Located in the southern extent of furbearer habitat
- 3. Moose habitat extends throughout the zone until the mid-point
- 4. Southern half of the zone is goat habitat
- 5. Important breeding duck habitat<sup>357</sup> at the river's confluence with the Mackenzie River
- 6. Dall's sheep habitat occurs throughout
- 7. Two portions of the zone are important for ecological representation
- 8. Karst features are found mid-zone
- 9. International Biological Programme site "Coral Peaks", Site 59 is partially in the zone

#### **Socio-Cultural Importance**

This zone was identified during the planning process as an important local travel corridor, heritage place and subsistence use location. The Mountain Dene of Fort Good Hope used this trail which has many named places, camping, hunting and fishing locations and many stories associated with the river. 358

In the old days, people travelled by moose skin boat, navigating the dangerous canyons on the river. Today it continues to be an important moose hunting area and is known as the shortest route to the highest mountains and sheep hunting areas.<sup>359</sup> Popular with white water canoeists, the river has tremendous tourism potential.<sup>360</sup>

#### Socio-cultural features:

- 1. Traditional trails exist in the zone including the Mountain River trail which leads from the Mackenzie River into the Yukon
- 2. Significantly large recreational areas as well as cultural and historical sites
- 3. Cabins and outpost camps
- 4. Archaeological sites located at the mouth of the River at its confluence with the Mackenzie River
- 5. Waterfowl are harvested throughout the entire zone
- 6. Furbearers are harvested along its eastern edge

http://www.sahtulanduseplan.org/website/web-content/index.html

<sup>&</sup>lt;sup>357</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09.

<sup>&</sup>lt;sup>358</sup> Prepared by The Sahtu Heritage Places and Sites Joint Working Group. January 2000 (2<sup>nd</sup> Edition).

<sup>&</sup>quot;Rakekée Gok'é Godi: Places We Take Care Of. Written by Tom Andrews.

<sup>359</sup> ibid

<sup>360</sup> ibid

- 7. Fish are harvested
- 8. High concentration of moose harvested
- 9. Bears are harvested at the mouth of the River, at its confluence with the Mackenzie River

The reports *Rakekée Gok'é Godi: Places We Take Care Of* and *Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001*<sup>361</sup> recommend a combination of the following:

- Designation of the zone as a Heritage River;
- Oral history and archaeological research to document and protect heritage resources;
- Surface protection documented sites and commemoration of specific sites to be negotiated following an inventory of the area.

#### **Economic Importance**

Oil and Gas Potential: majority of the zone is low or low to moderate but the northern segment

is very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Gana River Outfitter

<u>Hydroelectric Potential and Infrastructure</u>: Hydroelectric potential at Mountain River HPP site; Undetermined

Applicable Conditions

All General and Special Management Terms apply

48. THREE DAY LAKE Conservation Zone	
Dene Place Name:	To be determined
Size:	32 km <sup>2</sup>
Elevation (min, max, average):	76 m; 143 m; 104 m

#### **Reasons for Conservation**

Three Day Lake is a popular subsistence use site for the people of Norman Wells. It is a site for hunting, fishing and general harvest of wildlife, berries and plants. It is known for having some of the highest moose densities in the Sahtu and for an abundance of greyling, waterfowl and furbearers. The area is known as a waterfowl breeding and staging area.

<sup>&</sup>lt;sup>361</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

Similar to other water bodies, it has been given a 500m buffer to allow traditional and cultural uses to continue and to offer some added protection to the shoreline, the quality of water and to the habitat near the shore upon which many species depend.

#### **Location and Boundaries**

The 3-Day Lake Conservation Zone is a 500 m buffer around the lake which is located immediately south of Norman Wells, on the western bank of the Mackenzie River.

#### **Land Ownership**

The Tulita District holds all surface title to the land. The Crown holds subsurface rights.

#### **Ecological Importance**

This area is particularly known for having some of the highest moose densities in the Sahtu and is a good area for moose in the summer and fall. It is known as a breeding and staging area for waterfowl, particularly swans. The outflow of the lake – Sucker Creek – is known for having abundant grayling. Bald eagles nest on the side of the lake.

Geological Province: northern half – Interior Platform; southern half – Cordilleran Orogen

<u>Permafrost Type(s)</u>: extensive discontinuous

Level IV Ecoregion(s): North Mackenzie Plain LS

<u>Major Watershed(s)</u>: Central Mackenzie – The Ramparts

Regional Watershed(s): Central Mackenzie – Little Bear

Burn History: No recent fires have been recorded in the area

#### Ecological features:

- 1. Waterfowl and bird habitat
- 2. Important Wildlife Area for moose around the lake. The entire zone is moose habitat
- 3. Furbearer habitat throughout zone
- 4. The southern portion of the zone is important for ecological representation<sup>362</sup>
- 5. Located within bear habitat
- 6. Important breeding duck habitat<sup>363</sup>

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<sup>&</sup>lt;sup>362</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. http://www.sahtulanduseplan.org/ftpfiles/p

<sup>&</sup>lt;sup>363</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

#### Socio-Cultural Importance

Three Day Lake is a popular moose hunting area for residents of Norman Wells. 364

#### Socio-cultural features:

- 1. Traditional trails cross the zone
- 2. Berry picking sites present
- 3. A number of cabins and camp and tent sites are found on the lake
- 4. Waterfowl and birds harvested throughout
- 5. Moose are heavily harvested throughout
- 6. Fish harvesting takes place on lake
- 7. Furbearers are harvested throughout the zone
- 8. Bears are harvested throughout the zone

#### **Economic Importance**

Oil and Gas Potential: very high

Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Undetermined

<u>Hydroelectric Potential and Infrastructure</u>: A communications line passes close to the lake along the shore of the Mackenzie River

#### **Applicable Conditions**

All General and Special Management Terms apply

49. MOUNTAIN LAKES Conservation Zone	
Dene Place Name:	Shıt'a Tué Dawíla
Size:	210 km <sup>2</sup>
Elevation (min, max, average):	118 m; 1717 m ; 865 m

#### **Reasons for Conservation**

The Mountain Lakes are ecologically significant. All three were identified in the International Biological Programme (IBP) report, an international attempt at documenting areas that are of special natural heritage interest.

<sup>&</sup>lt;sup>364</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- The Mountain Lakes are also important for a number of wildlife such as moose, mountain woodland caribou, Dall's sheep and goats.
- Traditional activities take place on the lakes. Part of the reason for protection is to allow these uses to continue.

#### **Location and Boundaries**

The Mountain Lakes Conservation Zone consists of three lakes located within the Mackenzie Mountains: Carcajou Lake, Mirror Lake and Florence Lake. All three lakes are located near Dodo Canyon, at the head of the Canol Trail.

#### **Land Ownership**

The Tulita District holds almost all surface rights to the lakes in this zone, with a small exception around Carcajou Lake. The Crown holds all subsurface rights.

#### **Ecological Importance**

Geological Province: Cordilleran Orogen

Permafrost Type(s): extensive discontinuous

Level IV Ecoregion(s): Carcajou Plain LSb; Canyon Ranges LSsa

Major Watershed(s): Central Mackenzie – The Ramparts

Regional Watershed(s): Carcajou; Mountain

Burn History: There is no recent history of fire recorded around the lakes

Florence and Mirror Lakes occupy a border area between the Mackenzie River valley and the Mackenzie Mountains. A variety of species occur within the areas such as Dall's sheep, moose, boreal woodland caribou, and mountain woodland caribou. Florence Lake and Mirror Lake are moose concentration areas. They are good summer and fall habitat. In the 1970's Florence Lake was believed to be some of the only winter range available to moose in the area. In the winter of 1984 a survey found high moose density in the area of Mirror Lake.

#### **Ecological features**:

- 1. All of the lakes are located within Dall's sheep habitat, some of which is critical and some which is winter habitat
- 2. All of the lakes occur within goat habitat
- 3. All three lakes are International Biological Programme Sites:

<sup>&</sup>lt;sup>365</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, 2008, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT
<sup>366</sup> ibid

<sup>367</sup> ibid

- Florence Lake, Site 31: the area is of interest for a comparison of plants and animals with Carcajou Lake and to compare the ecology of the fans spreading into the Lake
- Carcajou Lake, Site 72: important Dall's sheep winter range, of interest for comparison with Florence Lake and hoodoos are present
- Mirror Lake, Site 74: of interest to compare with Carcajou Lake and to compare plants from different regions
- 4. Florence and Mirror Lakes are Important Wildlife Areas for moose<sup>368</sup>

#### Florence Lake

- 1. The area around Florence Lake is important breeding duck habitat 369
- 2. Salt licks identified 370
- 3. General furbearer habitat
- 4. Moose concentration area
- 5. In mountain woodland caribou range, specifically the Bonnet Plume herd range

#### Mirror Lake

- 1. Important for ecological representation<sup>371</sup>
- 2. Moose concentration area
- 3. In mountain woodland caribou range, specifically the Redstone herd rutting/wintering area

#### Carcajou Lake

- 1. Rare or possibly at risk plant found: Cryptogramma Stetteri
- 2. Important Wildlife Area for mountain woodland caribou<sup>372</sup>
- 3. Important wintering area for Dall's sheep
- 4. In mountain woodland caribou range, specifically the Bonnet Plume and Redstone herd ranges

#### Socio-Cultural Importance

#### Socio-cultural features:

- 1. Number of cabins, tent frames on all lakes
- 2. Some traditional trails cross the three lakes
- 3. Burial site at Mirror Lake
- 4. Moose harvest at Florence and Mirror Lakes

<sup>368</sup> ibid

<sup>&</sup>lt;sup>369</sup> Ducks Unlimited Canada. Comments on Draft 2 SLUP, July 31/09. http://www.sahtulanduseplan.org/website/web-content/index.html

Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>&</sup>lt;sup>371</sup> Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>

<sup>&</sup>lt;sup>372</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

- 5. Good trapping around Florence Lake
- 6. Fish harvesting occurs at Florence Lake
- 7. Trapping of furbearers takes place at Florence Lake
- 8. A number of archaeological sites and a cultural site are located on Carcajou Lake

#### **Economic Importance**

Oil and Gas Potential:

Florence Lake: southern half – low; northern half – moderate Mirror Lake: western half – low; eastern half – moderate to high

Carcajou Lake: low Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: None

Tourism and Outfitting Potential: Mackenzie Mountain Outfitters, lodge at Carcajou Lake

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

50. PLAINS OF ABRAHAM Conservation Zone	
Dene Place Name:	To be determined
Size:	105 km <sup>2</sup>
Elevation (min, max, average):	760 m; 1543 m; 1253 m

#### **Reasons for Conservation**

The Plains of Abraham CZ is an International Biological Programme Site 26. During the last glaciations, the Plains of Abraham remained unglaciated. It served as a refuge for a variety of plant and animal species. The area now supports a unique flora and fauna, including the long-tailed jaeger and the singing vole. The area is of interest to scientists because it can be used as a means of comparison with different regions.

#### **Location and Boundaries**

The Plains of Abraham Conservation Zone is located within the Mackenzie Mountains, 8 km from the Canol Heritage Trail and 80 km south-southwest of Norman Wells.

#### **Land Ownership**

The Plains of Abraham is located within the Tulita District, on Crown Land.

#### **Ecological Importance**

Geological Province: Cordilleran Orogen

<u>Permafrost Type(s)</u>: extensive discontinuous

Level IV Ecoregion(s): Canyon Ranges LSsa

Major Watershed(s): Central Mackenzie – The Ramparts

Regional Watershed(s): Carcajou

Burn History: There are no recorded recent burns

During the last glaciation, the Plains of Abraham is an area in the Mackenzie Mountains that did not get covered with ice. A variety of plant and animal species found refuge here and the area now supports a unique flora and fauna, including the long-tailed jaeger and the singing vole.

#### **Ecological features**:

- 1. Located in an Important Wildlife Area 373 for mountain woodland caribou
- 2. In mountain woodland caribou habitat, specifically in the Redstone herd range
- 3. Goat habitat
- 4. Furbearer habitat
- 5. Moose habitat
- 6. Caribou calving area according to community of Tulita
- 7. The southern and western ends of the zone are considered important for ecological representation<sup>374</sup>
- 8. Within Dall's sheep habitat and range (summer and fall range)
- 9. The Plains of Abraham is an International Biological Programme Site

#### Socio-Cultural Importance

#### Socio-cultural features:

- 1. Some traditional trails cross through the zone
- 2. There is an old traditional trail and an old abandoned army camp from 1944

#### **Economic Importance**

Oil and Gas Potential: low Oil and Gas Rights: None

Mineralization: Undetermined

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<sup>&</sup>lt;sup>373</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

Northwest Territories Protected Areas Strategy Science Team. (August 6, 2009). Ecological Representation Analysis of Conservation Zones/Protected Areas Initiatives in the April 30, 2009 Draft Sahtu Land Use Plan. <a href="http://www.sahtulanduseplan.org/ftpfiles/p">http://www.sahtulanduseplan.org/ftpfiles/p</a>

Mineral Rights: None

<u>Tourism and Outfitting Potential</u>: Ramhead Outfitters

<u>Hydroelectric Potential and Infrastructure</u>: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

#### Map 28. Mackenzie Mountains - 2

## 21. DO ET'Q (Canol Heritage and Dodo Canyon Trail) Proposed Conservation Initiative

Dene Place Name:	Do Et'Q
Size:	940 km <sup>2</sup>
Flevation (min. max. average):	143 m: 2004 m: 953 m

#### **Reasons for Special Management**

- Dodo Canyon and the Canol Trail are significant cultural and recreational use areas. They also have a historic and heritage value that the people of the Sahtu want to preserve. The land claim (SDMCLCA), allows for, but does not require the establishment of a Territorial Park around the Canol Trail and Dodo Canyon.
- The recreational and tourism values of the trail have not been lost on the People of the Sahtu. One of the park's possibilities would be to help increase the tourism value of the Sahtu to potential visitors.

#### **Location and Boundaries**

Doi T'oh Park (Canol Heritage and Dodo Canyon Trail) includes Dodo Canyon and a small buffer around the Canol Heritage Trail. It begins near Norman Wells, on the opposite bank of the Mackenzie River and extends nearly to Macmillan Pass on the NWT/Yukon border. The park includes most of the 355 km Canol Trail.

#### **Land Ownership**

This zone lies within the Tulita District. The entire trail is on Crown land but the Tulita District holds surface rights to a small portion of Dodo Canyon.

#### **Conservation Initiative Status**

S.17.3 of the *SDMCLCA* allows for the establishment of the Canol Trail and Dodo Canyon as a territorial park. ITI and the Tulita District have indicated to INAC that they want to proceed with S. 17.3 of SDCLCA for a territorial park. Surface crown lands are currently reserved to the GNWT. INAC's Contaminants and Remediation Directorate [CARD] is assessing locations along the trail for evidence of contamination to determine whether remediation is warranted and whether such a project would be eligible for funding under the Federal Contaminated Sites Action Plan, or otherwise subject to a risk management/monitoring approach. Resolution of issues around contamination would remove impediments to the ultimate permanent transfer of land to the GNWT. This initiative is not part of the Protected Areas Strategy.

#### **Ecological Importance**

<u>Geological Province</u>: The majority is in the Cordilleran Orogen; northern tip in the Interior Platform

<u>Permafrost Type(s)</u>: Dodo Canyon and the western tip of the zone are in continuous permafrost; the majority of the zone is in extensive discontinuous permafrost

<u>Level IV Ecoregion(s)</u>: North Mackenzie Plain LS; Carcajou Plain LSb; Canyon Ranges HSsa; Shattered Ranges HSas; Sayunei-Sekwi Ranges LSas; Natla Platuea MBas

Major Watershed(s): Central Mackenzie – The Ramparts; Central Mackenzie – Blackwater Lake

Regional Watershed(s): Carcajou; Keele

Burn History: There are no recorded recent burns in the zone

#### **Ecological features:**

- 1. The northern and southern segments of the Canol Trail are located in Important Wildlife Areas<sup>375</sup> for mountain woodland caribou
  - The northern section of the trail is in the Redstone herd's rutting and wintering area
  - o The southern section of the trail is in the Redstone herd's calving area
  - o The centre of the trail is in general Redstone habitat and migration area
- 2. A number of areas are very important for ecological representation
- 3. Parts of Dodo Canyon are good moose habitat
- 4. Ecologically significant features:
  - o A number of mineral licks occur in the zone
  - o Karst features occur in Dodo Canyon and at the eastern end
  - o At the western end of the trail there is an IBP site, the Mackenzie Mountain Barrens, Site 58 which also hosts a may-be at risk plant, *Draba albertina*
  - o Some may-be at risk plants are found:
    - Claytonia megarhize
    - Minuartia macrocarpa
- 5. Goat habitat is located throughout the zone
- 6. Bear habitat is located in Dodo Canyon and an Important Wildlife Area<sup>376</sup> for bears is found at the far western tip of the zone
- 7. Furbearer habitat occurs within the zone
- 8. Dall's sheep habitat occurs throughout and an Important Wildlife Area<sup>377</sup> for sheep is located in Dodo Canyon

#### **Socio-Cultural Importance**

The Canol Heritage Trail and Dodo Canyon are part of a 355 km route, beginning outside of Norman Wells and winding though the heart of the Mackenzie Mountains, to Macmillan Pass on the NWT/Yukon border. <sup>378</sup> The Canol Trial is what remains of the road and pipeline that were

<sup>&</sup>lt;sup>375</sup> Haas, C.A., & Wilson, M.J., DRAFT Important Wildlife Areas in the Western Northwest Territories, February 2010, Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT

<sup>376</sup> ibid

<sup>377</sup> ibid

<sup>&</sup>lt;sup>378</sup> Hawkings, Tim, Hiker's Guide to the Canol Heritage Trail, 1996, ITI, GNWT

built during WWII, connecting an oil field from Norman Wells to Whitehorse, Yukon. <sup>379</sup> After the war, the pipeline was shut down and most of the steel pipe and equipment were removed. Today some bits of vehicles and buildings remain along the Heritage Trail which follows the hunting trails of the Mountain Dene across rivers, though mountain passes and over barren plateaus. <sup>380</sup>

#### Socio-cultural features:

- 1. Recognized as a heritage trail in Rakekée Gok'é Godi: Places we take care of report
- 2. A number of archaeological sites are located along the length of the trail
- 3. A few cultural and recreational sites are located in Dodo Canyon and at the eastern head of the trail
- 4. Waterfowl and bird harvesting takes place in the middle of the zone
- 5. Furbearers are harvested in the zone
- 6. Bears are harvested in Dodo Canyon
- 7. Both Godlin River and Ekwi River are important areas for fish harvest

Mapping Our Future, Report on Community Surveys and Workshops April – May, 2001<sup>381</sup> recommended the creation of a Territorial Park as designated by the Sahtu Dene and Métis Comprehensive Land Claim Agreement.

#### **Economic Importance**

Oil and Gas Potential: low to low/moderate

Oil and Gas Rights: None

Mineralization: Undetermined but a number of carbonate-hosted lead-zinc deposits have been

found adjacent to the zone

Mineral Rights: Mineral leases occur mid-zone

<u>Tourism and Outfitting Potential</u>: A number of recreational sites in Dodo Canyon; Mackenzie Mountain and Ramhead with a few fishing and outfitting lodges and recreation sites along trail

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

<sup>379</sup> ibid

<sup>380</sup> ibid

<sup>&</sup>lt;sup>381</sup> Mapping Our Future, Report on Community Surveys and Workshops, April – May, 2001, Sahtu Land Use Planning Board, prepared by Jennifer Blomqvist

# 51. MOUNTAIN HOT SPRINGS Conservation Zone Dene Place Name: Tuésene Size: 45 km² Elevation (min, max, average): 656 m; 1901 m; 1115 m

#### **Reasons for Conservation**

The two hot springs are International Biological Programme (IBP) sites and are of interest because they provide unique habitat for plant and other species such as a snail of the Lymnaea genus. The areas may also be used as mineral licks by ungulates that are found throughout the mountains.

#### **Location and Boundaries**

The Mountain Hot Springs Conservation Zone is located within the Mackenzie Mountains, 75 km southwest of Tulita. It consists of two hot springs: Sculpin Springs and Lymnaea Springs.

#### **Land Ownership**

This zone lies within the Tulita District which holds surface rights to the easternmost hot spring. The Crown holds title to the remainder of land and holds all subsurface rights.

#### **Ecological Importance**

This zone includes two International Biological Program Sites: Sculpin Springs, and Lymnaea Springs.

The hot springs provide unusual habitat conditions for some specialized plants and animals – such as an endemic species of snail (Lymnaea bulmoides) at Lymnaea Springs and slimy sculpins at Sculpin Springs. The hot springs are used as mineral licks by Dall's sheep, moose, and caribou.

Geological Province: Cordilleran Orogen

<u>Permafrost Type(s)</u>: continuous permafrost

Level IV Ecoregion(s): Sayunei-Sekwi Ranges LSas; Tigonankweine Range LSas

Major Watershed(s): Central Mackenzie – Blackwater Lake

Regional Watershed(s): Keele

Burn History: There are no burns recorded in the recent fire history

#### Ecological features:

1. Within mountain woodland caribou habitat, specifically, within the Redstone woodland caribou herd migration range

- 3. In goat habitat and range
- 4. The area south of the Lymnaea Springs is very important for ecological representation
- 5. In Dall's sheep habitat
- 6. The zone consists of two International Biological Programme (IBP) sites:
  - o Lymnaea Springs, Site 60: hot spring pool which provides unusual habitat conditions for some specialized plants; a snail subspecies of *Lymnaea bulmoides* present year-round; area probably used as a mineral lick by ungulates
  - Sculpin Springs, Site 70: warm mineral spring which provides habitat for ancient plant species; slimy sculpin a new species of *Lymnaea* snail; nesting killdeer in the site

#### **Socio-Cultural Importance**

Traditional trails pass through both springs.

#### **Economic Importance**

Oil and Gas Potential: low Oil and Gas Rights: None

Mineralization: Undetermined

Mineral Rights: Incredibly high concentration of carbonate hosted zinc-lead all around Sculpin

**Springs** 

Tourism and Outfitting Potential: Mackenzie Mountains

Hydroelectric Potential and Infrastructure: Undetermined

#### **Applicable Conditions**

All General and Special Management Terms apply

# Chapter 6 - Issues, Actions and Recommendations

#### 6.1 INTRODUCTION

This chapter describes broad land use issues in the Sahtu Settlement Area and the Actions and Recommendations identified by the Board to address these issues and advance the vision and goals of the Plan.

**Actions** are Plan requirements that are intended to be implemented outside of the regulatory process. That is, they do not affect or relate to individual applications, though many support the regulatory process through the provision of new information or guidelines. All Actions are reproduced in Appendix 2 for ease of reference.

**Recommendations** are advisory in nature. They are intended to inform users and decision-makers about community expectations, and suggest various means to advance the goals and objectives of the Plan. They are not mandatory requirements. All Recommendations are reproduced in Appendix 3 for ease of reference.

#### **6.2 PLAN IMPLEMENTATION**

#### Action #1 - Plan Implementation Monitoring

In order for the SLUPB to monitor implementation of this Plan, Regulators that authorize a land use activity in the SSA shall provide copies of such authorizations to the SLUPB on request within a reasonable time.

#### **Context and Rationale**

The SLUPB is responsible for monitoring implementation of the approved Sahtu Land Use Plan. One way to do this is to monitor how Conformity Requirements are being integrated into the conditions of authorizations. The Board requires copies of all authorizations issued in relation to the Plan to do that.

#### 6.3 COORDINATION & COLLABORATION

The following Actions are intended to create a forum for collaborative decision-making to advance discussion and solutions on major land use issues for the Sahtu region.

#### Action #2 - Sahtu Working Group

The SLUPB shall establish and lead a Sahtu Working Group with representation from SSI and other designated Sahtu organizations, the federal and territorial governments, the SRRB, the SLWB, industry (oil and gas, mining, others), and non government organizations as a collaborative forum through which to discuss, study and resolve key regional land use issues and inform decision making. The Sahtu Working Group will work on Actions 3-6 below to develop appropriate measures for consideration and integration into future Plan revisions.

#### **Context and Rationale**

Through development of the Sahtu Land Use Plan, it became apparent that many of the broad land use issues for which further direction would be helpful will only be possible through a new framework of collaborative decision making. The traditional model of seeking input individually from planning partners is slow and less effective than having all the appropriate bodies in the same room talking to each other. It also became apparent that establishing individual working groups to tackle each issue separately would quickly overwhelm the limited capacity of most organizations that would need to be involved.

The Board therefore proposes to set up one working group that it will chair, with representation from all relevant planning partners to begin to address the broad land use issues outlined in this section. By chairing and coordinating the working group, the Board can ensure that progress is made on key issues required to advance the Plan and prepare for 5-year reviews.

Participation will be voluntary and self-funded. Decision-making will be concensus-based. Partners in the working group will be expected to bring information, their expertise, and a collaborative spirit to work together to resolve land use issues. The working group will allow for better communication and coordination within the region, improve relationships and access to relevant information, and provide for adaptive learning and management within the Sahtu Settlement Area.

#### **Action #3 - Community Engagement Guidelines**

The Sahtu Working Group shall collaborate to develop community engagement guidelines that define guiding principles, processes, and roles and responsibilities of government, industry and community organizations for community engagement in the SSA within 4 years. These may be incorporated into future revisions of the Sahtu Land Use Plan.

#### **Recommendation #5 – Community Engagement Guidelines**

- 1) In advance of the development of the Sahtu community engagement guidelines, government and applicants are encouraged to engage communities in a way that respects and embodies the legal and practical principles expressed in INAC's Interim Guidelines on Aboriginal Consultation and Accommodation, or quidelines from other jurisdictions.
- 2) SSI, designated Sahtu organizations, and other community organizations are encouraged to make effective use of community engagement opportunities to ensure their values and priorities are considered in land use decisions.

#### **Context and Rationale**

Defining appropriate community engagement practices is a major land use issue in many jurisdictions across Canada. Communities need to be informed of activities happening on their lands, contribute their knowledge of the local area, and provide input on if and how those activities are carried out, as they are the ones who are directly affected by the activities. They often have high expectations regarding community engagement and the level of influence their input should have in decision-making, though they sometimes lack the capacity to effectively engage with project applicants. Governments have legal and fiduciary obligations for consultation that are continuing to evolve through the courts and policy. Applicants are required to demonstrate efforts of community engagement as part of their applications.

There is disagreement on what community engagement actually entails, who should carry it out, and when it is required. Much community engagement is currently carried out on paper (notice of applications sent out with a period provided for review and written comment), whereas communities prefer in-person meetings where there is a better opportunity to understand the project, ask questions, and meet the people involved in the project. Certain land uses such as prospecting and staking mineral claims only require prospectors to notify the Designated Sahtu Organization seven days prior to entering on Sahtu lands. 382 Communities feel it is disrespectful for companies to enter their land without talking to them.

Companies are caught in the middle. Following current requirements falls short of community expectations. Companies need a better understanding of community expectations for community engagement. Government needs to clearly define its role and obligations in relation to company efforts. INAC has recently developed interim guidelines for its managers to guide them in meeting their legal obligations for consultation. The guidelines define a set of principles that are excerpted here. <sup>383</sup>

#### **Consultation Principles**

#### Legal Principles

Honour of the Crown – The honour of the Crown is at stake in all dealings between the Crown and Aboriginal peoples. The duty to consult and accommodate, where appropriate, stems from the Crown's unique relationship with Aboriginal peoples and must be discharged in a manner that promotes reconciliation of Aboriginal and non-Aboriginal rights and interests.

Reconciliation – The duty to consult and where appropriate, accommodate is part of a process of fair dealing and reconciliation that begins with the assertion of sovereignty by the Crown and continues beyond formal claims resolution through to the application and implementation of treaties. Crown efforts to consult with, and accommodate the interests of Aboriginal groups whose rights may be adversely affected, should be consistent with the overarching objective of reconciliation with Aboriginal groups.

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<sup>&</sup>lt;sup>382</sup> S. 21.4.6 of the SLCA

<sup>&</sup>lt;sup>383</sup> "Aboriginal Consultation and Accommodation: Interim Guidelines for Federal Officials to Fulfill the Legal Duty to Consult", Minister of Indian Affairs and Northern Development and Federal Interlocutor for Metis and Non-Status Indians, Ottawa, Dated February 2008.

Reasonableness – Crown efforts to reconcile and balance other societal interests and established or potential Aboriginal and treaty rights must be reasonable. Consultation processes need to reflect reasonable and genuine efforts by all parties.

Meaningful Consultation – The duty to consult requires a genuine effort to address legitimate concerns and interests that relate to the impacts of contemplated Crown conduct on section 35 rights. To be meaningful, there must be a genuine willingness and ability to adjust the contemplated conduct, if such is appropriate.

Good Faith – Consultation must be guided by genuine efforts. Such efforts require the disclosure of relevant factors and information, no predetermined outcome, no oblique motive, and the absence of any appearance of any sharp dealing.

Responsiveness – Consultation is intended to respond to Aboriginal rights and interests, to minimize the potential adverse affects of a given activity, and to substantively address the concerns raised. To do so, it is necessary that the Crown be prepared to respond, have some degree of flexibility in relation to the planning and implementation of the proposed activity, and consider potential accommodation measures that may be appropriate in a given context.

#### Principles from Practice

Mutual Respect – Consultation must be based on mutual respect for all participants, taking into account different interests, perspectives, cultures, understandings and concerns.

Accessibility and Inclusiveness – It is important to ensure the participation of Aboriginal groups who have an interest in or who may be affected by the decision. For consultation based on a legal duty to consult, participation would have to include specific Aboriginal groups whose established or potential rights could be negatively affected. Appropriate measures should be taken to ensure access of Aboriginal groups to the process, taking into account community capacities, geographic location and/or their linguistic, socio-economic background or physical capabilities.

Openness and Transparency – Consultation needs to be a procedurally fair and clear process. Consultation should be carried out with consideration of:

- early engagement;
- the provision of clear, accurate and relevant information;
- informing participants on how their concerns were considered in the decision-making process and reasons why their views were not reflected; and
- documenting results of the process.

Efficiency – The consultation process ought to be designed to make the most efficient use of existing and proposed processes and resources while maximizing the contribution of all participants.

Timeliness – Consultation is most effective if initiated as early as possible before decisions are made. Clear and reasonable timelines should be established for input and comments and these timelines need to be communicated clearly.

Guidelines exist for other jurisdictions that may also provide helpful guidance in planning and conducting community engagement activities. For example, the "First Nations Consultation Guidelines for Sustainable Resource Management Planning" in British Columbia 384 includes excellent resources for planning, carrying out and documenting consultations in a manner that respects First Nations needs and values.

While the Plan will not attempt to define legal consultation requirements, it is an appropriate forum for discussions on appropriate practices and guidelines for the region. The Action and Recommendation above are intended to accomplish that.

#### Action #4 - Best Practices

The Sahtu Working Group shall build on and refine the Plan's Conformity Requirements into a set of Best Practices for land use for the Sahtu Settlement Area within 4 years. The results may replace the Plan's Conformity Requirements through future Plan amendments.

#### **Context and Rationale**

The Plan's Conformity Requirements were developed by the Board to resolve land use issues raised during the planning process. The Board made decisions based on the information presented to it. There may be information relevant to some of the CRs that has not been brought to the Board's attention. Furthermore, the Conformity Requirements have evolved with each round of consultations to address the most recent comments received; earlier considerations may be lost in later revisions.

A collaborative forum is one way to overcome some of these challenges. When all affected parties are given the opportunity to discuss an issue in the same room, it is more likely that all relevant information will be brought forward for consideration at the same time. A diverse group may also produce more creative solutions that are only possible when different viewpoints are shared and explored. The Board sees value in having the Plan's Conformity Requirements reviewed and refined by the Sahtu Working Group to ensure they are the most appropriate solutions for the region for the long-term.

#### **Action #5 – Sahtu Cumulative Effects Management Plan of Action**

The Sahtu Working Group shall develop and begin implementation of a Sahtu Cumulative Effects Management Plan of Action within 4 years. Through the Plan of Action, the Working Group shall identify key knowledge and data gaps, design and implement research and data gathering projects to address those gaps, identify and test interim management strategies including targets, and implement chosen management strategies. The results of this work may be integrated into future Plan amendments.

#### **Context and Rationale**

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<sup>&</sup>lt;sup>384</sup> "First Nations Consultation Guidelines, Sustainable Resource Management Planning", British Columbia Ministry of Sustainable Resource Management, Forests, Lands and Marine Branch, July 2004. Available at: <a href="http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs/372854/fnconsultation.pdf">http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs/372854/fnconsultation.pdf</a>. See for example Resource E (Running a Successful Consultation Meeting), Resource F (Preferred Consultation Language), and Resource G (Establishing Personal Relationships).

As land use activities increase in the north, the potential for adverse impacts to the environment increases. While one operation may have little effect, the effect of multiple land use activities may combine to create a significant adverse impact on the environment – cumulative effects. The management of cumulative effects is a shared responsibility. The Environmental Stewardship Framework (ESF), the Cumulative Impact Monitoring Program (CIMP) and the NWT Environmental Audit are the NWT-wide programs intended to manage cumulative effects. The three initiatives are founded on a broad definition of the environment, including social, cultural, economic, and biophysical aspects.

ESF is intended to improve environmental stewardship in the NWT by setting out specific recommendations for decision-makers in the *ESF Blueprint for Implementation* and "*Regional Plans of Action*". Originally known as the Cumulative Effects Assessment and Management Framework (CEAMF) it changed its name in 2008 in recognition that the framework was broader than just cumulative effects management. However, this is still a core focus of the work. The framework includes 10 components:

- Vision and Objectives;
- Land Use and Conservation Planning;
- Baseline Studies and Long Term Monitoring;
- Research;
- Environmental Assessment;
- Regulation and Compliance;
- Information Management;
- Capacity-Building;
- Coordination; and
- Audit and Reporting.

The ESF Steering Committee includes representatives from INAC, EC, GNWT-ENR, Aboriginal governments, MVEIRB, environmental non-government organizations, mining and oil and gas industries. A regional plan of action for has not yet been developed for the Sahtu.

Land use planning is one component of ESF. Because of its broad, regional perspective, it is an ideal vehicle for managing landscape level impacts associated with multiple land uses; more so than the project-specific focus of other components of the regulatory system. The Planning Board held a regional workshop in November 2007 to discuss the management of cumulative effects through the Plan. There was broad support for this work.

Many research reports have assessed potential valued components, indicators and targets<sup>385</sup> for managing cumulative effects in northern Canada, the supporting literature and issues related to their implementation (see Appendix 5). Targets have been included in two land use plans - the Interim Draft Dehcho Land Use Plan (still under revision), and the approved North Yukon Land Use Plan. The Joint Review Panel Report recommended that targets (landscape thresholds) for valued socio-cultural and ecological components be established and included in Inuvialuit, Gwich'in, Sahtu and Dehcho Plans.<sup>386</sup>

<sup>&</sup>lt;sup>385</sup> Also known as thresholds, landscape objectives, carrying capacity, and limits of acceptable change. <sup>386</sup> Recommendation 11-7, Foundation for a Sustainable Northern Future, Report of the Joint Review Panel for the Mackenzie Gas Project, December/09.

The use of targets has met with considerable resistance in the past. Key issues include the lack of studies specific to the NWT, lack of spatial data with which to assess cumulative effects, scientific uncertainty in determining the cause of impacts to valued components, limited ability to control impacts (e.g. human-induced vs. natural impacts), questions regarding appropriate methodology and assumptions, and concerns that the application of targets will restrict development and negatively impact economic investment in the north.

Other initiatives, such as the Draft NWT Seismic Guidelines<sup>387</sup>, have approached cumulative effects management through the use of best practices to limit impacts from land use rather than applying concrete limits.

Most work on cumulative effects so far has been limited to literature reviews. ENR had initiated a multi-year project with Husky Oil Operations Ltd in 2006 to study boreal woodland caribou response to oil and gas activity in the Summit-Keele area southwest of Tulita. The objectives of the study were to monitor boreal woodland caribou before, during, and after the present and future activities in the Summit-Keele area, assess impacts of current industry techniques and the effectiveness of mitigative measures, and map caribou habitat by season. 388 However there has been limited oil and gas activity in recent years and the project was discontinued. 389

The issues described above suggest that our knowledge is not yet sufficiently advanced to implement cumulative effects targets. Further, satellite imagery that is necessary to carry out assessments has not been acquired for the Sahtu Settlement Area. If cumulative effects are to be managed in this region, then considerable work needs to be done to address the issues and fill in the gaps in information.

Cumulative effects management is a shared responsibility which affects all land users, regulators and resource managers, so decisions need to be made collaboratively. The Sahtu Working Group should initiate work on a Sahtu Regional Plan of Action for cumulative effects management as envisioned under the ESF.

#### Action #6 – Sahtu Environmental Monitoring Program

Within 4 years, the Sahtu Working Group shall develop a Sahtu Environmental Monitoring Program that defines regional monitoring priorities, practices and direction for work carried out under the Cumulative Impact Monitoring Program within the Sahtu Settlement Area. In developing the Sahtu monitoring program, the Working Group should consider research and monitoring recommendations identified in the "Great Bear Lake Watershed Research and Monitoring Plan", and "Rakekée Gok'é Godi: Places We Take Care Of".

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<sup>&</sup>lt;sup>387</sup> Draft NWT Guidance for the Protection of land, Forest, and Wildlife: Oil and Gas Seismic Exploration, Environment and Natural Resources (GNWT), Environment Canada, Indian and Northern Affairs Canada, June 25, 2009.

<sup>&</sup>lt;sup>388</sup> Sahtu CIMP Proposal for 2006-07: *Boreal woodland caribou response to industrial activity in the* Summit–Keele area, Sahtu Region, NT, Boyan Tracz and Alasdair Veitch, ENR. <sup>389</sup> Alasdair Veitch, Personal Communication, January 26/10.

#### **Context and Rationale**

"ELDERS' TEACHINGS: Research and monitoring are as fundamental a part of Sahtugot'ine culture as they are of Euro-Canadian cultures, notwithstanding the differences in these cultural traditions. Many middle-aged and elder Sahtugot'ine tell a similar story. When they were younger, their elders gradually passed on to them the accumulated knowledge of the Sahtugot'ine. They also instructed them to observe, take note and be aware of every aspect of their surroundings: of the particular features of any place; of the constantly changing relationships among weather, snow, ice, currents, plants and animals; of the cycles and features of plants and the seasons; and of the particular movements and behaviour of mammals, fish and birds, etc. These instructions and the sometimes-puzzling stories of their elders would often cause younger people to wonder why they were being so instructed and what the stories might mean. But they recount that, later in life, when they sometimes found themselves outside the normal realm of their experience and in real danger, the teachings of their elders and the years of observation, now second nature, allowed them to respond with understanding and skill, and to survive. Some also recount how their elders instilled in them the certainty that no matter what the problem, it can be solved. There is an answer, but the answer can only be found by persistence, hard work and careful observation. " 390

The Sahtu Dene and Métis consider themselves to be stewards of the land. Their traditional knowledge stems from lifetimes spent on the land observing changes, learning how different ecosystem components interact and respond to change. Many of the land uses today are relatively new. We are still learning how the environment responds to such uses. Residents and communities are concerned about impacts from development on the ecological and cultural values which sustain their livelihood and culture. Communities have expressed a strong interest in monitoring land use activities so they know what is happening on the land, can assist applicants to identify significant areas and minimize impacts to them, and to build their understanding of the changing environment.

Many components of the environment such as wildlife, water, and air quality are monitored by Boards like the SRRB, and by government departments in the course of carrying out their management responsibilities. Project-specific monitoring is also carried out by applicants and the SLWB. Current monitoring activities are not necessarily coordinated and are generally reactive rather than strategic. Given the importance of monitoring to the Sahtu Dene and Métis, a comprehensive Sahtu monitoring program should be established for the Sahtu Settlement Area to identify monitoring priorities; to integrate project-specific, community-based and government monitoring initiatives; and to provide a clear role for community-based monitoring.

As described in the previous section, the NWT Cumulative Impact Monitoring Program (CIMP) is the overarching monitoring program for the NWT though it is not fully functional due to a lack

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<sup>&</sup>lt;sup>390</sup> From GBLWMP, 2005. Story distilled from various speakers, including Leroy Andre, personal communication, June 27/04 and Morris Neyelle, personal communication, June 27/04.

of funding. An initial State of the Environment report was completed as part of the initial environmental audit, released in June 2006.<sup>391</sup> The CIMP Working Group completed a report on the preliminary state of knowledge of NWT Valued Components in 2002, and updated it in 2007.<sup>392</sup> There is an opportunity to define CIMP priorities, structure and monitoring work for the Sahtu based on regional needs and interests to guide future work under this program.

#### Recommendation #6 - Communications and Coordination

Every department, agency and organization, operating in the Sahtu Settlement Area, including community organizations, is encouraged to have a communications position dedicated to establishing and maintaining effective communications (using both oral and written means), and coordinating with communities and other organizations, and increasing community involvement in decision-making.

#### **Context and Rationale**

Many of the issues that are raised in a planning process exist because of a lack of communication and understanding between communities, government and land users of current activities and practices. People will always be concerned about the values and resources that are important to them. Many of those concerns disappear or are lessened when current practices, reasons for decisions or other pertinent information is shared. Frequent turnover in positions in all organizations make communications and coordination that much more important.

Communications with communities is especially important. The general purpose of the regional management boards established by the *SDMCLCA* and the *MVRMA* is "to enable residents of the Mackenzie Valley to participate in the management of its resources for the benefit of the residents and of other Canadians" The boards typically include people residing in the communities of the Sahtu settlement area but Board members do not "represent" their communities. Rather, they are appointed by the Minister of Indian Affairs and Northern Development to exercise the responsibilities set out in the *SDMCLCA* and the *MVRMA*. To enable residents to participate in decisions, every board and organization operating in the Sahtu Settlement Area must make a concerted effort to communicate with and engage communities in their decisions.

#### 6.4 INSPECTION AND ENFORCEMENT

#### Recommendation #7 - Inspection and Enforcement Funding

INAC is encouraged to seek additional funding for its inspectors to enable them to patrol priority areas identified in discussion with communities, and increase inspection levels to achieve their target inspection rate within the Sahtu Settlement Area.

<sup>&</sup>lt;sup>391</sup> Available at: http://nwt-tno.inac-ainc.gc.ca/nwt-a-eng.asp

<sup>&</sup>lt;sup>392</sup> Available at: http://www.nwtcimp.ca/vcstknowledge.html

<sup>&</sup>lt;sup>393</sup> MVRMA S. 9.1

#### **Action #7 - Inspection and Enforcement Priorities**

All government departments and agencies and other bodies having monitoring and enforcement responsibilities shall give priority, where reasonable to do so, to inspection and enforcement of activities occurring within Conservation Zones and Proposed Conservation Initiatives, followed by Special Management Zones, then General Use Zones.

## Action #8 – Community-Government Monitoring and Enforcement Strategy

Within 4 years, responsible authorities with enforcement responsibilities shall collaborate with appropriate community organizations (land corporations, renewable resources councils, First Nations, community councils) to develop and begin implementing a Sahtu community - government strategy to partner in patrols, monitoring, inspection and enforcement responsibilities. The strategy should emphasize training initially with a long term goal to maximize community involvement in these areas of responsibility.

#### **Context and Rationale**

A number of organizations have inspection and enforcement responsibilities, including ENR, INAC, DFO, Environment Canada, and the NEB. Inspection and enforcement in the NWT is currently limited by several factors, including limited funding and the costs of all aspects of inspection and enforcement, the stringent requirements of successful enforcement actions, the competing demands for inspection and enforcement from different parts of the NWT, and the specialized training requirements of enforcement officers.

According to the Auditor General of Canada, in 2009 INAC inspected about 300 of the roughly 2400 active permits and licences in the NWT that it was responsible for. This represents a 13% inspection rate, much lower than the department's target of 50-60 %. Sahtu communities are concerned about the low level of inspection and the lack of general patrolling or monitoring. Through the Plan's zoning, the Board has identified with communities which areas are the most sensitive. Given current inspection and enforcement limitations, first priority should be given to inspecting activities occurring in the most sensitive areas (Conservation Zones and Proposed Conservation Initiatives) to ensure the protection of those significant areas.

Many Sahtu residents spend considerable time on the land for recreation or subsistence harvesting. They know the land and will often report back to community representatives if they see land use activities or evidence of land use (materials or fuel caches). Because of their extensive use of the land, communities are well suited to monitoring or patrolling activities and could assist inspectors with certain aspects of their responsibilities. Such a partnership also enables communities to take on a greater role in the stewardship of land and resources.

As an example, in 2004, DFO initiated work on increasing the capability of the Déline Renewable Resources Council (DRRC) to patrol and survey fishing activities on Great Bear Lake (GBL). DFO made a 19' patrol boat available to the DRRC and entered into a contract with the DRRC whereby two fishery workers under the direction of the DRRC undertook a range of patrol

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<sup>&</sup>lt;sup>394</sup> Report of the Auditor General of Canada to the House of Commons, Chapter 4: Sustaining Development in the Northwest Territories, Spring 2010.

activities on GBL. The contracted work included: a survey of GBL anglers; weather monitoring; remediation of campsites and identification of sites needing major remediation; and data summary and logistical support to GBL research and monitoring personnel, including DFO researchers. Given other demands on its funding, DFO was unable to fund similar patrol work on GBL in future years.

The recommendation and Actions above are established to address current inspection and enforcement limitations.

#### 6.5 BUILDING ECONOMIC CAPACITY

Community organizations (land corporations, first nations, RRCs) all struggle with insufficient funding to hire staff, carry out their mandates, and participate effectively in the numerous processes and initiatives related to land use that affect their well-being. The following section includes recommendations to begin addressing this issue.

#### **Recommendation #8 - Economic Development Strategy**

District land corporations and relevant community organizations (land corporations, community councils, First Nations, and RRCs) are encouraged to work with ITI to develop an economic development strategy and action plan to identify economic needs and opportunities, including opportunities arising from establishment of Conservation Zones and new Protected Areas, and capitalize on the opportunities within each district.

#### **Context and Rationale**

A key objective of the *SDMCLCA* is "to encourage the self-sufficiency of the Sahtu Dene and Métis and to enhance their ability to participate fully in all aspects of the economy". Exploration and development of the region's natural resources is the key to economic self-sufficiency.

The Sahtu Settlement Area has considerable resource potential. Key areas include oil and gas around Norman Wells, Colville Hills, and Summit Creek; a potential gas pipeline down the Mackenzie Valley; mineral potential in the Mackenzie Mountains and the east side of Great Bear Lake; hydro potential along the Great Bear River; outfitting in the mountains; and sport fishing on Great Bear Lake. For various reasons, much of this potential lies untapped.

Each district approaches development differently and has access to different resource potential. Currently, resource development appears to be largely driven by industry. However the districts could benefit from taking a stronger lead in creating their own economic futures. Developing an economic strategy would help them identify the resources and areas they should focus on, promote with industry, and possibly initiate exploration and development on themselves, either through Sahtu companies or partnerships with industry.

#### Recommendation #9 - Building Capacity

The territorial and federal governments are encouraged to work with Sahtu businesses to build their capacity (e.g. training, financial assistance, splitting contracts where feasible) to be more successful in procuring contracts and maximize Sahtu business and contracting opportunities for qualified businesses for work carried out within the Sahtu Settlement Area.

#### **Recommendation #10 – Maximizing Benefits**

Applicants are encouraged to work with relevant community organizations (land corporations, community councils, First Nations, and RRCs) and businesses to maximize the economic benefits to communities, businesses and residents from proposed land uses.

#### **Context and Rationale**

Section 12.2.1 of the *SDMCLCA* requires the territorial and federal governments to follow preferential contracting policies and procedures intended to maximize local and regional employment and business opportunities. Section 12.2.3 requires that where the GNWT is going to public tender on a contract for work on settlement lands, it must give participants who satisfy all criteria the first opportunity to negotiate the contract.

However, the Implementation Plan only commits the federal government to notifying Sahtu businesses of contracting opportunities. It also identifies that where feasible, the federal government will remove unnecessary employment qualifications and design contracts to increase the opportunity for smaller or specialized firms to bid. It does not appear to provide for any preferential consideration to Sahtu firms.

The issue is further complicated by the existence of similar provisions and requirements under the Tlicho Agreement which are applicable to lands within the eastern portion of the Sahtu Settlement Area overlapping with the Mowhi Gogha Dè Nııtèè boundary. This results in Sahtu businesses being in direct competition with Tlicho businesses for the same "preferential consideration" for contracts on some lands within the Sahtu Settlement Area where these agreements overlap.

While it is recognized that Sahtu companies must be competitive with other companies, further work and consideration may be necessary to achieve the spirit and intent of this objective of the *SDMCLCA*. There are many benefits for both government and Applicants to assisting communities build local employment and business capacity. Many companies already recognize this and work with communities to maximize economic opportunities and benefits.

#### **Recommendation #11 - Community Participation Funding**

SSI, INAC and the GNWT are encouraged to work together to find ways to fund community participation in planning and regulatory processes.

#### **Context and Rationale**

A key objective of the *SDMCLCA* is to provide the Sahtu Dene and Métis the right to participate in decision making concerning the use, management and conservation of land, water and

resources. This is intended to be met through their representation on the Boards that make those decisions and through direct participation in land use planning and regulatory processes. While communities clearly participate in land use planning and play a central role in plan development, the effectiveness of their participation is hampered by the lack of financial and human resources.

In most communities there is no position responsible for reviewing the plan and coordinating community input. They do not have technical advisors who can assist them in understanding the implications of the Plan, or determine if comments they made previously were properly considered. There are limited internal community meetings to discuss the Plan and prepare their input. Community input depends on who and how many people come to consultations. While the Board devotes special attention to community interests and well-being as required and takes care to fully explain the Plan, in the end, the Board is an institution of public government and must balance the interests of the three approving parties. Only communities can determine if their interests are met in the Plan and they need to have the capacity to ensure that is the case.

In contrast to communities, the federal and territorial governments have teams of people from various departments reviewing and commenting on the plan, with lawyers and technical specialists available to advise them. They meet internally to determine their interests and present coordinated input to the Board. This imbalance puts communities at a disadvantage and can also draw out the planning process while communities struggle to figure out and convey their interests.

The lack of community capacity must also affect other stages of the regulatory process. MVEIRB has been pursuing intervenor funding to assist communities and others participate effectively in the environmental assessment processes. Ideally, each community will have a full time qualified coordinator who can review documents such as the Plan and applications for land or water use, hold internal community meetings to brief residents, identify who should participate in meetings with the Board, coordinate community input, seek legal advice if necessary, and review and respond to comments from other participants. The Board has seen the results of this within the Sahtu Settlement Area. Délane received funding and maintained a full time coordinator and their input and participation clearly reflected a higher level of clarity and coordination, which greatly assisted the planning process.

While it is up to the communities to fund their own participation in these processes, their lack of funding affects the entire process. Recommendations #8, 9, and 10 are intended to assist communities in building a larger revenue base so they can participate more effectively. However, until that time, additional funding to assist communities to participate effectively in resource management processes would benefit everyone.

# 6.6 FILLING THE GAPS

Effective land use decisions require access to current, accurate information. Decision-making processes that are supported by clear guidelines and procedures are more likely to be timely, consistent and acceptable to everyone involved. In developing the Plan, the Board identified

information gaps and topics where further action or direction would benefit project-specific decision-making and advance the goals of the Plan. Actions and Recommendations have been developed to address these gaps with a goal to improving and streamlining land use decisions.

# Action #9 - Traditional Knowledge Guidelines

SSI and other Designated Sahtu Organizations shall collaborate with community governments (First Nations, Charter community councils), the SRRB and Renewable Resource Councils to develop guidelines for the collection (including purpose and scope), use and management of traditional knowledge within the Sahtu Settlement Area.

#### **Context and Rationale**

The collection of traditional knowledge (TK) is a standard requirement in current regulatory processes. The SLWB requires the collection of Traditional Environmental Knowledge for land use permit and water licence applications<sup>395</sup> and has developed guidelines for Traditional Environmental Knowledge.<sup>396</sup> MVEIRB has developed guidelines for incorporating traditional knowledge in environmental assessment.<sup>397</sup> The GNWT Traditional Knowledge Policy identifies responsibilities for the use and incorporation of traditional knowledge into the design and delivery of government programs and mandates.<sup>398</sup> These documents speak to the need to collect traditional knowledge and the types of information expected but do not set out protocols for how that information should be gathered, ownership of the information, management and sharing of information, etc.

Similar to the community engagement issue, applicants would benefit from clarity and consistency on how to fulfill these requirements. Both the Gwich'in Tribal Council and the Dehcho First Nations have developed guidelines/protocols for the collection and use of their traditional knowledge. The development of similar guidelines for the Sahtu Settlement Area would provide much needed direction to applicants and responsible authorities regarding how these requirements can be carried out in a manner that respects the sensitive nature of this information and the rights of the TK holder.

# Recommendation #12 - Granular Resource Allocation Plan

The Sahtu Secretariat Incorporated and the Sahtu District Land Corporations are encouraged to work with Sahtu municipal governments, the Government of the Northwest Territories, and Indian and Northern Affairs to develop a Sahtu Granular Resource Allocation Plan for resources outside of community boundaries.

July 2005, Available at: http://www.mveirb.nt.ca/reference\_lib/index.php?section=18;

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<sup>&</sup>lt;sup>395</sup> See SLWB guidelines for land use permit and water licence applications available at <a href="http://www.slwb.com/land.html">http://www.slwb.com/land.html</a> and <a href="http://www.slwb.com/water.html">http://www.slwb.com/water.html</a>

 <sup>396 &</sup>quot;Traditional Environmental Knowledge", Sahtu Land and Water Board, Revised December 16, 2003."
 397 "Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment", MVEIRB,

Traditional Knowledge, Policy 53.03, Government of the Northwest Territories, Revised March 10, 2005, Available at: <a href="http://www.gov.nt.ca/publications/policies/ENR/53.03">http://www.gov.nt.ca/publications/policies/ENR/53.03</a> Traditional Knowledge.pdf Available at <a href="http://www.mveirb.nt.ca/reference\_lib/index.php?section=2">http://www.mveirb.nt.ca/reference\_lib/index.php?section=2</a>

#### **Context and Rationale**

Long-term access to granular resources is essential to the development of the Sahtu Settlement Area, for community development, regional development and industrial use. This requires a comprehensive understanding of the regional supply and demand, both volumes and locations, and decisions made on how this resource is most effectively used.

Since 2007, the GNWT has completed a Territorial Granular Resource Forecast<sup>400</sup> and developed a Granular Resource Directory<sup>401</sup> as part of its Territorial Granular Strategy. The Directory acts as a central repository for available information related to granular resource management (policies and guidelines, methods, demand forecasts, websites, bibliography of reports, etc.) It is an important first step in granular resource management.

According to the Directory, the GNWT departments and Sahtu communities will require 148,500 m³ of granular resources between 2008 and 2011. Tulita and Colville Lake are considered "non self-sufficient" with respect to granular resource supply because their supply access is seasonal and/or long distance, which drives up their costs. If the MGP proceeds, it will require 10 million m³ of borrow material. A similar amount will be needed for the construction of a Mackenzie Valley Highway extension between Wrigley and the proposed junction with the Dempster Highway. Other resource development projects will also need access to granular resource supplies in close proximity to their operations to be economical.

At the same time, the Geological Survey of Canada has been using seismic log data to identify potential sources of sand and gravel (see map 39 in the Background Report). 402

The Sahtu Secretariat Incorporated identified the need for a regional granular resource allocation plan for the Sahtu Settlement Area to ensure communities have a long-term supply of granular materials at a reasonable cost<sup>403</sup>. Granular resources are owned by the landowner so management responsibility for this resource is shared in the SSA between INAC, the GNWT and the Sahtu District Land Corporations. Any planning must involve all three Parties.

# Recommendation #13 - Non-Renewable Resource Assessments

INAC and the GNWT, through the NWT Geoscience Office, are encouraged to work with communities to carry out non-renewable resource assessments of Conservation Zones within the Sahtu Settlement Area, where supported by communities.

#### **Context and Rationale**

Non-renewable resource assessments are a requirement for establishing protected areas through the Protected Areas Strategy. They ensure that the protected area is established with full consideration of all resource values and potential uses of the area. Conservation Zones do

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 <sup>&</sup>lt;sup>400</sup> Territorial Granular Resource Forecast, Dept of Public Works and Services, Dept of Municipal & Community Affairs, Dept of Transportation and NWT Housing Corporation, GNWT, July 2007.
 <sup>401</sup> Northwest Territories Granular Resource Directory, Dept of Public Works and Services, Dept of Municipal & Community Affairs, Dept of Transportation and NWT Housing Corporation, GNWT, March 2009.

Smith, I.R., Lesk-Winfield, K. 2009: An integrated assessment of potential granular aggregate resources in Northwest Territories. Geological Survey of Canada, Open File 6058, 1 DVD.
 Letter from SSI to the SLUPB, August 24 2009 RE: Review of Draft 2 of the Sahtu Land Use Plan.

not have this requirement, though regional scale mineral and hydrocarbon resource potential evaluations are considered in Plan development. While some Conservation Zones are so culturally significant that communities will never support any form of exploration or development within them, communities may be open to further study in other Conservation Zones. Resource assessments can be considered during 5-year Plan reviews to determine if amendments to zone designations or boundaries should be considered.

# Action #10 - Access to Wildlife Information

Responsible authorities (ENR, CWS, SRRB, and DFO) shall develop and maintain current data on important and critical wildlife habitat for fish, furbearers, waterfowl, raptors, barren-ground caribou, mountain and boreal woodland caribou, moose, muskox, mountain goats, Dall's Sheep, grizzly bears and black bears and make the data readily accessible to land users and the public.

#### **Context and Rationale**

Applicants are expected to mitigate the impacts of their land uses to wildlife. To do that, they must have a clear understanding of which species are important, where the animals are, where areas defined as critical habitat are, and sensitive periods. The Board has spent considerable effort trying to collect and organize available data for use in the Plan but some of the information is older or too generalized to be useful for project-specific applications. Information for some species such as boreal woodland caribou is very limited. The responsibility for identifying important wildlife areas and seasons rests with wildlife managers. Having this information updated and accessible for land users will improve regulatory efficiency.

# Action #11 - Fish Habitat & Water Withdrawals

DFO shall work with communities

- a) to document community traditional knowledge of
  - i. fish and fish habitat, and
  - ii. water levels and quality; and
- b) to discuss
  - i. community concerns related to water withdrawal,
  - ii. DFO's winter water withdrawal protocol, and
  - iii. alternative solutions.

## **Context and Rationale**

The residents of Colville Lake have indicated that Lac Belot has shown rapid drawdown in water levels in the past and cannot support water withdrawal for construction of ice roads or other commercial or industrial purposes. Tulita has shared similar observations regarding Stewart Lake. Colville Lake residents have asked that Lac Belot only be used for drinking water. The Department of Fisheries and Oceans (DFO) stated that their surveys show that the lake depth exceeds 15 m on the west side and is a "more favourable alternative as opposed to smaller lakes which may be more susceptible to withdrawal stresses should a withdrawal moratorium be put into place." The community would like the opportunity to discuss their knowledge with

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<sup>404</sup> Colville Lake Meeting, January 15-16, 2009

<sup>&</sup>lt;sup>405</sup> DFO Comments on Draft 2, December 4, 2009.

DFO so that they can come to a common understanding of how to manage water withdrawal in this lake.

Many of the lakes in the Sahtu have been identified as "fish lakes" by communities; lakes from which communities regularly harvest fish. DFO has requested additional information regarding the species and abundance of fish that make these lakes significant. The Board does not collect that level of information for planning purposes. DFO and communities could both benefit from DFO working with communities to document their traditional knowledge regarding fish, their habitat and water levels within the Sahtu Settlement Area.

# Recommendation #14 - Mapping the Underground River

The community of Colville Lake is encouraged to work with Karst specialists and other partners to study the site and delineate the route of the Underground River.

#### **Context and Rationale**

In July 2007, Dr. Derek Ford, one of the world's leading Karst geologists, visited the NWT to study karst landforms in the Sahtu region. During his visit he was told of an underground river flowing into Lac Belot. Though he was unable to see the site, he confirmed its presence through topographic maps and flagged this as an important site for further research to delineate its course. The community of Colville Lake shares the desire to properly delineate the course of this area. Since it is currently designated as a Special Management Zone, it is important to ensure that the area selected properly reflects the location of this special geological area.

# Action #12 - Air Quality 408

- (1) ENR shall ensure that interested parties are provided with a paper copy of the Annual Air Quality Report, and directed to ENR's Air Quality Programs Coordinator as necessary.
- (2) ENR shall continue to study the feasibility and advisability of expanding the air quality monitoring network in the NWT. This will be based primarily on industrial development, population growth, and available resources.
- (3) ENR shall continue to develop air quality related regulations, guidelines and/or standards, as appropriate, for application within territorial jurisdiction through the NWT Environmental Protection Act. ENR will continue to work with the Land and Water Boards and responsible federal agencies to encourage their air quality objectives for new and existing developments, territory-wide.

#### **Context and Rationale**

Background information related to air quality is provided at the end of Chapter 4 in relation to Recommendation #1.

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<sup>406</sup> Ibid

<sup>&</sup>lt;sup>407</sup> Ford, D. 2008. Report Upon a Survey of Karst Landforms around Norman Wells, Northwest Territories. Prepared for the NWT Protected Areas Strategy, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.

<sup>&</sup>lt;sup>408</sup> This Action was excerpted from the GBLWMP and modified as per GNWT comments.

# Recommendation #15 - Contaminated Sites

INAC is encouraged to work cooperatively with communities to inventory, prioritize, research, monitor and remediate contaminated and waste sites in the SSA.

#### Context and Rationale 409

The Sahtu Dene and Métis have depended on the pristine state of the Sahtu Settlement Area to meet their social, cultural and economic needs for generations. Any deterioration in water quality from abandoned contaminated and waste sites has the potential to significantly alter their way of life. Abandoned mine and waste sites, and garbage and sewage from camps, lodges and communities are some of the greatest potential threats to the health of the water.

The federal government becomes responsible for contaminated and waste sites in the NWT when the person or corporation that established a site is unknown or has abandoned it, and the site is on Crown lands. INAC approaches the remediation of abandoned contaminated and waste sites North of 60 under the Contaminated Sites Management Policy (2002). This commits the Department to manage "contaminated sites in a cost effective and consistent manner, to reduce and eliminate, where possible, risk to human and environmental health and liability associated with contaminated sites." INAC manages contaminated sites by following the Treasury Board's Federal Contaminated Sites Management Policy, and by using the recommended guidelines and standards set by the Contaminated Sites Management Working Group, the Canadian Council of Ministers of the Environment and the Canadian Standards Association.

In setting remediation priorities among contaminated sites, INAC uses the following criteria and a risk management framework:

- i. human health and safety;
- ii. legal and claims obligations;
- iii. significant impacts on the environment; and
- iv. concerns of First Nations, Inuit, northerners and other stakeholders.

The approach determines which sites receive funding during the annual planning cycle. Because risk management is used to prioritize sites, sites closer to larger human population centres generally receive remediation priority. The federal government has recently, however, announced increased and longer term funding for the remediation of contaminated sites throughout Canada. This increased funding, together with the coordination of smaller remediations with larger remediation activities, means that it will now be possible to address concerns at a range of contaminated and waste sites in the Sahtu Settlement Area.

INAC is committed to "working collaboratively with First Nations, Inuit, northerners and other entities to manage contaminated sites on reserve lands, other federal lands north of 60, and any other lands under INAC's custodial responsibility." INAC acknowledges special factors in addressing contaminated sites in the north, including the sensitive and unique environment, the scope and scale of sites, the significant logistical challenges, the need for an ongoing presence, the need to work with appropriate regulatory agencies and conduct public consultations, and the importance of traditional foods and other socio-economic challenges.

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<sup>&</sup>lt;sup>409</sup> Entire Context and Rationale section excerpted with minor modifications from the Great Bear Lake Watershed Management Plan, Great Bear Lake Working Group, May 31/05.

Remediation standards for contaminated sites can vary. The *Federal Contaminated Sites Management Policy* outlines the methodology for setting remediation objectives. INAC will take into account the concerns of communities and regulators in selecting the appropriate method for establishing remediation objectives. INAC will, for example, take into account any site conditions that are unique or particularly sensitive, and the impact of any potential residual contamination on traditional lands and lifestyles.

INAC is committed to promoting Aboriginal and northern participation and partnership in the identification, assessment, decision-making and remediation/risk management processes relating to contaminated sites. The Department will also, as much as possible, plan the scale and pace of projects in keeping with northern and Aboriginal capacity for involvement.

Map 3 (in Chapter 2) shows the location of contaminated sites in the SSA.

# **Action #13 - Emergency Activity Reporting**

Where a land use activity is carried out, that would be prohibited under a zoning requirement if not for the emergency exemption, the body responsible for carrying out the activity shall provide a written report to the Board describing the operation, indicating when the emergency is likely to end and what, if any, restorative measures consistent with the vision and goals of the Plan are planned, as soon as possible.

#### **Context and Rationale**

S. 2.3.2 exempts from any requirement of this Plan, any land use activity that must be carried out in order to deal with an emergency that threatens life or property. Following the emergency, action may be needed to address any impacts resulting from the exempted land use. The above Action is required to allow the Board to effectively monitor land use in the SSA.

# 6.7 CULTURE AND EDUCATION

# **Elders' Story**

In Sahtu Dene and Métis tradition, grandparents often played a central role in the upbringing and education of their grandchildren. Many years ago, when the time was right, one such grandfather took up the teaching of his grandson. His words "made a path" or "life-long road" for his grandson, which would allow his grandson to "see his gray hair at the end of his road". He taught his grandson of the universal law of the connectedness of all things, of respect for all things, and of the challenges that he would face along his particular road.

His grandfather also tied moose hide bracelets around the wrists and ankles of his grandson and instructed his grandson not to disturb the bracelets, to leave them on until they disintegrated and fell off naturally, and to inform him as they fell off. And he instructed his grandson to pay close attention to his dreams.

Thereafter, the grandson began dreaming of the moose. He developed a "mystical tie" to the moose, a tie that was to endure and develop for the rest of his life. After some time, his left

ankle bracelet fell off. Later his right wrist bracelet fell off, and later again his right ankle and his left wrist bracelets each fell off in turn. When he informed his grandfather that the final bracelet had fallen off, of the order of their falling off and of his dreams, his grandfather was assured of the unity of his person and his relationship with the land. He declared his grandson sufficiently mature that he was now an adult and could establish his own household and home. 410

# Recommendation #16 - Strengthening Culture and Education 411

The appropriate government authorities should make every reasonable effort to support initiatives on the part of the Sahtu Dene and Métis to maintain and strengthen the land-based culture and its transmission from the elders to the younger generations.

Culture and education priorities are as follows:

- 1. Facilitate land-based activities for community members, particularly where the elders can pass on their culture to the younger generations.
- 2. Assist elders and local/regional educators in defining clear teaching roles for the elders in the schools, and in the developing and incorporating culturally-appropriate teaching materials in the school curriculum. Support the inclusion of materials on the Sahtu region in the curriculum, incorporating both Dene and Métis traditional knowledge and scientific knowledge about the watershed in the curriculum.
- 3. Support the community's efforts to develop its capacity in the fields of ecological and cultural research, monitoring and management.
- 4. Support community efforts to promote and communicate Dene and Métis culture, to develop greater mutual respect between Dene and Métis and people of other cultures.

# Context and Rationale<sup>412</sup>

Dene and Métis culture has traditionally defined itself largely in terms of in its relationship with the land and the Creator. To the elders, people are not separate from the land. Rather, they are part of "the land", in the deepest sense of that term.

Dene and Métis culture is a land-based, oral culture. It was traditionally passed on orally and through activities on the land — through careful observation of and learning from the land, and through the oral codification of this learning in various spiritual and ethical concepts, traditional law, codes of behaviour, stories, and an intimate knowledge of the natural environment and the behaviour of other creatures. This "traditional knowledge" has been developed and refined over long periods of time, and it has been passed on through many generations. The elders are the primary custodians and teachers in this oral culture, and it is ideally learned on the land. Thus many stories are associated with particular places on the land. They are told at those places (and by those places) and it is often for the listener to sort out what they mean. Dene and Métis traditional ecological knowledge is based on generations of careful observation of the environment and its seasonal and yearly variations: knowledge of local micro-climates, ice and

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<sup>&</sup>lt;sup>410</sup> Extracted from Great Bear Lake Watershed Management Plan, Charlie Neyelle, Personal Communication, June 25/04

<sup>&</sup>lt;sup>411</sup> Extracted from Great Bear Lake Watershed Management Plan, May 31/05

<sup>&</sup>lt;sup>412</sup> Extracted from Great Bear Lake Watershed Management Plan, May 31/05

snow, river currents, plant communities, and animal movements and behaviour, etc. Through this body of knowledge, the Dene and Métis survived in a very harsh environment.

It should thus be plain that the land in Dene and Métis culture fulfills many of the functions of libraries, schools, universities and spiritual places in most western cultures. It is the place where much of Dene and Métis culture is learned. It is the sustainer of all life. It is sacred. And human beings in turn have responsibilities towards it. Moreover, given the dominant role that the human species now plays in the natural environment, the elders say that we are even more responsible for maintaining its ecological integrity.

# 6.8 ACTIONS AND RECOMMENDATIONS SPECIFIC TO THE GREAT BEAR LAKE WATERSHED

# **Recommendation #17 - Fisheries Management**

The management of fisheries within the Great Bear Lake Watershed should be proactive in nature and precautionary in approach. The managers of GBLW fisheries should ensure that:

- i. All stocks fished for recreational or commercial purposes are maintained at sustainable levels consistent with identified fishery quality objectives. Licensed operators and harvesters should be responsible for providing harvest statistics and biological information specified in their authorizations to the appropriate authorities;
- ii. Lake trout populations on GBL should not fall below levels that ensure that the catch of large trophy lake trout (fish in excess of 9kg) by any lodge remains stable at baseline levels. Baseline levels should be established for various stocks as determined by harvest studies in areas used by fishing lodges;
- iii. Arctic grayling populations should be maintained at levels that ensure the high quality of trophy fisheries. Baseline levels should be established for various stocks as determined by harvest studies in areas used by fishing lodges; and
- iv. As a general rule, fish stocks should be managed conservatively in order to minimize the risk of degrading the quality of GBLW fisheries. 413

# Context and Rationale 414

GBL's subsistence fishery is very important to the community of Délīne. While several species are harvested, lake trout is the most heavily-harvested species, and lake cisco and whitefish also form a significant component of the subsistence fishery. GBL is also the last of the Great Lakes to contain a wide diversity of "morphotypes" or forms of lake trout. Morphological and genetic diversity allow populations to better adapt to environmental changes over the long term. This diversity has been extinguished or greatly reduced in the other Great Lakes due to

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<sup>&</sup>lt;sup>413</sup> From GBLWMP, Great Bear Lake Working Group, May 31/05

<sup>&</sup>lt;sup>414</sup> Entire Context and Rationale section extracted with minor modifications from the GBLWMP, Great Bear Lake Working Group, May 31/05.

<sup>&</sup>lt;sup>415</sup> Kim Howland (DFO), personal communication based on SRRB Harvest Study (February 25/05).

over-harvesting and the introduction of non-native species. GBL thus provides one of the only remaining models of how lake trout populations naturally function in a large lake ecosystem. 416

GBL's trophy-size lake trout population is worth special mention, given the importance of this fishery to the lake and the local economy. Trophy grayling are also economically important. Notwithstanding the apparent abundance of trophy-size fish, the very slow growth rate of these fish and the low primary productivity of GBL mean that their harvest mortalities must be kept at a low to moderate level.

# Recommendation #18 - Transboundary Coordination

The Dél<sub>Įne</sub> Land Corporation and Renewable Resources Council are encouraged to assist their elders in meeting with elders in adjacent jurisdictions, to discuss cooperative principles and processes by which the larger watershed of Great Bear Lake may be kept clean and bountiful for all time.

# Context and Rationale<sup>417</sup>

Much of the watershed of GBL lies outside of the Sahtu Settlement Area, in Nunavut, the Dehcho and particularly in the Tlicho (Wek'eezhii) settlement areas. The GBL watershed comprises approximately 144,069 sq. km. in total. The watershed's breakdown in various jurisdictions is as follows:

Nunavut: 2% (2,876 sq. km.) Deh Cho: 4% (6,401 sq. km.) Tlicho: 31% (44,525 sq. km.) Sahtu: 63% (90,267 sq. km.) Total: 100% (144,069 sq. km.)

Water flows, animals migrate and air pollution knows no boundaries. Action to protect the GBLW — to keep it clean and bountiful for all time — will only be effective if authorities throughout the watershed (and beyond) cooperate in the maintenance of its ecological and cultural integrity. Délıne's elders informed the GBL Working Group that this matter is too important to be left unresolved. They would like to lay the foundation for cooperation with other jurisdictions. They propose to do this through discussions, similar to those that took part in much earlier times, with the elders of adjacent jurisdictions.

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<sup>416</sup> Ibid

<sup>&</sup>lt;sup>417</sup> Entire Context and Rationale section excerpted with minor modifications from the Great Bear Lake Watershed Management Plan, Great Bear Lake Working Group, May 31/05.

# Chapter 7 – Plan Approval & Implementation

# 7.1 PLAN APPROVAL

Under S.43 of the *MVRMA*, upon completion of the Land Use Plan, the SLUPB will adopt the Plan and submit it to SSI, the Minister of ENR, GNWT and the Minster of INAC. SSI must approve the Plan first and notify the territorial and federal Ministers in writing. Next, the territorial Minister will approve the Plan and notify SSI and the federal Minister in writing. Finally, the federal Minister will approve the Plan. If any Party does not approve the Plan, it shall notify the other Parties and the Planning Board in writing of its reasons. The Planning Board will consider the reasons, make any changes to the Plan it considers appropriate and resubmit the Plan for approval. The approval process will then start over following the same process. The Plan takes effect on the date of its approval by the federal Minister.

# 7.2 IMPLEMENTATION

# 7.2.1 Shared responsibility

Plan implementation is a shared responsibility. The Plan "belongs" to the approving Parties - SSI, the GNWT and Canada - and they are ultimately responsible for its implementation, either directly through the authorizations and interests they administer and measures they take, or indirectly through the work of boards and similar bodies and their approval of decisions of such bodies. By approving the Plan, the parties accept responsibility to fully implement its requirements.

In addition, implementation of the Plan requires the participation and cooperation of Sahtu residents and communities, co-management boards, designated Sahtu organizations, departments and agencies of the federal and territorial governments, and land users.

# 7.2.2 Role of the Planning Board

Under S. 44 of the *MVRMA*, following Plan approval, the SLUPB will monitor implementation of the Plan and, where so authorized by the Plan, consider applications for exceptions to the Plan.

The Board will monitor and assess the following aspects of Plan implementation:

- Is the Plan achieving its goals and advancing the vision?
- Is the Plan being implemented fully and appropriately by regulators and responsible authorities?
- Would further clarification assist in accurately interpreting and implementing the Plan?
- How is the Plan affecting the regulatory system (is it having the desired result)?

- Are there new land uses or questions not addressed by the Plan that should be considered in future amendments or 5-year reviews?
- Have exception requests or other types of feedback identified Plan amendments that should be considered?

The Board will monitor Plan implementation primarily through its participation in the review of applications (and equivalent proposals for land dispositions) relating to land use. The Board will carry out a conformity determination on the activities proposed in every application, whether it is referred to the Board or not, as part of its monitoring function. The Board will also monitor implementation success after authorizations are issued by checking to ensure that the Plan's requirements are captured in the terms and conditions of authorizations. The Board may also review the results of MVEIRB assessments and reviews and assess how the Plan can better help to coordinate and integrate the planning and impact assessment functions under the *MVRMA*.

The Board will monitor annual progress on the Plan's Actions and the extent to which Recommendations are being implemented, through collaboration with other regulatory and responsible authorities.

In addition, the Board will continue to gather information on the values and resources discussed in the plan to better inform land use decisions and be prepared for the five-year review.

The exception process is described separately below.

# 7.2.3 Role of Regulators and Responsible Authorities

Under s. 46(1) of the *MVRMA*, "First Nations, departments and agencies of the federal and territorial governments ... shall carry out their powers in accordance with the land use plan". These bodies carry out the Plan's Actions outside the regulatory process. Actions are related to the use of land, waters, or resources, and in many cases support the regulatory process. For example, they may include the mapping of habitat features so that impacts may be mitigated in authorizations. They may also include policy measures, such as policies for the collection of TK in relation to applications for land use.

For convenience, the Plan refers to the bodies that carry out Actions as "responsible authorities".

In addition, under the same *MVRMA* provision, "every body having authority under any federal or territorial law to issue licences, permits or other authorizations relating to the use of land or waters or the deposit of waste" is responsible to implement the Plan. These bodies apply the Plan's Conformity Requirements in the regulatory process, i.e. in determining whether and on what terms a land use will be authorized. Conformity Requirements direct how land may be used.

For convenience, the Plan refers to the bodies that apply the Conformity Requirements as "regulators". Note that regulators are also "responsible authorities" - responsible for carrying out Plan Actions within their jurisdictions - when they act outside the regulatory process.

# 7.2.4 Implementing Conformity Requirements

Conformity Requirements will be implemented through conformity determinations, the regulatory process and related dispositions of land. Figure 4 illustrates this process.

# a) The Conformity Determination Process

Conformity determination is the process of checking an application for authorization of a land use activity (or an equivalent proposal for a land disposition) against the Plan's Conformity Requirements and determining if the land use activity described complies. Conformity determinations may be done by the regulator (or owner responsible for the disposition), or by the SLUPB. Under s. 47(1) of the *MVRMA*, the SLUPB is only required to do conformity determinations where applications are referred to the Board by a first nation, a department or agency of the federal or territorial government, the regulators involved in the application, or by any person directly affected by the proposed activity. Where an application is referred to the SLUPB to do the conformity determination, the Board's decision is final and binding (S. 47(4)).

The possible decisions that may result from a conformity determination are:

**Positive**: Yes, the activity described in the application conforms;

**Positive (subject to Plan conditions)**: Yes, the activity described in the application conforms, provided that the activity also meets any specified Conformity Requirements with which compliance cannot be determined based on the application alone. The specified Conformity Requirements may require that regulators consider certain factors in their decisions, or incorporate certain conditions in their authorizations (see Section b below); or

**Negative**: No, the activity described in the application does not conform.

The Plan's Conformity Requirements are written as clear as possible to assist applicants and regulators to assess conformity in a consistent and timely manner. The SLUPB should be involved in determining conformity of initial applications after the Plan is approved, to model the process and address any initial questions of interpretation that may arise. As regulators develop experience with the Plan, they may take on the conformity determination role themselves. Applications should continue to be referred to the SLUPB where the conformity determination is not clear or where questions arise. In any case, for Plan monitoring purposes, copies of all authorizations and equivalent land dispositions will need to be provided to the SLUPB.

Applicants are encouraged to review the Plan and contact the Planning Board and appropriate regulators when they are developing their applications to ensure an efficient conformity determination process. Applications that demonstrate how they are meeting each of the applicable Conformity Requirements will help the SLUPB and regulators in determining conformity.

Applicant submits application to Regulator. **SLUPB** determines Regulator forwards copy of conformity application to SLUPB. (monitoring) Is the Regulator referring YES the application to SLUPB? **SLUPB forwards CD** to RA, applicant and NO referring party Regulator determines if the activity conforms to the Plan. NO YES Applicant may apply Activity does not conform Activity Conforms to the to SLUPB for to SLUP. SLUP (subject to conditions) exception **SLUPB** considers Regulator distributes application Applicant may with any conditions to referral exception request & amend application responds (normally) organizations as per current & start over preliminary screening procedures within 30 days **MVEIRB** conducts EA & considers SLUP in EA Referral to EA? scoping, setting measures & recommendations. NO YES Regulator implements conformity determination, SLUPB exception decision and EA results in determining whether to Activity does not NO authorize the proposed activity, and, if so, conform to Plan on what terms and conditions authorization cannot be granted Application YES Rejected Regulator gives authorization with terms **Applicant may** and conditions necessary to implement amend application EA decisions and SLUP requirements. & start over

**Figure 4. Implementing Conformity Requirements** 

The SLUPB will conduct an internal conformity determination on every application as soon as it is received, as part of its monitoring activities. In doing so, the Board will be prepared should a referral be made to it later on to avoid further delays in the regulatory process.

The SLUPB or Regulator, as the case may be, should submit its conformity determination, and in the case of a negative determination, a notice of deficiencies, in writing to the applicant, other regulators, and to the referring party (where it was referred to the SLUPB by someone other than a regulator).

# b) Implementation in the Regulatory Process

If an application for an authorization is determined to conform, the application will continue through the preliminary screening, environmental assessment (if referred) and regulatory phases, subject to any Conformity Requirements that require regulatory implementation. When reporting a positive conformity determination that is subject to conditions, the Board will identify the Conformity Requirements that require further attention or implementation by a regulator. Where, for example, there is a requirement to not contaminate community drinking water source watersheds, the *MVRMA* responsibility to act in accordance with the Plan includes the responsibility either to incorporate suitable conditions to meet that requirement in their authorizations, or to avoid authorizing any activity that would contravene that requirement.

If an application is determined not to conform, the Board will identify the Conformity Requirement that was not satisfied, and in what respect, and refer the application back to the applicant and regulatory body. Under the *MVRMA*, the regulator may not issue an authorization for a non-conforming land use unless an exception is available under the Plan and is applied for and granted. This is express direction to the SLWB under s. 61(1) of the *MVRMA*; for all other Regulators, it is a necessary implication of s. 46(1). If the applicant wishes, it can submit a new application that meets the Conformity Requirements of the Plan.

If circumstances warrant, the applicant may also apply to the SLUPB for an exception to the land use plan. If received immediately, an exception request can be handled within existing regulatory timeframes.

Conformity Requirements are minimum land use requirements. They are not mandated or designed to be exhaustive. Regulators, acting under distinct legislative mandates, will apply additional land use conditions consistent with Conformity Requirements, as they deem appropriate.

# c) Implementation by Land Dispositions

INAC and the GNWT also have Plan implementation responsibilities in controlling the disposition of interests in land. For example, mineral interests normally include rights of access that can have significant surface land use implications. In the past, this has created difficulties where Conservation Zones would restrict mineral development. The *Northwest Territories and Nunavut Mining Regulations* were recently amended to address this issue. The regulations now restrict mineral prospecting and staking mineral claims in areas where such activities are prohibited under approved land use plans.

Another example of the responsibility to implement land use plans in the process of public land dispositions concerns the issuance of surface leases for long-term land uses, such as roads. INAC can issue a land lease rather than a land use permit in order to authorize the use of public lands on a long-term basis. This appears to be one reason why the *SDMCLCA* includes "leases and other interests in land" in the types of authorization that it designates to implement approved land use plans. <sup>418</sup>

Settlement lands are owned by the District Land Corporations. To the extent that the District Land Corporations authorize uses of land through the sale, lease or other disposition of surface or subsurface interests in settlement lands, or through negotiated agreements related to access, granular resources or water rights, the SSI and District Land Corporations are responsible under s. 46(1) of the *MVRMA* to carry out their responsibilities in accordance with the land use plan in essentially the same way as regulators acting on public lands.

# d) Timeframes

The Conformity Requirements of the Plan are designed to be implemented within existing regulatory timeframes. The Board will work cooperatively with regulators to "test" the timeframes required for conformity determinations and ensuing regulatory action before the Plan is adopted by the Board and submitted for approval.

# e) Key Regulators

For illustration only, Table 11 identifies key regulators and authorizations responsible under the *MVRMA* to implement the Conformity Requirements of the Plan. The *MVRMA* gives equivalent responsibility to all regulators whose authorizations deal with a land use that is subject to the Plan.

Table 11. Key Regulators and Authorizations that Implement the Sahtu Land Use Plan<sup>419</sup>

Regulator	Authorization	Associated Act/Regulation
Land Administration,	Research licence	Sahtu Dene and Métis
[SSI]	Land lease	Comprehensive Land Claim
	Quarry permit	Agreement
	Subsurface resource rights/access	
Aurora Research	NWT scientific research licence	NWT Scientists Act
Institute		
Prince of Wales	Archaeological permit	Northwest Territories Act
Northern Heritage		Northwest Territories
Centre		Archaeological Sites Regulations

<sup>&</sup>lt;sup>418</sup> SLCA, S.25.2.9.

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<sup>&</sup>lt;sup>419</sup> The Draft 3 version of this table follows the example of the approved Gwich'in Land Use Plan. The SLUPB is continuing to review this table and may make further modifications pending further work with regulators and responsible authorities.

Regulator	Authorization	Associated Act/Regulation						
Environment and Natural Resources, GNWT	Free timber cutting permit Timber cutting permit/licence Timber transport permit/licence Timber scaling licence Mill licence (Forest) research licence Fire permit Outfitter licence Wildlife Research Permit Commercial Wildlife Licence General Wildlife Permit Licence or permit authorizing discharge	Forest Management Act Wildlife Act Wildlife Licences and Permits Regulations Wildlife Business Regulations Wildlife Management Outfitter Areas Regulations Environmental Protection Act						
Investment, Tourism and Industry, GNWT	Tourism operator licence Big game outfitter licence Establishment of territorial Parks	Tourism Act Territorial Parks Act						
Sahtu Land and Water Board	Type A and B land use permit Type A and B water licence	Mackenzie Valley Resource Management Act Mackenzie Valley Land Use Regulations Northwest Territories Waters Act Northwest Territories Waters Regulations						
INAC Mining Recorders Office	Prospecting permit Mineral claim/lease Dredging Lease Coal licence/lease	Territorial Lands Act Nunavut and Northwest Territories Mining Regulations Territorial Dredging Regulations Territorial Coal Regulations						
INAC Land Administration	Quarry permit Surface lease Licence of occupation Easement	Territorial Lands Act Territorial Lands Regulations Territorial Quarrying Regulations Federal Real Property and Federal Immovables Act						
INAC Oil and Gas Directorate	Exploration Licence Significant Discovery Licence Production Licence Subsurface Storage Licence	Canadian Oil and Gas Operations Act Canadian Petroleum Resources Act						
Department of Fisheries and Oceans	Habitat Alteration, Disruption, Destruction Authorization, Authorization for deposit of deleterious substances Commercial Fishing Licence Scientific Collection Permit	Department of Fisheries and Oceans Act Fisheries Act Fishery Regulations Northwest Territories Fishery Regulations						
National Energy Board	Certificate of Public Convenience and Necessity	National Energy Board Act						

Further information on implementation criteria for each of the Plan's Conformity Requirements is provided in a Draft Implementation Guide (separate document). The SLUPB will refine this document with regulators, applicants and other planning partners over the following year.

# 7.2.5 Implementing Actions

Actions are to be implemented by the responsible authorities outside the regulatory process. For example, the establishment of a working group to study and collaboratively develop a cumulative effects management strategy will require participation and commitment from a variety of planning partners to advance the plan, but this work is not initiated by a particular land use application. Upon completion of the Action, the results may be considered for integration into a future revision of the Sahtu Land Use Plan (e.g. the first 5 year review) as amended or new Conformity Requirements. Other Actions may produce new information or new protocols to support future decision making in planning or regulatory processes.

SSI and other Designated Sahtu Organizations are also responsible for implementing Actions directed at them, and for considering Recommendations in their decisions and operations.

# 7.2.6 Implementing Recommendations

Recommendations are advisory in nature and are directed at various planning partners. Some are applicable to land use applications and should be duly considered by applicants and responsible authorities in making their decisions. Others are more general and provide non-binding guidance on actions that would advance the goals of the region. Applicants and responsible authorities are asked to consider and implement recommendations wherever feasible and appropriate.

# 7.2.7 Implementation Roles of Other Bodies and Organizations

# a) Mackenzie Valley Environmental Impact Review Board

While the Review Board does not issue any authorizations, it is responsible for conducting environmental assessments and recommending to the Minister of INAC whether or not a project should proceed and under what conditions. The process for determining the conformity of land uses with the land use plan will have preceded the Review Board's assessments.

The Review Board's Plan implementation role includes: understanding and being aware of the relevant Conformity Requirements (e.g. scoping assessments to include values identified for the area in the Plan); giving consideration to the information and objectives described for the zones in which the development is proposed; and considering relevant Recommendations in its decisions.

# b) Sahtu Renewable Resources Board

Though the SRRB does not issue permits, licences or authorizations, it will be involved in implementing the Conformity Requirements of the Plan through its participation in the review of applications for land use. The SRRB will play a central role in implementing Actions and Recommendations related to renewable resources.

# c) Applicants

Applicants for land use authorizations and equivalent land dispositions will benefit from reading and understanding the Plan and supporting documents (Background Report and Draft Implementation Guide). It contains considerable information about the Sahtu Settlement Area, and the goals and values of the people. It identifies where different land uses are permitted or restricted, and under what conditions.

Applicants are encouraged to use the information provided in the Plan in developing their applications for land use. Applications must meet the Conformity Requirements specified in the Plan to proceed through the regulatory system and should consider relevant Recommendations. Project applications that are designed according to these requirements can proceed to the next stage of the regulatory process. Applicants are encouraged to contact the Planning Board to clarify plan requirements in advance of submitting their applications. Should there be a need for an exception to a Conformity Requirement the Applicant must apply to the Planning Board in writing for an exception. The process for exceptions is described below.

# 7.3 ENFORCEMENT

The enforcement powers of regulators are subject to the MVRMA requirement that responsible authorities act in accordance with the land use plan.

INAC inspectors are responsible for inspecting and enforcing terms and conditions of land use permits and water licences, some of which will implement Conformity Requirements of the Plan. The GNWT has some enforcement responsibilities relating to land use permit/water licence terms and conditions relating to areas within their jurisdiction such as wildlife and forestry. Other departments and agencies, such as Environment Canada, DFO and the NEB, also have their own inspectors. To the extent that Plan requirements are included as terms and conditions of licences, permits and other authorizations, INAC, the GNWT and other departments and agencies with enforcement powers will be enforcing implementation of the land use plan.

# 7.4 EXCEPTIONS

S.41(3)(d) of the MVRMA states that a land use plan may include "authority for the planning board to make exceptions to the plan and the manner of exercising that authority".

S. 44 (b) of the MVRMA states: "Subsequent to the approval of a land use plan, a planning board shall, where so authorized by the plan, consider applications for exceptions to the plan."

The *MVRMA* authorizes the Board to make exceptions to the Conformity Requirements of the Plan to the extent and in the manner set out below.

The Planning Board may consider applications for exceptions to the Plan that would limit or waive a condition of land use, but not a zoning prohibition. This Plan does not authorize the Board to grant an exception to allow a use that is prohibited by the Plan. Exceptions may be granted for various reasons, including but not limited to addressing unforeseen consequences, addressing new land uses or new information not available during plan development, and to provide flexibility to address unique circumstances (e.g. if an applicant can demonstrate that a condition may prevent the continuation of an existing land use). Exceptions may also be used to temporarily address questions of interpretation, but this will be followed by a statement of interpretation or plan amendment proposal as soon as possible to clarify Plan requirements.

Applicants must apply to the Planning Board directly in writing outlining the nature of the exception being applied for and the reasons why it is necessary. <sup>420</sup> Once the application is received and deemed complete, the SLUPB will consider it and issue its decision. Factors to be considered by the Board in making its decision include, but are not limited to:

- Will granting the exception enable the Plan to continue to meet the goals for the zone?
- Why is the exception required? Is it consistent with the reasons described above for which an exception might be granted?
- How will the exception benefit the residents and communities of the Sahtu Settlement Region?
- Is the exception request supported by affected communities? Does it reflect the interests of other planning partners?
- What are the ecological, social, cultural and economic effects of allowing the proposed land use?
- What implications will the proposed land use have for other activities occurring or likely to occur in the region, and in the zone specifically?
- Is the exception potentially precedent setting, i.e. is it likely to lead to more requests for similar exceptions?
- Is the issue better handled by a Plan amendment proposal?

The Board will consider each application for an exception based on its own merit. The Board will issue the reasons for its decision in writing. Decisions of the Board are a matter of public record.

# 7.5 AMENDMENTS

The Plan amendment process is described under S. 48 (1) of the *MVRMA*: "A planning board may, on application or on its own motion, adopt any amendments to a land use plan that the planning board considers necessary."

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<sup>&</sup>lt;sup>420</sup> The Board will develop an Exception Application Form prior to the approval of the Plan.

Plan amendments will most likely occur as a result of the 5-year review of the Plan. However, an amendment may be applied for at any time by anyone following approval of the original Plan. Plan amendments may be considered for a variety of reasons, including the need to address a new land use, consider new information, update the status and application of the Plan to a newly established protected area, or clarify Plan requirements and implementation (see listing under S. 5.6 Five Year Review for a more comprehensive list).

A Plan amendment is not a remedy for non-conformity of a proposed land use activity, or for Board denial of an exception application. The Board will assess amendment requests based on their ability to improve the Plan (improve clarity, update information for decision-making), rather than their implications for individual land use activities. Plan amendments must continue to uphold the guiding principles for the Plan as established under the *SDMCLCA* and the *MVRMA*.

An amendment may be a lengthy and potentially expensive process. The Board will consider the need, appropriateness and timing of the requested amendment in light of planning priorities, constraints and the availability of other solutions, including Plan revisions that may be considered in the process of comprehensive 5-year review. If, in the Board's opinion, the requested amendment may be necessary, its representatives would confer with the person or organization requesting the amendment and any other parties necessary to scope the amendment process appropriately. The Board will conduct any research and consultations necessary to understand the nature of the amendment and its implications. The Board will prepare a draft proposed amendment for public consultation.

Under Section 48(2) of the *MVRMA*, the Board is required to give notice of the proposed amendment, and may hold a public hearing to consider the proposed amendment. The Board will distribute the proposed amendment broadly for comment. The Board will determine the need for a public hearing based on the feedback received. Following comment and a possible public hearing, the Board will decide whether to adopt the proposed amendment, including any final revisions that the Board may make. If the Board adopts the amendment, it will submit the amendment to SSI, GNWT and Canada following the same approval process as described in S. 43 of the *MVRMA*. The amendment will come into effect when approved by the federal Minister.

# 7.6 FIVE YEAR REVIEW

Under S. 50 of the *MVRMA*, the "planning board shall carry out a comprehensive review of a land use plan not later than five years after the plan takes effect and thereafter every five years or at any other intervals agreed to by the federal Minister, the territorial Minister and [SSI]."

The Board will work with the Parties, communities and other planning partners to determine if or what revisions are required. Key considerations of the review will include:

- Do the vision and goals still reflect the values of the region?
- Is the Plan achieving the vision and goals of the region and of the individual zones?

- Is the Plan achieving the purposes established for it under the SDMCLCA and the MVRMA?
- Have there been any exception or amendment requests that signal a need for a change?
- Is there new information available that needs to be considered in land use decisions?
- Have there been changes in Proposed Conservation Initiatives that need to be updated in the Plan?
- Are there new land uses, issues or major projects on the horizon that need to be addressed?
- Have there been any challenges related to the implementation of Conformity Determinations that need to be addressed?
- Are there areas of ambiguity than can be better clarified?
- What progress has been made on Actions?
- To what extent are Recommendations being implemented?

The Five-Year Review may have a few possible outcomes:

- 1) The previous Plan continues in effect with no revisions necessary;
- 2) The previous Plan continues with only minor amendments; or
- 3) The Plan is substantially revised, submitted and approved.

The Board will undertake a preliminary review based on its monitoring over the previous five years to scope the Plan review process. The Board will confer with the approving parties before finalizing the scope of the review. The Board will carry out any research required and consult with all planning partners to solicit input into the review. The Board will produce a draft review document outlining the results of its research and consultations, including any amendments being considered to the land use plan. 421

The Board will hold a comprehensive round of consultations on the results of its draft review. If the Board is proposing amendments to the land use plan, it will publish notice of the Draft Amendments within the Mackenzie Valley inviting comment on them, and may hold a Public Hearing. Following these events, the Board will make a final determination of what amendments, if any, it will adopt for the Sahtu Land Use Plan as a result of the review.

If the Board decides to adopt amendments, it will submit them for approval to the three Parties, following the same approval process as set out in Section 43 of the *MVRMA*. The amended plan will take effect once it is approved by the federal Minister. The previous Plan will remain in effect until then.

If no amendments are proposed to the Plan, the Board will submit a Final Review Report to the approving Parties describing the results of its work and its reasons for decision. The previous Plan will continue in effect.

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<sup>&</sup>lt;sup>421</sup> This may be a proposed amended plan with amendments highlighted, or a separate document describing the results of the review if few or no amendments are being proposed.

# **APPENDICES**

# **Appendix 1. List of Conformity Requirements**

The Plan's Conformity Requirements, developed in Chapter 4, are reproduced in this Appendix for ease of reference.

Any activities in the SSA to which these requirements do not apply – either as a result of limits in the *MVRMA* or exemptions in the Plan - are identified in Chapter 2. For clarity, the prohibitions on particular land uses in Conservation Zones and Proposed Conservation Areas, established in CR#1, do not apply to existing land uses as defined in Section 2.3.2 (A). However, all conditions on permitted uses established in these requirements apply to existing land uses. Chapter 2 also contains exceptions for certain community uses.

Any areas to which these requirements do not apply are identified in Table 6, reproduced below. For clarity, these requirements do not apply within National Parks, National Historic Sites or local government boundaries.

### CR #1: Land Use Zoning

- 1) Land must be used in accordance with the land use zones shown in Map 4 and Table 6. The zone types consist of General Use, Special Management, Conservation, and Proposed Conservation Initiatives. Map 4 and Chapter 5 Zone Descriptions identify the location of each zone. Bulk water removal is a prohibited land use in all zone types. The prohibited land uses in Conservation Zones and Proposed Conservation Initiatives are mineral exploration and development, oil and gas exploration and development, quarrying, power development, and commercial forestry. Any land use not prohibited in a zone is permitted, subject to the conditions of this Plan.
- 2) Despite the land use prohibitions that apply in Conservation Zones and Proposed Conservation Initiatives, quarrying, transportation and infrastructure development that would be prohibited, or any water use other than a bulk water removal that would be prohibited is permitted in such zones if and to the extent that it is demonstrated that:
  - a) such activity is necessary in order to carry out a permitted land use outside the zone, and the user will be authorized to conduct the land use outside the zone (for example, subject to other applicable Plan conditions, water may be taken from a Conservation Zone to the extent necessary to carry out authorized oil and gas activities in an adjacent Special Management Zone, and a pipeline may be built in a Conservation Zone in order to transport gas lawfully produced in an adjacent Special Management Zone or to connect authorized pipelines in adjacent zones);
  - b) no feasible alternative to carrying out the activity in the Conservation Zone or Proposed Conservation Initiative exists;
  - c) the activity takes place outside known or suspected significant ecological and cultural areas as identified in the Zone Descriptions (Chapter 5), Background Report or by community organizations (First Nation, charter community, renewable resource council or land corporation); and
  - d) its location, project design, construction, operation and maintenance minimize any foreseeable adverse impacts on the ecological and cultural values identified for the zone,

including subsistence use, either by avoiding such impacts or mitigating them to the extent possible.

**Table 6. Zone Prohibitions and Applicable Conditions** 

Zone #	Zone Name	Area	% of	Prohibited Uses*				Conditions								
		(km²) Canada Equal Areas Projection	SSA	<b>Bulk Water Removal</b>	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	<b>General Conditions</b>	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20
Genera	l Use Zones			1	1	1				1	ı	1			1	
	Total	87,585	30.82	х						1						
Special	Management Zones	5														
1	Marion Lakes	1,780	0.63	х						1	1					
2	Little Chicago	116	0.04	х						1	1					
3	Mackenzie River	6,335	2.23	х						1	1					
4	Ontaratue River	66	0.02	х						1	1					
	Loon River to Fort															
5	Anderson Trail	329	0.12	x							1					
6	Hare Indian	501	0.18	х						1	1					
	Bluefish Creek to															
7	Tsintu River	121	0.04	x												
8	Snafu Creek	74	0.03	X						1	1					
9	Underground River	308	0.11	X						1	1					
10	Norman Range	6,134	2.16	X						1	1					
11	Willow Lake Wetlands	1,347	0.47	х						1	1					
12	Carcajou River	369	0.13	X						1						
	Mackenzie									,	,					
13	Mountains	23,639	8.32	X						1	1					
14	Great Bear River	910	0.32	X						1	7					
15	Great Bear Lake	70.045	24.65	V						V	اد	اد	V	V		
15	Watershed Neregah	70,045	24.65	X						٧	٧	٧	٧	V		
16	(NorthShore)	4,792	1.69	x						1	1	1	1			
17	Horton Lake	1,178	0.41	Х						V	V	1	*			
	Total	118,044	41.54							1	,					
Propos	ed Conservation Ini															
18	Edajíla	8,840	3.11	X	X	X	X	X	X	<b>√</b>	1	<b>√</b>	1			
10	Ts'ude niline	0,040	3.11	_	^	^	^	^	^	٧	¥	٧	٧			
19	Tu'eyeta	15,136	5.33	x	x	x	x	x	X	1	1					
20	Shúhtagot'ine Néné	25,574	9.00	x	Х	Х	X	X	Х	V	1					

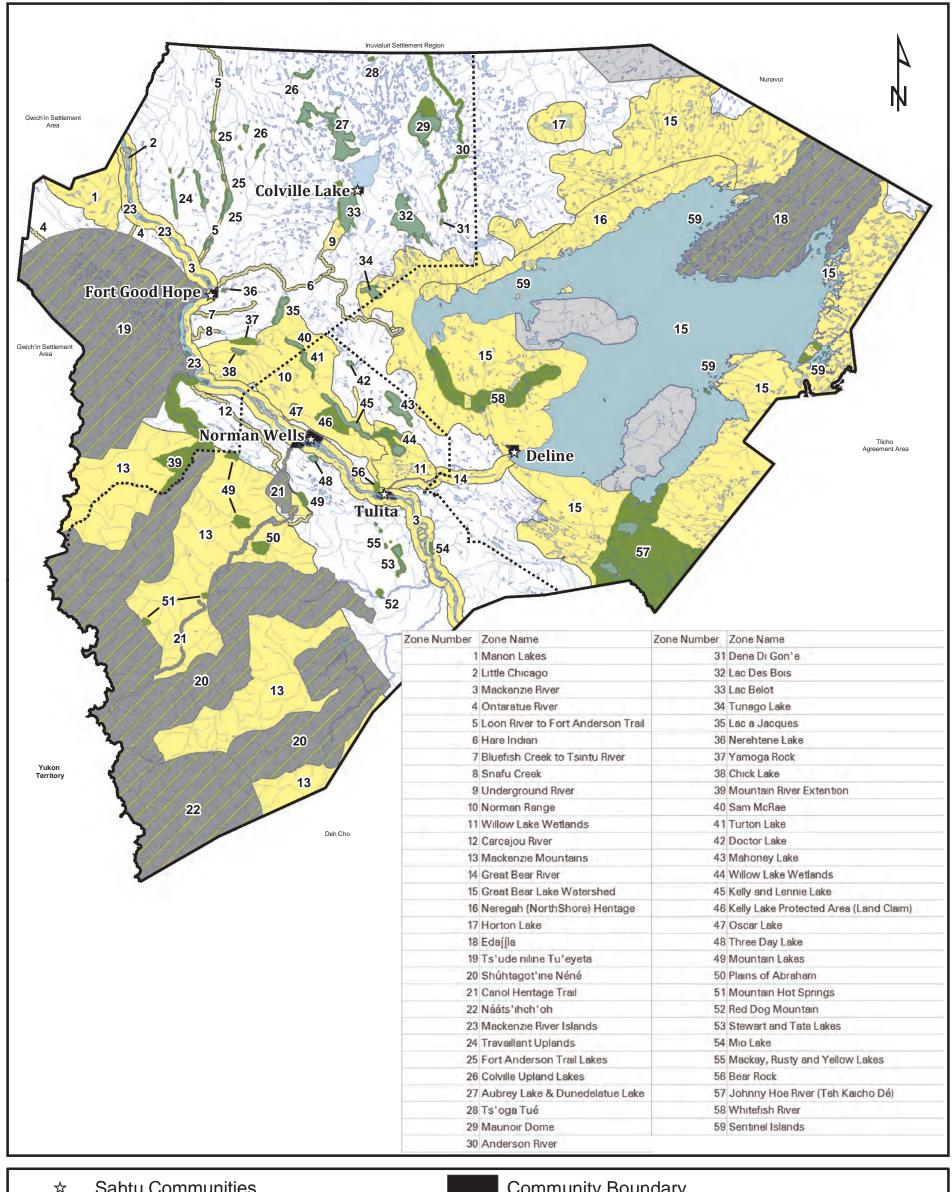
Zone #	Zone Name	Area	% of	Prohibited Uses*					¢	Conditions								
		(km²) Canada Equal Areas Projection	SSA	<b>Bulk Water Removal</b>	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	General Conditions	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20		
21	Canol Heritage Trail	940	0.33	X	X	X	X	X	X	1	$\checkmark$							
22	Nááts'ihch'oh	7,576	2.67	X	X	X	X	X	X	1	1							
	Total	58,066	20.44															
Conserv	vation Zones																	
COMBCI	Mackenzie River																	
23	Islands	57	0.02	x	X	X	X	X	X		1							
24	Travaillant Uplands	187	0.07	x	X	X	X	X	X	1	1							
	Fort Anderson Trail																	
25	Lakes	218	0.08	X	X	X	X	X	X		1							
26	Colville Upland Lakes	113	0.04	X	X	X	X	X	X		1							
	Aubrey Lake &									,	,							
27	Dunedelatue Lake	611	0.21	X	X	X	X	X	X	1	1					<u> </u>		
28	Ts'oga Tué	13	0.00	X	X	X	X	X	X	1	1							
29	Maunoir Dome	563	0.20	X	X	X	X	X	X	1	1							
30	Anderson River	415	0.15	X	X	X	X	X	X	1	1					<u> </u>		
31	Dene Di Gon'e	11	0.00	X	X	X	X	X	X	1	1					<u> </u>		
32	Lac Des Bois	520	0.18	X	X	X	X	X	X	1	1					ļ.,		
33	Lac Belot	406	0.14	X	X	X	X	X	X	1	1					1		
34	Tunago Lake	108	0.04	X	X	X	X	X	X	1	1							
35	Lac a Jacques	123	0.04	X	X	X	X	X	X	1	1							
36	Nerehtene Lake	12	0.00	X	X	X	X	X	X	1	1							
37	Yamoga Rock	92	0.03	X	X	X	X	X	X	1	1							
38	Chick Lake	36	0.01	X	X	X	X	X	X	1	1							
39	Mountain River Extension	1,393	0.49	X	x	x	X	x	x	1	1							
40	Sam McRae	59	0.02	X	X	X	X	X	X	1	1							
41	Turton Lake	79	0.03	X	X	X	X	X	X	1	1							
42	Doctor Lake	21	0.01	X	X	X	X	X	X	1	1							
43	Mahoney Lake	232	0.08	X	X	X	X	X	X	1	1							
	Willow Lake									- 1	1							
44	Wetlands	245	0.09	X	X	X	X	X	X	1	1							
45	Kelly and Lennie Lake	205	0.07	X	X	X	X	X	X	1	1					<u> </u>		
46	Kelly Lake Protected Area (Land Claim)	273	0.10	x	x	x	X	x	X	1	1							
47	Oscar Lake	67	0.10	X	X	X	X	X	X	1	1							
48	Three Day Lake	32	0.02	X	X	X	X	X	X	1	1							
49	Mountain Lakes	210	0.01	X	X	X	X	X	X	1	1							
50	Plains of Abraham	105	0.07	X	X	X	X	X	X	1	1							
		103			1		1		X	1	1					<del>                                     </del>		
51	Mountain Hot		0.02	X	X	X	X	X	X	V	V	<u> </u>	1	<u> </u>		<u> </u>		

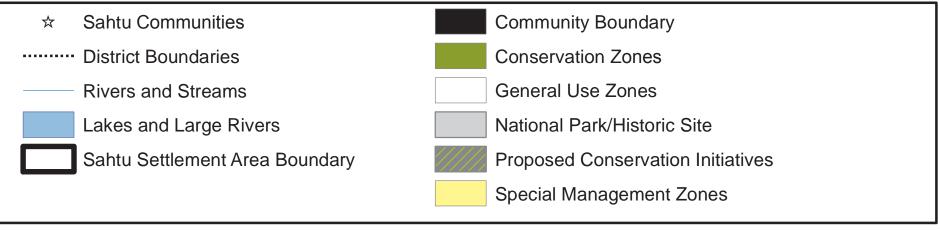
Zone #	Zone Name	Area	% of	_ F	roh	ibite	ed U	ses*	¢		Conditions						
		(km²) Canada Equal Areas Projection	SSA	Bulk Water Removal	Mining	Oil and Gas	Power Dev't	Forestry	Quarrying	General Conditions	Special Mgmt Cond'ns	CR #16	CR #17	CR #18	CR #19	CR #20	
	Springs	45															
52	Red Dog Mountain	27	0.01	X	X	X	X	X	X	1	1						
	Stewart and Tate									,	,					Ι,	
53	Lakes	121	0.04	X	X	X	X	X	X	1	1					1	
54	Mio Lake	19	0.01	X	X	X	X	X	X	1	1						
55	Mackay, Rusty and Yellow Lakes	18	0.01	x	x	x	X	x	X	<b>√</b>	<b>√</b>						
56	Bear Rock	33	0.01	Х	X	X	X	X	X	1	1						
57	Johnny Hoe River (Teh Kaicho Dé)	4,184	1.47	X	x	x	X	x	X	1	1	1	1				
58	Whitefish River	1,443	0.51	X	X	X	X	X	X	1	1	1					
59	Sentinel Islands	211	0.07	X	X	X	X	X	X								
	Total	12,510	4.40														
Nation	al Park/Historic Site			Sa	htu	Land	l Use	Plai	n Do	es N	ot A <sub>l</sub>	ply	In Ti	nese	Area	as	
	Tuktut Nogait National Park	1,869	0.66														
	Saoyú-?ehdacho National Historic Site	5,608	1.97														
	Total	7,477	2.63														
Commi	unity Boundaries			Sa	htu	Land	Use	Plai	n Do	es N	ot Aı	vlac	In Ti	nese	Area	as	
	Colville Lake	40	0.01														
	Déline	69	0.02														
	Fort Good Hope	56	0.02														
	Norman Wells	218	0.08														
	Tulita	77	0.03														
	Total	460	0.16														
	Total Area of SSA	284,142	100.00														

water uses, where necessary to support adjacent permitted uses (See CR #1, S.2)

# Sahtu Land Use Plan - Draft 3

# **Map 4: Land Use Zones**





# **General Conditions**

# CR #2 - Community Engagement and Traditional Knowledge

- 1) Before any land use activity is authorized, Regulators shall ensure that relevant community organizations (land corporation(s), first nation and/or community council, renewable resources council) and potentially affected community members have had the opportunity to meet with the applicant in person to:
  - a) discuss the proposed activities,
  - b) identify specific locations and issues of concern, and
  - c) provide traditional knowledge that is relevant to the location, scope and nature of the proposed activities.
- 2) Regulators shall ensure that a land use activity is designed and carried out in a manner that addresses community concerns and incorporates relevant traditional knowledge.

## CR #3 - Community Benefits

Before any land use activity is authorized, Regulators shall ensure that communities will benefit from the proposed land use.

# CR #4 - Archaeological Sites, Historic Sites and Burial Sites

A land use activity shall not take place within 500 m of suspected or known burial sites, historical sites or archaeological sites.

#### CR #5 - Watershed Management

Before a land use activity is authorized anywhere within a regional watershed containing an SMZ, CZ or PCI, Regulators shall consider the effects of the proposed activity in combination with other past, present and anticipated future land use activities, and ensure that it will not substantially alter the water quality, quantity and rate of flow within a SMZ, CZ or PCI.

# CR #6 - Drinking Water

- 1) Before a land use activity is authorized, Regulators shall assess the potential impacts of the proposed activity to downstream drinking water sources.
- 2) Regulators may not authorize a land use activity that would result in the contamination of water within community catchments as shown in Map 6.

#### CR #7 - Wildlife

1) A land use activity shall be designed and carried out based on the most current wildlife information for species of concern (specific locations, sensitive periods, etc.) as obtained from ENR, CWS, DFO, the SRRB and local renewable resources councils (RRCs), including but not

limited to fish, furbearers, waterfowl, raptors, barren-ground caribou, mountain and boreal woodland caribou, moose, muskox, mountain goats, Dall's Sheep, grizzly bears and black bears.

- 2) Before any land use activity is authorized, Regulators shall ensure that appropriate measures are in place to prevent and/or mitigate long-term adverse impacts from the proposed land use to the wildlife groups listed above, their habitat and migration patterns, and important community harvesting areas (including Special Harvesting Areas).
- 3) In particular, the area shown in Map 7 is known to be important rutting and winter habitat for the bluenose west barren-ground caribou herd. It is also considered to be Boreal woodland caribou habitat. Regulators shall ensure that appropriate measures are in place to prevent and/or mitigate long-term adverse impacts from the land use activity to barren-ground and boreal woodland caribou and their habitat, within the area shown in Map 7 from October 8th to March 31<sup>st</sup>.
- 4) In addition, Regulators shall ensure that no land use activity takes place around known habitat sites during sensitive periods except in accordance with the horizontal setbacks and minimum flight altitudes identified in Table 8.

Table 8. Wildlife Setbacks, Minimum Altitude and Sensitive Periods

Species/Group	Habitat Type	Period	Horizontal Setback	Minimum Altitude
Black & grizzly bear	Dens	15 Oct - 15 May	800 m	300 m
Wolverine	Dens	15 Oct - 15 May	800 m	300 m
Wolf	Dens	1 May - 15 Sep	800 m	300 m
Dall's sheep	Lambing areas	01 May - 15 Jun	2000 m	300 m
Mountain goat	Known goat habitat	Year Round	2000 m	300 m
Raptors	Nest sites	1 Mar - 1 Aug	1000 m	650 m
Raptors	Nest sites	2 Aug - 28 Feb	500 m	650 m
Waterfowl	Nest sites	01 Jun - 31 Aug	250 m	650 m
Waterfowl	Staging Areas / Concentrations 422	10 May – 20 Jun 15 Aug – 30 Sep	250 m	650m altitude, 1500 m lateral distance
Waterfowl	Concentrations	Year Round		650 m

<sup>&</sup>lt;sup>422</sup> CWS has identified key migratory bird terrestrial habitat sites within the Sahtu Settlement Area which are known areas of waterfowl concentrations. Waterfowl may concentrate in other areas from time to time as identified by CWS, to which these seasonal restrictions would be expected to apply.

# CR #8 - General Environmental Impacts

Any adverse environmental impact from a land use activity shall be minimized to the extent possible. This includes but is not limited to minimizing the footprint of a land use activity, and in particular, using an existing road, seismic lines or other disturbed area wherever possible.

## CR #9 - Climate Change

The design and operation of a land use activity shall take into account climate change factors, including but not limited to, preventing and/or mitigating adverse environmental impacts resulting from the degradation or aggradation of permafrost, and minimizing greenhouse gas emissions.

#### CR #10 - Incidental Harvest

Where a proposed land use activity involves the incidental harvest or removal of resources that will not be fully used by the applicant, the remaining usable resources shall be distributed to local communities wherever reasonably feasible.

# **CR #11 - Species Introductions**

A land use activity shall not result in the introduction of non-native plant and animal species, or of domestic animal species or subspecies, except by special approval by the ENR.

## CR #12 - Ecologically Significant Areas

- 1) A land use activity shall be designed and carried out based on the most current information on the location of rare and may-be at risk plants, hot and warm springs, mineral licks and amphibian sightings as obtained from ENR, and in a manner that mitigates impacts to these features.
- 2) A land use activity shall not take place on Karst topography, or if unavoidable, shall mitigate impacts to karst topography.
- 3) A land use activity shall not take place within 1000 m of any mineral lick.
- 4) Before a land use activity is authorized within the boundary of glacial refugia or within 500 m of known hot or warm spring(s), Regulators shall ensure that a rare plant survey is conducted, and shall require as a condition of their authorization, that any plants found are monitored for impacts from the activity.
- 5) Authorizations shall require that the location of any hot or warm spring or mineral lick discovered while carrying out an authorized activity be reported to <a href="mailto:nwt\_pas@gov.nt.ca">nwt\_pas@gov.nt.ca</a>, and any amphibian sightings to <a href="mailto:nwtsoer@gov.nt.ca">nwtsoer@gov.nt.ca</a>.

#### CR #13 - Closure and Reclamation

1) Financial security shall be posted and maintained with the Minister of Indian and Northern Affairs Canada for any land use activity that is not carried out by a local government or the

territorial or federal government, in an amount sufficient to cover the full cost of reclamation and post-closure activities, where the amount calculated exceeds \$50,000.

2) On termination or abandonment of a land use activity, any area affected by the land use activity shall be restored to a viable, self-sustaining ecosystem consistent with the surrounding ecosystem and expected future uses of the area as determined in consultation with residents, communities and responsible authorities, prior to the return of security.

# **Special Management Conditions**

# CR #14 - Assessment and Mitigation

Before any land use activity is authorized within a Special Management Zone, Conservation Zone or Proposed Conservation Initiative, Regulators shall assess the potential impacts from the activity on the values for which the zone was established and ensure that appropriate measures are in place to minimize impacts to the zone values.

# CR #15 - Monitoring

- 1) Any land use activity proposed for a Special Management Zone, Conservation Zone or Proposed Conservation Initiative shall include a site-specific monitoring program that is sufficient to monitor the effectiveness of the proposed mitigation measures and any impacts on the values identified for the zone in which the activity is proposed.
- 2) Monitoring reports shall be distributed to relevant community organizations and made publicly available, where confidentiality issues do not prevent such distribution.

# **Zone-Specific Special Management Conditions**

# CR #16 - Ecological and Cultural Integrity

Before any land use activity is authorized in the Great Bear Lake Watershed (GBLW), Regulators shall ensure that the activity is consistent with the maintenance of the ecological and cultural integrity of the GBLW.

Applicable Zones: Zones #15, 16, 18, 57, 58, and 59.

#### CR #17 - Fish Farming and Aquaculture

Fish farming and aquaculture shall not be authorized within the Great Bear Lake Watershed. Applicable Zones: Zones #15, 16, 18, 57, 58, and 59.

#### CR #18 - Disturbance of Lakebed

A land use activity that would disturb the lakebed of Great Bear Lake, other than the installation of environmental monitoring equipment, and public, private or commercial wharves and docks, shall not be authorized.

Applicable Zones: Zone 15

# CR #19 - Uses of Du K'ets'Edi (Sentinel Islands)

No permanent structure or land use other than the installation of research and monitoring equipment shall be authorized on Du K'ets'Edi (Sentinel Islands).

Applicable Zones: Zone 59

#### CR #20 - Water Withdrawal

The withdrawal of water for industrial purposes from Lac Belot, Stewart Lake or Tate Lake, except from the outflow, shall not be authorized until DFO addresses community concerns related to observed water draw-down in these lakes.

Applicable Zones: Zones 33 and 53

### **Appendix 2. List of Actions**

The Plan's Actions, developed in Chapter 6, are reproduced in this Appendix for ease of reference. Actions are Plan requirements that are to be implemented outside the regulatory process.

### Action #1 – Plan Implementation Monitoring

In order for the SLUPB to monitor implementation of this Plan, Regulators that authorize a land use activity in the SSA shall provide copies of such authorizations to the SLUPB on request within a reasonable time.

### Action #2 - Sahtu Working Group

The SLUPB shall establish and lead a Sahtu Working Group with representation from SSI and other designated Sahtu organizations, the federal and territorial governments, the SRRB, the SLWB, industry (oil and gas, mining, others), and non government organizations as a collaborative forum through which to discuss, study and resolve key regional land use issues and informed decision making. The Sahtu Working Group will work on Actions 3-6 below to develop appropriate measures for consideration and integration into future Plan revisions.

### Action #3 - Community Engagement Guidelines

The Sahtu Working Group shall collaborate to develop community engagement guidelines that define guiding principles, processes, and roles and responsibilities of government, industry and community organizations for community engagement in the SSA within 4 years. These may be incorporated into future revisions of the Sahtu Land Use Plan.

#### Action #4 - Best Practices

The Sahtu Working Group shall build on and refine the Plan's Conformity Requirements into a set of Best Practices for land use for the Sahtu Settlement Area within 4 years. The results may replace the Plan's Conformity Requirements through future Plan amendments.

#### Action #5 - Sahtu Cumulative Effects Management Plan of Action

The Sahtu Working Group shall develop and begin implementation of a Sahtu Cumulative Effects Management Plan of Action within 4 years. Through the Plan of Action, the Working Group shall identify key knowledge and data gaps, design and implement research and data gathering projects to address those gaps, identify and test interim management strategies including targets, and implement chosen management strategies. The results of this work may be integrated into future Plan amendments.

# Action #6 - Sahtu Environmental Monitoring Program

Within 4 years, the Sahtu Working Group shall develop a Sahtu Environmental Monitoring Program that defines regional monitoring priorities, practices and direction for work carried out under the Cumulative Impact Monitoring Program within the Sahtu Settlement Area. In developing the Sahtu monitoring program, the Working Group should consider research and monitoring recommendations identified in the "Great Bear Lake Watershed Research and Monitoring Plan", and "Rakekée Gok'é Godi: Places We Take Care Of".

# **Action #7 - Inspection and Enforcement Priorities**

All government departments and agencies and other bodies having monitoring and enforcement responsibilities shall give priority, where reasonable to do so, to inspection and enforcement of activities occurring within Conservation Zones and Proposed Conservation Initiatives, followed by Special Management Zones, then General Use Zones.

# Action #8 - Community-Government Monitoring and Enforcement Strategy

Within 4 years, responsible authorities with enforcement responsibilities shall collaborate with appropriate community organizations (land corporations, renewable resources councils, First Nations, community councils) to develop and begin implementing a Sahtu community - government strategy to partner in patrols, monitoring, inspection and enforcement responsibilities. The strategy should emphasize training initially with a long term goal to maximize community involvement in these areas of responsibility.

#### Action #9 - Traditional Knowledge Guidelines

SSI and other Designated Sahtu Organizations shall collaborate with community governments (First Nations, Charter community councils), the SRRB and Renewable Resource Councils to develop guidelines for the collection (including purpose and scope), use and management of traditional knowledge within the Sahtu Settlement Area.

#### Action #10 - Access to Wildlife Information

Responsible authorities (ENR, CWS, SRRB, and DFO) shall develop and maintain current data on important and critical wildlife habitat for fish, furbearers, waterfowl, raptors, barren-ground caribou, mountain and boreal woodland caribou, moose, muskox, mountain goats, Dall's Sheep, grizzly bears and black bears and make the data readily accessible to land users and the public.

#### Action #11 - Fish Habitat & Water Withdrawals

DFO shall work with communities

- a) to document community traditional knowledge of
  - i. fish and fish habitat, and
  - ii. water levels and quality; and
- b) to discuss

- i. community concerns related to water withdrawal,
- ii. DFO's winter water withdrawal protocol, and
- iii. alternative solutions.

# Action #12 - Air Quality

- (1) ENR shall ensure that interested parties are provided with a paper copy of the Annual Air Quality Report, and directed to ENR's Air Quality Programs Coordinator as necessary.
- (2) ENR shall continue to study the feasibility and advisability of expanding the air quality monitoring network in the NWT. This will be based primarily on industrial development, population growth, and available resources.
- (3) ENR shall continue to develop air quality related regulations, guidelines and/or standards, as appropriate, for application within territorial jurisdiction through the NWT Environmental Protection Act. ENR will continue to work with the Land and Water Boards and responsible federal agencies to encourage their air quality objectives for new and existing developments, territory-wide.

### Action #13 - Emergencies Activities Reporting

Where a land use activity is carried out, that would be prohibited under a zoning requirement if not for the emergency exemption, the body responsible for carrying out the activity shall provide a written report to the Board describing the operation, indicating when the emergency is likely to end and what, if any, restorative measures consistent with the vision and goals of the Plan are planned, as soon as possible.

## **Appendix 3. List of Recommendations**

The Plans non-binding recommendations, developed in Chapters 4 and 6, are reproduced in this Appendix for ease of reference.

# Recommendation #1 - Air Quality

The SLWB should recommend to those applying for permits, licences or other authorizations that they conduct all activities in the SSA in conformity with the standards set out in the GNWT's Guidelines for Ambient Air Quality Standards, and other applicable federal or territorial regulations, guidelines or standards as they are developed.

#### Recommendation #2 - Wildlife Monitors

Applicants are encouraged to work with the local Renewable Resources Council (RRC) to hire a qualified monitor, who will assess the presence of wildlife in the area of operations, monitor impacts on wildlife from the proposed activities, and keep the RRCs and SRRB informed of activities affecting wildlife. Where a monitor judges that an activity may have a negative impact on wildlife, the monitor should discuss this with the applicant and attempt to resolve the concern. Any unresolved concerns should be reported to the land use inspector and the RRC so that appropriate action may be taken to mitigate impacts.

# Recommendation #3 - Project Summary Meeting

Applicants are encouraged to meet with residents and community representatives upon completion of their land use activities to discuss the results of the work, any issues that arose, community concerns, next steps and lessons learned.

### Recommendation #4 - Community Research Liaison

Individuals or organizations interested in carrying out research in the Sahtu Settlement Area are encouraged to establish and maintain a working contact with the appropriate organization(s) in affected communities (Land Corporation, first nation, and/or renewable resources council).

# Recommendation #5 – Community Engagement Guidelines

- 1) In advance of the development of the Sahtu community engagement guidelines, government and applicants are encouraged to engage communities in a way that respects and embodies the legal and practical principles expressed in INAC's Interim Guidelines on Aboriginal Consultation and Accommodation, or quidelines from other jurisdictions.
- 2) SSI, designated Sahtu organizations, and other community organizations are encouraged to make effective use of community engagement opportunities to ensure their values and priorities are considered in land use decisions.

#### Recommendation #6 - Communications and Coordination

Every department, agency and organization, operating in the Sahtu Settlement Area, including community organizations, is encouraged to have a communications position dedicated to establishing and maintaining effective communications (using both oral and written means), and coordinating with communities and other organizations, and increasing community involvement in decision-making.

# Recommendation #7 - Inspection and Enforcement Funding

INAC is encouraged to seek additional funding for its inspectors to enable them to patrol priority areas identified in discussion with communities, and increase inspection levels to achieve their target inspection rate within the Sahtu Settlement Area.

## Recommendation #8 - Economic Development Strategy

District land corporations and relevant community organizations (land corporations, community councils, First Nations, and RRCs) are encouraged to work with ITI to develop an economic development strategy and action plan to identify economic needs and opportunities, including opportunities arising from establishment of Conservation Zones and new Protected Areas, and capitalize on the opportunities within each district.

## Recommendation #9 - Building Capacity

The territorial and federal governments are encouraged to work with Sahtu businesses to build their capacity (e.g. training, financial assistance, splitting contracts where feasible) to be more successful in procuring contracts and maximize Sahtu business and contracting opportunities for qualified businesses for work carried out within the Sahtu Settlement Area.

### Recommendation #10 - Maximizing Benefits

Applicants are encouraged to work with relevant community organizations (land corporations, community councils, First Nations, and RRCs) and businesses to maximize the economic benefits to communities, businesses and residents from proposed land uses.

### Recommendation #11 - Community Participation Funding

SSI, INAC and the GNWT are encouraged to work together to find ways to fund community participation in planning and regulatory processes.

#### Recommendation #12 - Granular Resource Allocation Plan

The Sahtu Secretariat Incorporated and the Sahtu District Land Corporations are encouraged to work with Sahtu municipal governments, the Government of the Northwest Territories, and Indian and Northern Affairs to develop a Sahtu Granular Resource Allocation Plan for resources outside of community boundaries.

#### Recommendation #13 - Non-Renewable Resource Assessments

INAC and the GNWT, through the NWT Geoscience Office, are encouraged to work with communities to carry out non-renewable resource assessments of Conservation Zones within the Sahtu Settlement Area, where supported by communities.

## Recommendation #14 - Mapping the Underground River

The community of Colville Lake is encouraged to work with Karst specialists and other partners to study the site and delineate the route of the Underground River.

#### Recommendation #15 - Contaminated Sites

INAC is encouraged to work cooperatively with communities to inventory, prioritize, research, monitor and remediate contaminated and waste sites in the SSA.

# Recommendation #16 - Strengthening Culture and Education

The appropriate government authorities should make every reasonable effort to support initiatives on the part of the Sahtu Dene and Métis to maintain and strengthen the land-based culture and its transmission from the elders to the younger generations.

Culture and education priorities are as follows:

- 1. Facilitate land-based activities for community members, particularly where the elders can pass on their culture to the younger generations.
- 2. Assist elders and local/regional educators in defining clear teaching roles for the elders in the schools, and in the developing and incorporating culturally-appropriate teaching materials in the school curriculum. Support the inclusion of materials on the Sahtu region in the curriculum, incorporating both Dene and Métis traditional knowledge and scientific knowledge about the watershed in the curriculum.
- 3. Support the community's efforts to develop its capacity in the fields of ecological and cultural research, monitoring and management.
- 4. Support community efforts to promote and communicate Dene and Métis culture, to develop greater mutual respect between Dene and Métis and people of other cultures.

### Recommendation #17 - Fisheries Management

The management of fisheries within the Great Bear Lake Watershed should be proactive in nature and precautionary in approach. The managers of GBLW fisheries should ensure that:

- v. All stocks fished for recreational or commercial purposes are maintained at sustainable levels consistent with identified fishery quality objectives. Licensed operators and harvesters should be responsible for providing harvest statistics and biological information specified in their authorizations to the appropriate authorities;
- vi. Lake trout populations on GBL should not fall below levels that ensure that the catch of large trophy lake trout (fish in excess of 9kg) by any lodge remains stable at baseline levels.

- Baseline levels should be established for various stocks as determined by harvest studies in areas used by fishing lodges;
- vii. Arctic grayling populations should be maintained at levels that ensure the high quality of trophy fisheries. Baseline levels should be established for various stocks as determined by harvest studies in areas used by fishing lodges; and
- viii. As a general rule, fish stocks should be managed conservatively in order to minimize the risk of degrading the quality of GBLW fisheries.

# Recommendation #18 - Transboundary Coordination

The Dél<sub>Įne</sub> Land Corporation and Renewable Resources Council are encouraged to assist their elders in meeting with elders in adjacent jurisdictions, to discuss cooperative principles and processes by which the larger watershed of Great Bear Lake may be kept clean and bountiful for all time.

**Appendix 4. NWT CIMP Valued Components and Indicators Applicable Within the Sahtu Settlement Area** 

Valued Component	Indicators
Water and Sediment Quality	Primary:  Water temperature  pH*  Conductivity*  Turbidity/Colour*  Dissolved Oxygen*  Total Suspended Solids*  Total/Dissolved Organic Carbon*  Major Ions*  Nutrients*  Total/Dissolved Metals*  Polyaromatic Hydrocarbons (PAH)*  Bacteria such as:  Fecal Coliform  Fecal Strep.  E. coli
	<ul> <li>Secondary:</li> <li>Clarity</li> <li>Total Mercury</li> <li>Extractable Organochlorine</li> <li>Pesticides</li> <li>Polychlorinated Biphenyls (PCBs)*</li> <li>Dioxins/ Furans</li> <li>BTEX</li> </ul>
Water Quantity	<ul> <li>Water Levels*</li> <li>Stream Flows*</li> <li>Ice Phenology (freeze-up and break-up)*</li> </ul>
Snow, Ground Ice and Permafrost	<ul> <li>Snow water equivalencies</li> <li>Active layer depth*</li> <li>Ground temperature*</li> <li>Snow cover duration*</li> </ul>
Fish Habitat, Population and Harvest	<ul> <li>Age distribution of fish stocks</li> <li>Aquatic habitat structure (substrate cover) and quality (importance to species)</li> <li>Fish abundance, size and distribution*</li> <li>Maturity and fecundity</li> <li>Spawning, rearing and over wintering locations</li> <li>Winter depth/ velocity</li> </ul>
Fish Quality	<ul> <li>Fish abundance and distribution</li> <li>Presence of diseases/parasites</li> <li>Water quality</li> <li>Contaminant levels*</li> <li>Invertebrates/insects</li> </ul>

	Fish health*
Caribou	Calf/cow ratio
	<ul> <li>Parasites/diseases</li> </ul>
	<ul> <li>Number harvested*</li> </ul>
	<ul> <li>Pregnancy rates*</li> </ul>
	Migration routes
	Habitat availability
	Energetics
	Body weight/fat
	<ul> <li>Levels of contaminants*</li> </ul>
	<ul> <li>Population size and trends*</li> </ul>
	<ul> <li>Movements and distribution*</li> </ul>
	Availability of forage
	Wolf predation
Moose	Population size and trend
	Number harvested*
	Twinning estimates
	Areas of recent forest fires
	<ul> <li>Presence of diseases and parasites</li> </ul>
	Age structure
	Calf/cow ratio
	Adult sex ratio
	<ul> <li>Presence of contaminants</li> </ul>
Other Mammals (Terrestrial)	<ul> <li>Population size and trend*</li> </ul>
, ,	<ul> <li>Number harvested*</li> </ul>
	Habitat quality
	Reproductive rates
	Presence of diseases and parasites
	Age structure
	<ul> <li>Distribution</li> </ul>
	Food availability
	<ul> <li>Presence of contaminants*</li> </ul>
Birds and Insects	<ul> <li>Population size and trend*</li> </ul>
	<ul> <li>Number harvested*</li> </ul>
	<ul> <li>Distribution and abundance</li> </ul>
	Rate of breeding success
	<ul> <li>Presence of diseases and parasites</li> </ul>
	Age structure
	Habitat quality
	Food availability
	<ul> <li>Presence of contaminants*</li> </ul>
Vegetation	<ul> <li>Vegetation cover/abundance*</li> </ul>
	<ul> <li>Phenology and growth changes</li> </ul>
	<ul> <li>Forest fire regimes*</li> </ul>
	<ul> <li>Presence of contaminants*</li> </ul>
	Disease and insect outbreaks
	Habitat quality
	Herbivory
	-

Climate	<ul> <li>Distribution/migration</li> <li>Frequency (rare plants)*</li> <li>Natural variation</li> <li>Air temperature*</li> <li>Precipitation*</li> <li>Evaporation</li> </ul>
Air Quality	<ul> <li>Air Composition*</li> <li>Air Emissions*</li> <li>Air Deposition</li> </ul>
Human Health and Community Wellness	<ul> <li>Human health*</li> <li>Population*</li> <li>Education*</li> <li>Crime and safety*</li> <li>Housing*</li> <li>Families and children*</li> <li>Income and employment*</li> <li>NWT economy*</li> <li>Aboriginal culture*</li> </ul>
* Trend graphs are available for	or indicators on CIMP Website (www.nwtcimp.ca)

**Appendix 5. Summary of Cumulative Effects Reports and Recommended Targets** 

Valued Components &	ued Components & Targets					
Indicators	DLUPC Report (2004) <sup>1</sup>	Draft Dehcho LUP (June 2006) <sup>2</sup>	Beaufort Delta CE Project (2006) <sup>3</sup>	NWT VC Thresholds Project (March 2009) <sup>4</sup>	Approved NYLUP (June 2009)⁵	SLUPB Report (Sept 2009) <sup>6</sup>
VC: Air						
Air Quality	Critical: NWT Ambient Air Quality Standards		Critical: NWT Ambient Air Quality Standards	NWT Ambient Air Quality Standards & Canadian National Ambient Air Quality Objectives		
VC: Water		•				
Water Quality	Critical: CCME Water Quality Guidelines for the Protection of Aquatic Life	Applied through a separate CR	Critical: CCME Water Quality Guidelines for the Protection of Aquatic Life	CCME Canadian Water Quality Guidelines for Protection of Freshwater Aquatic Life		Recommended for management of point source pollution only
Water Quantity				DFO Water Withdrawal Protocol		
Total Corridor Density (regardless of width)				Referred to thresholds recommended in DLUPC, NYLUP and Salmo Beaufort Report (pertaining to terrestrial features)		Critical: 1 km/km2; Target: 0.7 km/km2; Cautionary: 0.4 km/km2
Water Quality (for future scenarios)	Critical: 20% from baseline conditions					
VC: Aquatic Habitat						
Fish Habitat	No net loss of bed and bank habitat					
Stream Crossing Density (crossings/ km2) per subwatershed)	Critical: median < 0.5/km2; Target: < 0.32/km2	< 0.5 crossings/km2 applied to O&G 1/4 grid				
Total Aquatic and Riparian Area Disturbed			Critical: No net loss; Cautionary: Stream crossing density less than 0.25 crossings/km2	Referred to aquatic thresholds recommended in DLUPC and Salmo Beaufort Report		
Total Land Area Disturbed			General Use Areas: Critical: < 15%; Target: < 10%; Special Management Areas: Critical: < 10%; Target: < 5%; Conservation Areas: Critical: < 0.5%; Target: No disturbance	Referred to thresholds used for terrestrial management in Dehcho and North Yukon plans		
Specialized Environmental Features (spawning, overwintering areas)			Dolly Varden Char: Critical: No disturbance within 100 m of overwintering and spawning areas; Target: No disturbance within 250 m; Other Species: Critical: No net loss; Target: No disturbance within 100 m of overwintering and spawning areas			
VC: Aquatic Focal Species						
Char Mortality			Target for Dolly Varden Char: No more than 1% of total annual allowable harvest; Target for other species: No more than 10% of recorded subsistence harvest during previous	Referred to Beaufort Report		

			year			
Large Lake Trout (>9 kg) Catch Rate (angler days/lg fish)						Critical: >10 Angler days/Lg fish; Target: 2-10; Cautionary: < 2
VC: Land Use						
Total Cleared / Disturbed Area	Critical: < 10% disturbed; Target: < 5 %	< 10% of land disturbed in each zone	General Use Areas: Critical: < 15%; Target: < 10%; Special Management Areas: Critical: < 10%; Target: < 5%; Conservation Areas: Critical: < 0.5%; Target: No disturbance	Referred to Salmo Dehcho, North Yukon and Beaufort thresholds	Zone 4 (Development): Critical: 1%; Cautionary: 0.75%; Zone 3: Critical: 0.5%; Cautionary: 0.375%; Zone 2: Critical: 0.2%; Cautionary: 0.15%; Zone 1 (Conservation): Critical: 0.1%; Cautionary: 0.075%	
Area Available by Sector	No recommendations					
Visual Quality	No recommendations					
VC: Terrestrial Habitat						
Habitat Availability	Critical: <10% available habitat disturbed; Target: <5%	< 10% of land disturbed in each zone				
Specialized Habitat Features	Critical: No net loss; Target: No disturbance	Applied no disturbance through a separate CR	Critical: No net loss; Target: No disturbance or activity within 250 m	Referred to Salmo Dehcho and Beaufort thresholds		
Significant Environmental Features	Critical: No net loss; Target: No disturbance	Applied no disturbance through a separate CR	Critical: No net loss; Target: No disturbance or activity within 250 m			
Core Area	Wildlife Management Area: Critical: >65% large core areas (>1000 ha & 500 m wide); Target: >75%; Cautionary: >85%; Resource Development Area: Critical: >40% medium core areas (>200 ha & 350 m wide); Target: >50%; Cautionary: >65%	> 65% medium core areas for woodland caribou in all zones; > 65% large core areas for grizzly bears in selected zones	General Use Zones: Critical: > 50%; Target: > 40%; Special Management Zones: Critical: > 70%; Target: > 60%; Conservation Zones: Critical: > 90% (% of area more than 1 km from sites of intensive human use)	Referred to thresholds in DLUPC and Salmo Beaufort Report		
<b>VC: Terrestrial Focal Species</b>						
Industrial Footprint (% of management unit within 250 m of land use for woodland caribou, within 500 m for grizzly bears)				No threshold recommendations. Recent study indicates that corridor density can be used in place of industrial footprint.		
Total Corridor Density (km/km2) (includes roads, trails, pipelines, seismic lines, power lines >3 m width)	Caribou Management Area: Critical: < 1.5 km/km2; Target: < 1.2; Cautionary: < 1.0; Resource Development Area: Critical: < 1.8; Target: < 1.5; Cautionary: < 1.0	1.8 km/km2 for woodland caribou applied to O&G 1/4 grid	General Use Zones: Critical: 1.2 km/km2; Target: 1.0; Special Management Zones: Critical: 1.0; Target: 0.6; Conservation Zones: Critical: 0.2; Target: No corridors	Referred to thresholds recommended in Dehcho and North Yukon Plans, and in Salmo Beaufort Report	Zone 4 (Development): Critical: 1.0 km/km2; Cautionary: 0.75; Zone 3: Critical: 0.5; Cautionary: 0.375; Zone 2: Critical: 0.2; Cautionary: 0.15; Zone 1 (Conservation): Critical: 0.1; Cautionary: 0.075	Critical: Total Density of Linear Features regardless of width < 0.4 km/km2 and young forest (<30 yrs old) >5% of area; Target: Linear density < 0.3 km/km2 and young forest > 4%; Cautionary: Linear density < 0.2 km/km2 and young forest > 3%
Road and Trail Density (km/km2) - all linear corridors >3 m width	Wildlife Management Area: Critical: < 0.6 km/km2; Target: < 0.3; Cautionary: < 0.2; Resource Development Area: Critical: < 0.9; Target: < 0.6; Cautionary: < 0.4	0.6 km/km2 for grizzly bears in selected zones applied to O&G 1/4 grid				

Human-Induced Mortality (# animals killed per mgmt unit due to management actions, illegal kills, legal harvest by workers, other industry-related mortality) - grizzly bears and wolverines			Critical: 1 industrial-associated mortality: Target: None	Referred to Beaufort Report	
VC: Traditional Culture and La	nd Use				
Significant Cultural Features	Critical: No net loss; Target: No disturbance	Avoidance and mitigation required through a separate CR	Critical: No net loss; Target: No disturbance within 100 m	No thresholds recommended	
Areas Unavailable for Traditional Use (land within 1 km of visible sites and those with intensive industrial use)			General Use Areas: Critical: < 15%; Target: < 10%; Special Management Areas: Critical: < 10%; Target: < 5%; Conservation Areas: Critical: < 0.5%	No thresholds recommended	
VC: Community Health and W	ell Being				
Community Population (transient and permanent pop increase)	No recommendations		Critical: No more than 25% change from 10 yr average growth/decline rate; Target: No more than 10% change	Referred to thresholds recommended in Beaufort report	
Wage Employment Participation Rate	No recommendations		Critical: Labour force participation no lower than 10-year average rate; Target: Labour force participation rate higher than 10-year average	Referred to thresholds recommended in Beaufort report	
Training (resident skill training and non-resident cross-cultural training)			Critical: All resident employees/contractors complete at least 1 skill training program and non -residents complete 1 cross-cultural training program every 5 years; Target:  Residents - 2 programs, non-residents - 1 program every 5 years	Referred to thresholds recommended in Beaufort report	
VC: Economy and Business					
Employment			Critical: Labour force participation no lower than 10-year average rate; Target: Labour force participation rate higher than 10-year average	Referred to thresholds recommended in Beaufort report	
Income			Critical: Average household income no lower than 10-yr average; Target: Average household income higher than 10-yr average	Referred to thresholds recommended in Beaufort report	
Regional Revenue by Sector	No recommendations				

# References

<sup>&</sup>lt;sup>1</sup> Deh Cho Cumulative Effects Study Phase 1: Management Indicators and Thresholds, Salmo Consulting Inc in association with Axys Environmental Consulting LTd., Forem Technologies Wildlife & Company Ltd, Calgary AB, Prepared For the Dehcho Land Use Planning Committee, April 2004

<sup>&</sup>lt;sup>2</sup> Final Draft Dehcho Land Use Plan, Dehcho Land Use Planning Committee, June 2006

<sup>&</sup>lt;sup>3</sup> Beaufort Delta Cumulative Effects Project, Final Report, Environmental Studies Research Funds 04-3429, Prepared by Dillon Consulting Limited and Salmo Consulting Inc., May 2006

<sup>&</sup>lt;sup>4</sup> Valued Component Thresholds (Management Objectives) Project, Prepared for Environmental Studies Research Fund (ESRF) by Antoniuk, T.; Kennett, S., Aumann, C., Webber, M., Schuetz, S.D., McManus, R., McKinnon, K., and K. Manuel, March 2009.

<sup>&</sup>lt;sup>5</sup> North Yukon Land Use Plan, North Yukon Planning Commission, June 2009.

<sup>&</sup>lt;sup>6</sup> Sahtu Target Implementation Project, Prepared for the Sahtu Land Use Planning Board by ALCES Group, March 2009.

**Appendix 6. SLUPB Board Members, Staff and Technical Support** 

Name	Position	Term		
Current Board Members				
Collin Bayha	SSI Nominee	Apr/10 - Apr/13		
Judith Wright-Bird	Chair	Jan/09 - Jan/12		
Stephen Kakfwi	SSI Nominee	Jan/09 - Jan/12		
Bob Overvold	Federal Nominee	May/08 - May/11		
Danny Bayha	GNWT Nominee	May/08 - May/11		
Former Board Memb	pers			
Collin Bayha	SSI Nominee	Apr/07 -Apr/10		
Judith Wright-Bird	Chair	Jan/09-Jan/12		
Bella T'Seleie	Federal Nominee	March/05 – March/08		
Peter Menacho	GNWT Nominee	Oct/04-Oct/07		
Barry Harley	Acting Chair/GNWT Nominee	March/98-Dec 02		
Wilbert Kochon	SSI Nominee	April/99-Sept 02		
Rod Hardy	SSI Nominee	March/99-		
Clarence Campbell	Acting chair/SSI Nominee	April/99-Sept/02		
Ed Reeves	Acting chair/Federal Nominee	April/01-April/04		
Bryan McNeely	GNWT Nominee	April/05-April/08		
Raymond Taniton	Federal Nominee	June/02-June/03		
Sahtu Land Use Plar Wilbert Kochon	nning Working Group M	embers Sept/99-Sept/02		
Barry Harley		March/98-Dec/02		
Celina Stroeder				
Ruby MacDonald				
Marie Adams				
Staff				
Joel Ashworth	GIS Analyst	Nov/09 – Present		
Mike Bly	GIS Analyst	May/09 - Aug/09		
Edna Tobac	Executive Director	Apr/09 – Present		
Ida Mak	Communications Coordinator/Planner	Mar/09 – Present		
Heidi Wiebe	Senior Planner	May/08 – Present		
Dean Holman	Executive Director Trainee	May/08 - Aug/08		
Benita King	Office Manager	March/07 - Present		
Jamie Forsey	Office Manager	June/06-Oct/07		
John T'Seleie	Executive Director	Sept/05 - Dec/07		
Murray McKnight	Board Advisor	June/03 – May/09		
Kimberley Horrocks	Planner	July/02 – Dec/03		
Barry Hunter	Senior Planner	Aug/98-Dec 01		
Susan McKenzie	Natural Resources Specialist	April/98-Aug 01		
Sara Geirholm	Researcher	July/99-Dec /01		
Deborah Simmons	Social Scientist	May/98-April/01		
Tammy Proctor	Office Manager	Feb/99-Oct/04		
Patricia Manuel	Office Manager	Jan /03-Jun/03		

Name	Position	Term
Karen Caesar	Office Manager	April 98-Aug/00
Glenda Padillio	Office Manager	Oct/01-June/02
Anne-Marie Jackson	LUP Trainee	July 00-Feb 02
Stanley Cook	LUP Trainee	Jan 00-March 01
Diane McNeely	Office Manager	Nov/03-Sept/05
Mark Fewster	Office Manager	Dec/05-May/06
Fieldworkers	,	•
Rose McNeely	Colville Lake & Fort Good Hope Mapping/Office manager	Oct/98 –June/03
Rita Kakfwi-Kochon	Colville Lake Mapping	Sept/99 – Sept/00
Dora Kochon	Colville Lake Mapping	Sept/99 – May/00
Ann Kochon-Orlias	Colville Lake Mapping	June/00 – Sept/00
Jane Modeste	Délįne Mapping	Jan/00 – May/00
Michael Neyelle	Déline Mapping	Jan/00 - Sept/00
Jackie Kenny	Déline Mapping	Jun/00 - Sept/00
Marlene Tutcho	Déline Mapping	Jun/00 - Sept/00
Rodger Odgaard	Norman Wells Mapping	Nov/99 – Jun/00
Sherry Hodgson	Norman Wells Mapping	Jun/00-June/00
Lisa McDonald	Tulita Mapping	Sept/99 – Jun/00
Deborah Simmons	Tulita Mapping	Sept/99 – Jun/00
Laura Adams	Tulita Mapping	Jun/00 – Nov/00
Glenda Lennie	Tulita Mapping	June/00-July/00
Bertha Lennie	Tulita Mapping	March/01-May/01
Alfred Masuzumi	Graphics Productions	March 01-July 01
Technical Consultants	3	
Jennifer Blomvquist		June/00-June/01
Petr Cizek		July/00-Aug/00
Dennis Allen Productions	Sahtu video production	Feb/01-March/01
Jennifer Duncan	SLUPB research	June/01-July/01
Sara Geirholm		Sept/01-Dec/01
Carmen Hess	Mineral/budracerbon manning	Feb/00-April/00
Key Scarp Ltd Robert Kershaw	Mineral/hydrocarbon mapping	July/00-Sept/00 Nov/99-Nov/01
Andrew Kidd		March/01-June/01
Stephen Kidd		March/01-June/01
Soonya Quon		July/99-Sept/99
Ellen Simmons	Technical mapping	Mar/00-Mar/01
Rob Simpson	Fish Habitat Research	Mar/00-Mar/00
Bella T'Seleie	Traditional Knowledge	July/00-Sept/00
The Forestry Corp.	Digital Info.	Jan/01-Mar/01
Al Udell	<u> </u>	Feb/01-Dec/01
Watertight Solutions Ltd.	Watershed Mapping	Mar/00-Mar/00
Tim Wilson		Dec/00-Jan/01
Heather Bourassa		June/01-July/01

Name	Position	Term
Sahtu GIS Project		
Phil Spencer	GIS Specialist	2007 – Present
Simon Kearney	GIS Specialist	2007
Mike Bly	GIS Technician	2004 - 2006
James Auld	GIS Specialist	2002 – 2007
Miki Promislow	GIS Specialist	2000 - 2003
Melonie Dyck	Land Use Mapping Project	2000 - 2001
	Assistant	
Arianna Zimmer	Wildlife/Forestry Technician,	1998-2004
	Cumulative Effects Biologist	
Tanya Townsend	GIS Technician	1998 - 2002
Nancy Stevens-Whiteman	GIS Summer Student	1998 - 2001
Lana Robinson	GIS Specialist	1997 - 2000

Appendix 7. Summary of SLUPB Consultations and Workshops

Date	Participants (Location)	Subject		
Meetings for 1999 and	2000 compiled from "Building a \	Vision for the Land, Report on Community		
Interviews July-October 1999" (SLUPB Nov/00) and "Community Land Use Mapping, Report on				
Community Interviews", Compiled by Melanie Dyck, (SLUPB August 2001)				
July 26-August 12/99	Colville Lake	Visioning interviews and workshop		
August 26-30/99	Fort Good Hope	Visioning interviews and workshop		
September 1-17/99	Déline	Visioning interviews and workshop		
September 27- October 15/99	Tulita	Visioning interviews and workshop		
October 18-November 1/99	Norman Wells	Visioning interviews and workshop		
September 13-24/99	Fort Good Hope	Visioning interviews and workshop		
November 22/99	ENGOs	Visioning workshop		
December 1-2/99	Tourism Industry	Visioning workshop		
December 2-3/99	Resource Industry	Visioning workshop		
Marc h16/99	DSOs (Fort Good Hope)	Report and discussions on Visioning interview and workshop results		
June 23/00	SSI and INAC	Report and discussions on Visioning interview and workshop results (in fulfillment of S. 40 <i>MVRMA</i> requirements)		
July 19/00	GNWT	Report and discussions on Visioning interview and workshop results (in fulfillment of S. 40 <i>MVRMA</i> requirements)		
September 11/99 – June 1/00	Tulita	Current Trails Mapping Project Interviews		
September 24/99 – May 25/00	Colville Lake	Current Trails Mapping Project Interviews		
November 18/99 – February 28/00	Fort Good Hope	Current Trails Mapping Project Interviews		
November 18/99 – June 1/00	Norman Wells	Current Trails Mapping Project Interviews		
January 10 – May 23/00	Dél <sub>i</sub> ne	Current Trails Mapping Project Interviews		
June 4 – September 26/00	Colville Lake	Resource Mapping Project Interviews		
June 7 – October 7/00	Fort Good Hope	Resource Mapping Project Interviews		
June 9 – September 20/00	Dél <sub>1</sub> ne	Resource Mapping Project Interviews		
June 16-26/00	Norman Wells	Resource Mapping Project Interviews		
June 22 – November 6/00	Tulita	Resource Mapping Project Interviews		
SLUPB participated in m	A comprehensive list of meetings and workshops from 2001-2005 is not available. During this period the SLUPB participated in meetings related to development of the Great Bear Lake Watershed Management Plan and Protected Areas Strategy community meetings, and did not carry out many meetings of its own.			
March 5-12/05	Tulita	Informal community meetings to discuss zoning with community members		
March 12-20/05	Dél <sub>i</sub> ne	Informal discussions with community members on plan development		

Date	Participants (Location)	Subject
May 26-30/05	Colville Lake	Informal community meetings to discuss zoning with community members
May 31/05	Dél <sub>i</sub> ne	Board Open House with Community Organizations
July 18-19/05	Tulita	Board Open House with Community Organizations
July 20/05	Norman Wells	Board Open House with Community Organizations
June 29-30/06	Colville Lake	Plan development workshop on zoning
July 18-06	Yamoga Land Corporation (Fort Good Hope)	Plan development meeting on zoning
July 31-Aug 4/06	Déline Land Corporation	Plan development meeting
March 28/07	SSI (Norman Wells)	Presented Draft 1 Sahtu Land Use Plan
August 28/07	SSI/Sahtu Dene Council (SDC) (Tulita)	Presented Discussion Draft 2, Section 1
October 22/07	Norman Wells	Community Meeting on Discussion Draft 2
October 25/07	Déline	Community Meeting on Discussion Draft 2
October 26/07	Fort Good Hope	Community Meeting on Discussion Draft 2
October 27/07	Colville Lake	Community Meeting on Discussion Draft 2
May 23/08	Ayoni Keh Land Corporation (Colville Lake)	Plan development meeting
July 8/08	SLWB (Fort Good Hope)	Plan development update
July 11/08	INAC (Yellowknife)	Plan development update
August 1/08	GNWT (Yellowknife)	Plan development update
August 26-28/08	SSI & SDC AGM (Norman Wells)	Plan development update at SSI/SDC AGM
September 4/08	Sahtu Water Conference	Presentation on Plan development
September 30/08	Naats'ihch'oh Working Group	Presentation on Plan development in relation to National Park establishment
November 12/08	Tulita	Morning mapping session with Fort Norman Métis Land Corporation; afternoon/evening Plan development meeting with community
November 18-19/08	NWT Geoscience Forum	Poster presentation and discussions with industry on Plan development
January 15-16/09	Colville Lake	Plan development meeting with community to redo zoning
March 1-14/09	PDAC Annual Conference and Trade Show	Informal discussions with industry on Plan development
June 8-9/09	Fort Good Hope	Draft 2 Consultations
June 10-12/09	Colville Lake	Draft 2 Consultations
June 15-16/09	Déline	Draft 2 Consultations
June 15-16/09	Science in the Changing North Conference	Presentation on Plan development
June 17/09	Government & Industry (Norman Wells)	Draft 2 Consultations
June 17-18/09	Norman Wells	Draft 2 Consultations
June 22/09	O&G Industry (Calgary)	Draft 2 Consultations
June 24-25/09	Tulita	Draft 2 Consultations

Date	Participants (Location)	Subject
June 29/09	Government, Industry, NGOs (Yellowknife)	Draft 2 Consultations
June 30/09	Mining Industry (Yellowknife)	Draft 2 Consultations
July 7/09	Government, Industry, NGOs (Ottawa)	Draft 2 Consultations
July 22/09	O&G Industry (Calgary)	Follow-up session to complete discussions and see industry presentation
August 25-26/09	Sahtu communities	Overlap meetings to resolve zoning conflicts between adjacent communities
August 25-27/09	SSI-SDC AGM (Fort Good Hope)	SLUPB Open House & Presentation to assembly on Draft 2
October 23/09	INAC	Follow-up meeting to discuss INAC comments
October 26-27/09	Fort Good Hope	Follow-up with community to revise zoning and discuss comments from other parties
October 28/09	SLWB	Follow-up meeting to discuss comments, get input into CRs for implementation
November 4/09	Norman Wells Land Corporation & RRC	Follow-up meeting to discuss zoning and comments from other parties
November 17-18/09	NWT Geoscience Forum	Presentation in regulatory session and workshop with industry to get input for Draft 3 on specific questions
January 27/10	Tulita	Follow-up with community to revise zoning and discuss comments from other parties
February 4-5/10	Dél <sub>l</sub> ne, SSI, GNWT, INAC (Dél <sub>l</sub> ne)	Meeting to discuss integration of Great Bear Lake Watershed Management Plan
February 8/10	Colville Lake	Follow-up to discuss revised zoning and comments from other parties
March 17/10	SLWB (Norman Wells)	Board to Board meeting to discuss financial security CR and provide update
March 30/10	INAC (Ottawa)	Update on plan development
March 30/10	Standing Committee on Aboriginal Affairs and Northern Economic Development	Presentation to Committee and participation in panel discussion on Northern Territories Economic Development: Barrier and Solutions