



# SAHTU LAND USE PLAN MONITORING & EVALUATION FRAMEWORK



DECEMBER 2019



Prepared for:  
The Sahtu Land Use Planning Board  
PO Box 235, Fort Good Hope, NT  
X0E 0H0

Prepared by:  
HTFC Planning & Design with Dr. Arthur Hoole  
500-115 Bannatyne Avenue East  
Winnipeg, MB R3B 0R3



## TABLE OF CONTENTS

<b>1. OVERVIEW .....</b>	<b>1</b>
<b>2. BACKGROUND .....</b>	<b>2</b>
Land Use Planning in the MVRMA.....	2
Implementing the Sahtu Land Use Plan.....	3
Monitoring to Date .....	5
<b>3. MONITORING AND EVALUATION FRAMEWORK .....</b>	<b>6</b>
Core Elements of Monitoring and Evaluation .....	6
Monitoring Implementation for Better Management .....	8
<b>4. PLAN VISION AND GOALS .....</b>	<b>10</b>
<b>5. MANAGEMENT ACTIVITIES .....</b>	<b>12</b>
<b>6. MONITORING INDICATORS.....</b>	<b>17</b>
Stream 1: Monitoring Management Activities.....	18
Stream 2: Monitoring Key Values (for Outcomes) .....	21
<b>7. AMENDMENTS &amp; ADJUSTMENTS .....</b>	<b>29</b>
Reporting .....	29
<b>8. NEXT STEPS .....</b>	<b>30</b>

<b>APPENDICES .....</b>	<b>34</b>
Appendix A: Case Studies .....	34
Appendix B: Literature Review .....	41
Appendix C: Monitoring Management Activities Form .....	48



# 1. OVERVIEW

This report has been prepared for the Sahtu Land Use Planning Board (SLUPB) as a product of HTFC Planning & Design's work with Dr. Arthur Hoole towards developing a framework for monitoring implementation of the Sahtu Land Use Plan. The work includes:

- Clarifying and focusing the goals, recommendations and actions of the Sahtu Land Use Plan (note: this work has now been incorporated into the *Sahtu Land Use Plan Draft 5-Year Review Amendment Application for Public Review*)
- Developing a framework to monitor implementation of the Sahtu Land Use Plan. This "framework" is meant to help in tracking and evaluating the implementation of the plan. The Board has requested a framework that is:
  - a) Informed by current best practice;
  - b) Customized to the Sahtu Settlement Region;
  - c) Creative and innovative;
  - d) Simple, straightforward and easy to use; and
  - e) Practical to implement.



## 2. BACKGROUND

### Land Use Planning in the MVRMA

The Sahtu Land Use Planning Board (SLUPB) is the regional planning body for the Sahtu region of the Northwest Territories. The Board's mandate is set out in the *Sahtu Dene and Metis Comprehensive Land Claim Agreement (SDMCLCA)* and the *Mackenzie Valley Resource Management Act (MVRMA)*.

Section 35 of the MVRMA provides guidance for land use planning in the settlement area, emphasizing the rights, cultures, and economies of Sahtu residents, First Nations and communities. It focuses land use planning on the needs of local people, with regard to the broader interests of all Canadians.

The Act (s. 35) says, "Land use planning for a settlement area shall be guided by the following principles:"

- (a) The purpose of land use planning is **to protect and promote the social, cultural and economic well-being of residents and communities** in the settlement area, having regard to the interests of all Canadians;
- (b) **Special attention shall be devoted to the rights of the Gwich'in and Sahtu First Nations** under their land claim agreements, to protecting and promoting their social, cultural and economic well-being and to the lands used by them for wildlife harvesting and other resource uses; and
- (c) Land use planning **must involve the participation of the First Nation and of residents and communities** in the settlement area.

Plan development and implementation therefore need to be locally grounded and attentive to the cultural landscape of the Sahtu Settlement Area.

Beginning in 1998, the Sahtu Land Use Planning Board conducted extensive community engagement work towards its plan vision and goals and developed the current land use plan over the next 15 years. The Sahtu Land Use Plan was approved and enacted in August of 2013, and implementation is now underway.

## Implementing the Sahtu Land Use Plan

Responsibility to implement the SLUP is shared amongst the Plan's three approving parties: the Sahtu Secretariat Incorporated (SSI), the Government of the Northwest Territories, and the Government of Canada. Regulators (including the Sahtu Land and Water Board, the Mackenzie Valley Land and Water Board, the Territorial and Federal Governments, etc.) share responsibility for implementing the Plan by issuing "licences, permits or other authorizations relating to the use of land or waters or the deposit of waste" in accordance with the zoning and other requirements of the Sahtu Land Use Plan (MVRMA 46(1)).

The Sahtu Land Use Planning Board is responsible to monitor how the plan is being implemented (under Section 44 of the Mackenzie Valley Resource Management Act). Other responsibilities during plan implementation include determining whether referred activities are in accordance with the Plan; adopting amendments to the Plan; and carrying out comprehensive reviews of the Land Use Plan at 5-year intervals (see Table below).

ROLES OF A LAND USE PLANNING BOARD UNDER THE MVRMA FOLLOWING PLAN APPROVAL		
S.	Role	MVRMA Text
44	Monitor Plan Implementation	Subsequent to the approval of a land use plan, a planning board shall monitor the implementation of the Plan; and (b) where so authorized by the Plan, consider applications for exceptions to the Plan.
45	Engage in Trans-boundary Planning	The planning board for a settlement area 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.
47	Conduct Conformity Determinations on Referral	A planning board shall determine whether an activity is in accordance with a land use plan where a. the activity is referred to the planning board by a first nation or a department or agency of the federal or territorial government or by the body having authority under any federal or territorial law to issue a licence, permit or other authorization in respect of the activity; or b. an application for such a determination is made by any person directly affected by an activity for which an application has been made for a licence, permit or authorization.
48	Consider Amendments to the Plan	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. Sections 42 and 43 apply (the need for a public hearing and submission to the First Nation, the territorial Minister, and the federal Minister), with such modifications as are required, in respect of any amendment to a land use plan.



49	Keep Public Records of Applications and Decisions	A planning board shall a. keep a public record of all applications made to it and all decisions made by it; b. furnish, on request and on the payment of a fee prescribed under subsection (2), copies of a land use plan or of any decision made by it; and c. have the custody and care of all documents filed with it.
50	Conduct Planning Activities Leading Towards the Five Year Review	A 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 the first nation of the settlement area.

This document focuses on the Board's responsibility to monitor implementation of the Sahtu Land Use Plan (under Section 44 of the MVRMA).

The Sahtu Land Use Plan says the Board will ask the following questions in monitoring and assessing Plan implementation:

1. Is the Plan achieving its goals and advancing the vision (for the Sahtu region)?
2. Is the Plan being implemented fully and appropriately (by the many bodies responsible for implementation)?
3. Would further clarification assist in accurately interpreting and implementing the Plan?
4. How is the Plan affecting the regulatory system (is it having the desired result)?

The 2013 *Implementation Guide: Sahtu Land Use Plan* includes some initial guidance on how the Board can monitor plan implementation. On page 44, the guide suggests the following:

1. Qualitative monitoring through dialogue with planning partners and communities (the Sahtu Working Group is named as a key forum for this dialogue);
2. Periodic review of key authorizations to confirm how CRs are captured; and
3. Gathering information on the values and resources discussed in the plan.

## Monitoring to Date



Over the first five years since the SLUP was adopted, implementation has been monitored informally by SLUP staff and Board members, largely following the approach provided in the 2013 Implementation Guide.

The 2016 Sahtu Land Use Plan Assessment project served to document perceptions among planning partners and communities with respect to how the plan has been implemented, how it has contributed to achieving the plan vision and goals, and where clarifications and amendments are needed. This assessment was based on feedback from approximately 20 interviews and 40 survey responses from representatives of Sahtu Designated Organizations, regulators, granters of authorizations and dispositions, oil and gas and mining industries, and other parties who had experience using or developing the Sahtu Land Use Plan.

In 2018, the SLUP produced an official 5-year review document, entitled Sahtu Land Use Plan – The First Five Years: A Look Back to Move Forward. This document lists key activities taken to implement the plan during its inaugural years. This includes ongoing tracking of authorizations issued by various regulatory bodies in the planning area, and ongoing data collection with respect to the social, environmental, and economic values that are relevant to the plan. The report states, “the SLUPB has monitored and collected releases of new information that may have value to ongoing planning practices . . .” (p.11). However, without an official monitoring and evaluation framework, this data has not been collected systematically and has never been fully analyzed in relation to the Land Use Plan.

### 3. MONITORING AND EVALUATION FRAMEWORK

#### Core Elements of Monitoring and Evaluation

This section sets out the approach used in the Sahtu Land use Plan Monitoring and Evaluation Framework and introduces 5 Core Elements of the Framework. These core elements are drawn from best practices in the background research in conjunction with the approach desired by the Sahtu Land Use Planning Board.

Background research was an early and important part of process to examine precedents and lessons learned, and to ensure that the SLUP framework represents leading thinking in the area. The several interrelated parts of this work included a review of professional/academic literature, selection and evaluation of relevant case studies, and careful review of relevant materials from the SLUP.

---

#### LITERATURE REVIEW

To complete the literature review, the planning team reviewed a cross-section of peer-reviewed theoretical and applied literature, with particular attention to features or elements that are suggested to contribute to robust implementation, evaluation and monitoring of programs, projects and plans. The sources are drawn mainly from the literature of Criteria and Indicators and Result-Based Management (RBM). The review also considered a SLUPB-supported study by University of Alberta students and selected aspects of case studies that are being considered as part of the background research for the project. Notes from each of the documents reviewed are included in the Appendices. Lessons are applied below.

---

#### CASE STUDIES

The planning team also reviewed comparable large area land-use plans for best practices in monitoring and evaluation. This review focused on other plans in the Northwest Territories and other large area regional plans from Yukon, British Columbia, Manitoba and Ontario. These include:

- North Yukon Regional Land Use Plan - Nichih Gwanat'in • Looking Forward
- Wooshtin Wudidaa - Atlin Taku Land Use Plan
- Respect For The Land: The Dehcho Land Use Plan
- Gwich'in Land Use Plan: Nành' Geenjit Gwitr'it T'igwaa'in / Working For The Land
- Pimachiowin Aki Management Plan



To complement desktop analysis of the plans, the planning team contacted representatives from case study examples during our “lessons learned research” to get a first-hand sense of how the monitoring and evaluation frameworks in these plans are working, and what tools have been useful in assembling and managing information. Notes on the individual case studies are provided in the appendices.

---

## CORE ELEMENTS

The following points emerged from the background research as the Core Elements to guide the monitoring of Plan implementation:

### 1. Monitoring Must be Tied to Plan Vision and Goals

*To evaluate the overall success of the plan, monitoring indicators need to be intentionally tied to the plan’s vision and goals.*

### 2. Monitoring should focus on the Plan’s impact on the values identified in the Vision and Goals

*The Plan recognizes that there are many factors influencing cultural integrity, and economic conditions in the Sahtu region. Monitoring should be focussed on values that are directly influenced by the plan, and where possible, seek to understand how the plan has affected that value.*

### 3. Monitoring must Incorporate Métis and Dene Knowledge and Perspectives

*The Plan acknowledges the “cultural landscape” of the Sahtu area, where natural and cultural values are interconnected. Monitoring should draw on both Indigenous knowledge systems and Western scientific perspectives.*

### 4. Monitoring Should Support Partnerships & Communication

*Monitoring should build upon good work already underway to understand values in the region (caribou, permafrost, etc.). Monitoring should involve the range of approving parties and planning partners who play a role in implementing the plan and managing the region. Communication, information sharing and partnerships will be key.*

## Monitoring Implementation for Better Management

There are several important reasons to monitor the Plan:

- We **establish a record of actions** that are being taken to implement the plan, and how the various elements of the plan are implemented;
- Information collected allows us to **reflect on how our management activities are impacting the land, people, and communities**, and answer the questions: **are we progressing towards our goals?**
- In turn, we can **reflect on how we are doing and make adjustments** to the plan or our approach to implementing it as we move forward.

Monitoring plan implementation is therefore an essential part of good land use management.

By continually monitoring and adjusting our approach, we become adaptive managers, able to adjust to changing circumstances and continually progress towards our fundamental vision.

We recognize that we cannot monitor or track everything in our environment, but can choose indicators—specific signs—that we can watch to see what changes are happening to the land, water, wildlife and communities of the region.



# Sahtu Land Use Plan Monitoring Cycle



A planning process begins with a **Vision and Goals** for what we hope to achieve through our plan.

The plan then sets out a series of **Management Activities** (in this case, conformity requirements, actions, and recommendations) intended to help achieve the goals.

As we implement the plan, we can track our activities, and start **Monitoring Indicators** that help us to understand the impacts of our actions.

By evaluating the outcomes of our monitoring, we can determine where **Amendments & Adjustments** are needed in the Plan itself, or in our approach to implementing the Plan.



## 4. PLAN VISION AND GOALS

This section summarizes the four main elements of the Plan's Vision and Goals for the Sahtu Region and includes a list of key values derived from the vision as part of this Framework.

Recommendations about potential changes to the vision, goals, actions and recommendations in the Sahtu Land Use Plan have now been incorporated into the *Sahtu Land Use Plan Draft 5-Year Review Amendment Application for Public Review*.



### ECOLOGICAL INTEGRITY

**Vision:** "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."

**Goal:** Maintain the Ecological Integrity of the Sahtu Settlement Area.

**Key Values:** Water quality, Wildlife & Fish, Permafrost, Plan Effectiveness



### CULTURAL INTEGRITY

**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."

**Goal:** Maintain or Enhance the Cultural Integrity of the Sahtu Settlement Area.

**Key Values:** Harvesting Areas, Archaeological Sites & Burial Sites, Plan Effectiveness

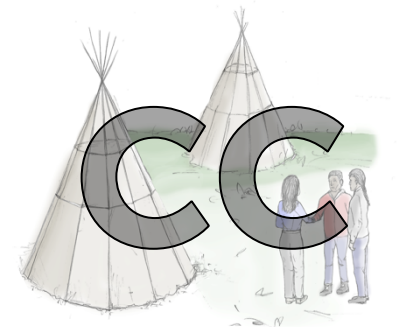


## COMMUNITY CAPACITY & DECISION-MAKING

**Vision:** “Communities have sufficient authority, capacity and involvement in managing and monitoring land use to work in true partnership with land and resource managers, co-management 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 Metis traditional laws, beliefs and management practices with scientific and regulatory frameworks. There is trust and respect amongst all participants in land and resource management.”

**Goal:** Increase community capacity and decision-making authority in land and resource management.

**Key Values:** Community Engagement, Community Land Use Monitoring, Clarity and Understanding, Plan Effectiveness



## ECONOMIC SELF-SUFFICIENCY & SUSTAINABLE DEVELOPMENT

**Vision:** “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.”

**Goal:** Increase the economic self-sufficiency of the region through sustainable development.

**Key Values:** Areas for Resource Development, Resource Development Projects, Employment, Plan Effectiveness



## 5. MANAGEMENT ACTIVITIES

This section illustrates how Management Activities within the 2013 Plan (conformity requirements, actions, recommendations) aim to implement the plan's Vision & Goals.

It is provided in four parts, reflecting the four elements of the Sahtu Land Use Plan's Vision:

1. Ecological Integrity
2. Cultural Integrity
3. Community Capacity & Decision-Making
4. Economic Self-Sufficiency & Sustainable Development



## ECOLOGICAL INTEGRITY

**Goal:** Maintain the Ecological Integrity of the Sahtu Settlement Area.

SUPPORTING GOALS	MANAGEMENT ACTIVITIES WITHIN THE PLAN (TO ADVANCE THE GOALS)
<b>a. Protect environmentally significant areas and ecologically representative areas.</b>	CR #1 Land Use Zoning CR #9 Sensitive Species and Features CR #14 Protection of Special Values CR #18 Uses of Du K'ets'Edi Conservation Zone Action #2 Inspection and Enforcement Priorities
<b>b. Water quality, quantity and ecological productivity will not be degraded and will be restored and enhanced where degradation has occurred.</b>	CR # 5 Watershed Management CR # 6 Drinking Water



	CR #15 The Great Bear Lake Watershed CR #17 Disturbance of Lakebed (only in zone 23) CR #19 Water Withdrawal Action #4 Water Withdrawals
<b>c. Consider and mitigate long-term cumulative impacts to land and water from land use activities.</b>	<i>Plan supports and allows, but no tools to implement this goal.</i>
<b>d. Remediate current contaminated and waste sites.</b>	<i>Plan supports and allows, but no tools to implement this goal. (Note: 2.5.F. says activities related to the cleanup and reclamation of contaminated sites or historic industrial sites are exempt from CR #1 – Land Use Zoning)</i>
<b>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.</b>	CR #7 Fish and Wildlife Action #3 Access to Wildlife Information
<b>f. Consider impacts of, and adaptations to, climate change in decisions affecting land, water and other resources.</b>	Recommendation #2 Climate Change
<b>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 Area.</b>	Action #1.4 Sahtu Land Use Working Group – Cumulative Effects and Monitoring Program
<b>h. Manage transboundary issues in cooperation with organizations from adjacent regions.</b>	<i>Plan supports and allows, but no tools to implement this goal. However, SLUPB work on this when needed.</i>
<b>Management Activities related to Ecological Integrity unrelated to specific supporting goals.</b>	CR #8 Species Introductions CR #10 Permafrost CR #11 Project-Specific Monitoring CR #13 Closure and Reclamation CR #16 Fish Farming and Aquaculture Recommendation #1 Air Quality Recommendation #4 Incidental Harvest

# CULTURAL INTEGRITY

**Goal:** Maintain the or Enhance the Cultural Integrity of the Sahtu Settlement Area



SUPPORTING GOALS	MANAGEMENT ACTIVITIES WITHIN THE PLAN (TO ADVANCE THE GOALS)
<b>a. Protect places of significant cultural or spiritual value.</b>	CR #1 Land Use Zoning CR #14 Protection of Special Values Action #2 Inspection and Enforcement Priorities
<b>b. Enhance protection of heritage sites, and important subsistence use and harvesting areas.</b>	CR #4 Archaeological Sites and Burial Sites
<b>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.</b>	Action #1.3 Sahtu Land Use Working Group - Traditional Knowledge Guidelines
<b>d. Document traditional ecological knowledge and protocols of the Sahtu Dene and Metis and integrate this knowledge into all aspects of land and resource management, including research and monitoring.</b>	CR #2 Community Engagement and Traditional Knowledge CR #3 Community Benefits
<b>e. Increase opportunities for residents to spend time on the land.</b>	<i>Plan supports and allows, but no tools to implement this goal.</i>
<b>f. Increase use and transfer of cultural skills, values, practices and language among residents, especially from Elders to the youth.</b>	<i>Plan supports and allows, but no tools to implement this goal.</i>
<b>g. The goals identified under Item 3 also contribute to cultural integrity.</b>	See Community Capacity & Decision-Making

# COMMUNITY CAPACITY & DECISION-MAKING

**Goal:** Increase community capacity and decision-making authority in land and resource management.



## SUPPORTING GOALS

## MANAGEMENT ACTIVITIES WITHIN THE PLAN (TO ADVANCE THE GOALS)

**a. Increase community capacity and engagement in regulatory processes, resource management, monitoring and enforcement. Joint planning is the end goal.**

CR #2 Community Engagement and Traditional Knowledge

CR #13 Closure and Reclamation ("Where appropriate, plans shall be developed in consultation with community organizations")

Action #1.5 Working Group – Community-Government Monitoring and Enforcement Plan

Action #1.6 Working Group – Community Land Use Monitoring Program

Recommendation #3 Community Land Use Monitors

**b. Improve communication and coordination between community organizations, regulators, resource managers, and enforcement personnel.**

Action #1.2 Sahtu Land Use Working Group - Community Engagement Guidelines

**c. Improve clarity, consistency and efficiency of the regulatory environment in conjunction with current regulatory improvement efforts of the federal government and other regulators.**

Sahtu Land Use Plan Implementation Guide

**d. Advance and complete self-government negotiations.**

*Plan supports and allows, but no tools to implement this goal.*

# ECONOMIC SELF- SUFFICIENCY & SUSTAINABLE DEVELOPMENT

Goal: Increase the economic self-sufficiency of the region through sustainable development.



SUPPORTING GOALS	MANAGEMENT ACTIVITIES WITHIN THE PLAN (TO ADVANCE THE GOALS)
<b>a. Address barriers to industry investment and increase non-renewable resource development in the region.</b>	CR #1 Land Use Zoning
<b>b. Develop renewable resource industries, including commercial hunting, fishing, forestry and tourism.</b>	CR #1 Land Use Zoning
<b>c. Address community and industry needs for access and infrastructure development.</b>	<i>Plan supports and allows, but no tools to implement this goal. (Note: 2.5.E says the development of new municipal infrastructure necessary for community use or service are exempt from CR #1 – Land Use Zoning)</i>
<b>d. Maximize benefits to Sahtu residents and communities from development.</b>	CR #3 Community Benefits
<b>e. Establish long-term training programs for residents and communities in all aspects of renewable and non-renewable resource development, business, and financial management.</b>	CR #12 Financial Security



## 6. MONITORING INDICATORS

As we implement the plan, we can track our activities, and start **monitoring indicators** that help us to understand the impacts of our actions with respect to our vision and goals for the region.

This Monitoring & Evaluation Framework is provided in two streams.

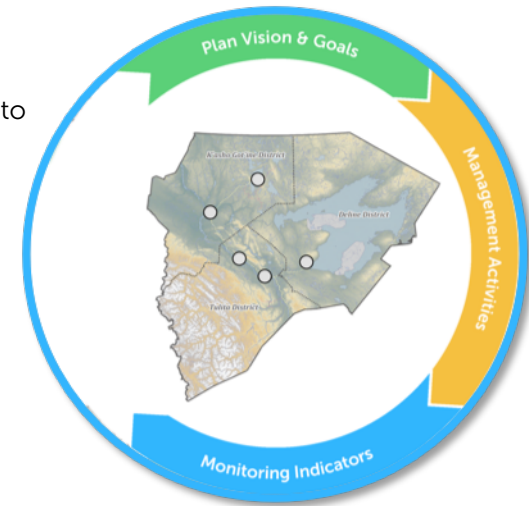
**STREAM 1** monitors Management Activities under the plan. This is a process of tracking applications and authorizations (specifically gathering information on how determinations are made). Information is collected on an ongoing basis and reviewed periodically (with focus on priority topics) to refine the plan and process.

Stream 1 Monitoring addresses three of the four monitoring questions posed in the SLUP:

- Is the Plan being implemented fully and appropriately (by the many bodies responsible for implementation)?
- 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)?

**STREAM 2** focuses on monitoring progress towards the Plan vision and goals. Monitoring tracks indicators to assess the status of **key values** captured in the vision and goal statement. Where possible, it reflects on how implementation of the plan has affected these values. In effect, Stream 2 monitoring addresses the remaining monitoring question in the SLUP:

- Is the Plan achieving its goals and advancing the vision (for the Sahtu region)?



## STREAM 1: Monitoring Management Activities

This subsection addresses how the SLUPB can monitor management activities (as opposed to outcomes).

---

### CONTEXT

#### ***Land Use Permits and Water Licences***

The regulatory body primarily responsible for issuing permits related to land and water use in the Sahtu area is the Sahtu Land and Water Board (SLWB).

The Mackenzie Valley Land and Water Board (MVLWB) issues land use permits and water licences for proposed projects that cross jurisdictional boundaries (for example, a road that would pass through both the Sahtu area and the Gwich'in area).

Documents associated with applications for land use permits or water licences are uploaded onto an online public registry. This registry is hosted by the Mackenzie Valley Land and Water Board and includes a specific section for the Sahtu Land and Water Board (as well as the Gwich'in and Wek'eezhii Land and Water Boards).

#### ***Other Authorizations and Dispositions***

As described above, the MVRMA S. 46(1) says that land use plans must also be followed when Sahtu First Nations, government departments, and other licencing bodies are "issuing licences, permits, or other authorizations relating to the use of land or waters or the deposit of waste."

The *Sahtu Land Use Plan Implementation Guide* lists a number of these other authorizations and dispositions that need to be reviewed for conformity with the Sahtu Land Use Plan, including: research licences; land leases; quarry permits; subsurface resource rights/access/leases; timber cutting/transporting permits and licences; outfitter licences; commercial wildlife licences or general wildlife permits; pesticide application permits; tourism operator licences; prospecting permits, mineral claim/leases, dredging leases or coal licences/leases; licences for oil and gas exploration and discovery, and others. Since devolution, many of these authorizations and dispositions are now being administered through the Government of the Northwest Territories, making the GNWT another significant regulator under the SLUP.

## MONITORING APPROACH

The SLUPB is developing a system of information sharing that will allow the Board to keep an active record of all applications and regulatory decisions that apply to the plan area. The initial system is being developed with the two primary regulators: the Sahtu Land and Water Board and the Government of the Northwest Territories. Once established, the system can be expanded to other regulators such as the Canadian Wildlife Service, National Energy Board, and others.

Stream 1 monitoring is proposed as follows:

1. A proponent applies for a license or permit for development or another land use activity. When applying, applicants may provide their own supporting evidence on how the proposed activity complies with the Sahtu Land Use Plan. The SLWB currently requires applicants to provide this assessment. If appropriate, this requirement could be added to applications for authorizations by the GNWT.
2. Before issuing a land use permit, water licence, or other authorization or disposition, a regulator will review any supporting evidence provided by the proponent and assess if the proposed activity complies with the conformity requirements in the Sahtu Land Use Plan.
3. Regulators will record their rationale on a form. Proposed form templates are provided in Appendix C. These forms are adapted from the system already being used by the Sahtu Land and Water Board. We recommend that the GNWT adopt a similar system to allow easy comparison across authorization types. The proposed forms are customized for different application types, to reflect the CRs relevant to each authorization.
4. The regulator will make a decision about whether or not to approve the land use permit, water licence, or other authorization or disposition for the proposed activity. In some cases, a Board or Council will consider the initial staff review of the proposed activity. Any additional comments or changes to the assessment by the Board or Council should be reflected on the form

Project Name: _____		Issuing Authority: _____		
Proponent Name: _____		Date of Application: _____		
Location: _____		Authorization Granted: Y / N		
		Date of Authorization: _____		

Conformity Requirement	Application Section(s)	Supporting Evidence	Review Comments / Rationale	Conforms?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				
CR # 2 Community Engagement and Traditional Knowledge				
CR # 3 Community Benefits				
CR # 4 Archaeological Sites and Burial Sites				
CR # 5 Watershed Management				
CR # 6 Drinking Water				
CR # 7 Fish and Wildlife				

Figure 1: Sample Form to Monitor Management Activities

5. Once a decision is made, the form can be completed and submitted to the Sahtu Land Use Planning Board. Regulators may also choose to save the forms and submit them to the SLUPB on a semi-annual or annual basis.

The Sahtu Land Use Planning Board will collect forms submitted by the regulatory bodies. On a yearly basis, the SLUPB will tally information on applications within the planning area, including the number and types of applications, the number of applications deemed to conform to the plan, the number of non-conforming applications, and the number of authorizations issued. This summary information will be published in annual SLUPB monitoring reports.

The SLUPB will also undertake a periodic review to understand how priority CRs are being applied by the various regulators. When analyzing each CR, the SLUPB will consider the following questions:

- Are there inconsistencies in how this CR is being applied project to project?
- What do regulators think is the current standard to meet this CR? (What is good enough?)
- Should there be changes to the Plan or Implementation Guide to improve clarity of this CR?
- Is this CR necessary, or have circumstances or regulations changed so that it is no longer needed?

Outcomes of the Board's analysis will be communicated with SLUP Planning Partners, discussed among the parties, and considered in future 5-year review processes.



## Stream 2: Monitoring Key Values (for Outcomes)

The second stream of monitoring **focuses on assessing the status of key values captured in the Sahtu Land Use Plan**. This will allow the SLUPB to reflect on the outcomes of implementing the plan and consider to what degree the plan has helped to advance its vision and goals for the region.

Further discussion will be needed among the SLUPB, the Planning Partners, and communities to determine the appropriate scope, values, and methods for Stream 2 monitoring. This document presents several monitoring tools and a range of potential values and indicators as initial ideas to support discussion. Key steps in developing Stream 2 monitoring are as follows:

### 1) Selecting Values to Monitor

The values being monitored should reflect key elements of the plan vision and goals, and should be influenced, to some degree, by implementation of the plan. They might include concepts like “water quality”, “traditional harvesting areas”, “employment”, or other values that the plan seeks to promote. The program could include anywhere from two or three, to ten or twelve values. Ideally, these values will tie to each of the four elements of the vision statement: ecological integrity; cultural integrity; community capacity and decision making; and economic self-sufficiency and sustainable development.

### 2) Choosing Appropriate Indicators

For each value, the SLUPB will work with communities and planning partners to identify appropriate indicators - or measures that can be recorded over time to understand the condition of the value in question. For example, if “wildlife” is selected as a value, indicators might include caribou population numbers, or community perspectives on availability of important species. We recommend indicators that capture a range of traditional and western perspectives.

### 3) Selecting Monitoring Approaches

Information on indicators can be gathered in a number of ways: through gathering existing publicly available data; carrying out direct monitoring (surveys or fieldwork); partnering with researchers and Guardians programs; or documenting observations from local knowledge holders who ‘monitor’ the land through ongoing land use and observation.

The following pages present a number of monitoring tools for consideration, followed by tables showing possible values and indicators tied to the four elements of the plan vision and goals. **These materials represent initial brainstorming around Stream II monitoring only. Broad communication and discussion with Sahtu communities and planning partners will be needed to identify the values, indicators, and monitoring tools best suited to the region.**

## POSSIBLE TOOL #1 - FIVE-YEAR SURVEY

For the 2016 Sahtu Land Use Plan Assessment, HTFC Planning & Design worked with the Sahtu Land Use Planning Board staff to develop a detailed survey questionnaire and interview guide to solicit input from the SLUPB's planning partners (including representatives of Sahtu Designated Organizations, regulators, granters of authorizations and dispositions, oil and gas and mining industries, and other parties who had experience using or developing the Sahtu Land Use Plan).

The questionnaire was circulated digitally using the SurveyMonkey survey tool. Survey invitation links were sent to 49 different organizations, government departments, or Sahtu community governments; representatives from 37 of these organizations submitted a response (a 67% response rate).

The questionnaire was developed to be replicable so that it can serve as a tool to assess Plan implementation over time. There are several questions in the survey that would be helpful to repeat before the Plan's next 5-Year Review, which could be compared to the baseline data from the 2016 surveys. These questions are outlined in the Monitoring Key Values tables below. In particular, the SLUPB could repeat questions on awareness and understanding of the Sahtu Land Use Plan, implementation of the Sahtu Land Use Plan (particularly related to Conformity Requirements), the Plan's Vision and Goals, and the overall evaluation of the Sahtu Land Use Plan.

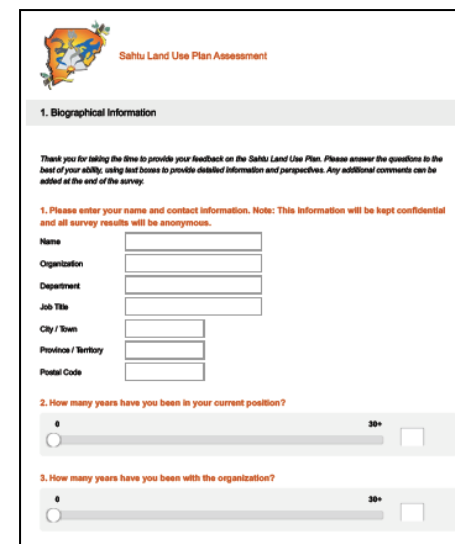
The image shows a screenshot of a SurveyMonkey questionnaire titled "Sahtu Land Use Plan Assessment". At the top left is a logo featuring a map of the Sahtu region. The form is divided into sections. The first section is "1. Biographical Information". Below this is a thank-you message: "Thank you for taking the time to provide your feedback on the Sahtu Land Use Plan. Please answer the questions to the best of your ability, using text boxes to provide detailed information and perspectives. Any additional comments can be added at the end of the survey." This is followed by a note: "1. Please enter your name and contact information. Note: This information will be kept confidential and all survey results will be anonymous." The form includes input fields for Name, Organization, Department, Job Title, City / Town, Province / Territory, and Postal Code. Below these are two horizontal range sliders. The first slider is labeled "2. How many years have you been in your current position?" with a scale from 0 to 20+. The second slider is labeled "3. How many years have you been with the organization?" also with a scale from 0 to 20+.

Figure 2: The SurveyMonkey survey tool was used to get feedback from Sahtu planning partners.

## POSSIBLE TOOL #2 - STATE OF THE SAHTU WORKSHOPS

In order to produce a holistic assessment of the Sahtu Land Use Plan's outcomes for the values of the region, it is essential that any monitoring approach incorporate Dene and Métis knowledge and perspectives. Only four out of the seven Sahtu Community Governments provided responses to the survey during the 2016 Sahtu Land Use Plan Assessment. Face-to-face gatherings provide a better way to hear from Sahtu community members than a digital survey.

To get better community feedback on the Sahtu Land Use Plan, the SLUPB could hold "State of the Sahtu" workshops. This could be a special multi-community gathering or a round of meetings in each community that would address topics related to evaluation of the Land Use Plan. Topics could include Indigenous knowledge of: the health of the water; community harvesting data; fish health and abundance; traditional knowledge of harvesting practice; status of burial sites and special areas; etc. Workshops would include careful note taking and mapping to document the knowledge of Sahtu residents with respect to the status of the values that the SLUP aims to promote.

State of the Sahtu workshops would provide an opportunity to reflect on the Sahtu as a “cultural landscape” with interconnected natural and cultural values that would provide insight into how the Plan is working to advance the Vision and Goals for the Sahtu region.

---

### **POSSIBLE TOOL #3 - GATHER PUBLICLY-AVAILABLE INFORMATION**

The most cost-effective tool that can be used to monitor key values for outcomes is gathering publicly-available information. There are several sources of information that may be relevant to the Sahtu Land Use Planning Board’s Monitoring and Evaluation Framework.

#### ***Census Data and Other Population and Demographic Statistics***

Statistics Canada’s Census Program provides statistical data for census areas across the country every five years. In the Sahtu, there is separate data for the census subdivisions of Fort Good Hope, Colville Lake, Norman Wells, Tulita and Déline (the rest of the land in the Sahtu is covered under the Region 2 Unorganized census subdivision; however, this region has a population of 0).

The Census provides data such as employment, income, and languages spoken, which are relevant to the vision and goals in the Sahtu Land Use Plan. The Census’ long history and consistency over time make this a valuable tool for assessing change in the region, even though it may be hard to attribute these changes directly to the Sahtu Land Use Plan.

#### ***Research Data***

Another important source of publicly-available information relevant to the Sahtu Land Use Plan is published research data. This is particularly relevant to monitoring Ecological Integrity. Some relevant data sources include:

- [Caribou Population Estimates](#) (published every 3 years by the GNWT)
- Permafrost Monitoring: [Circumpolar Active-Layer Monitoring Program \(CALM\)](#) and other data sources from [GNWT Environment and Natural Resources](#)
- Scientific data related to other types of wildlife, fish, water quality, etc.

#### ***Mapping***

Publicly available mapping may also be relevant to monitoring and evaluation of the Sahtu Land Use Plan. For example, the GNWT produces a [NWT Hydrocarbon Potential](#) map that the SLUPB could use to assess how the Plan’s zoning allows or does not allow for oil and gas development in areas where Hydrocarbon Potential is high.

---

## POSSIBLE TOOL #4 - COMMUNITY-BASED MONITORING

Community-Based Monitoring is another tool the SLUPB could use to evaluate Plan outcomes. Community-Based Monitors are typically Indigenous resource users or knowledge holders from a Sahtu community. They may be part of local trapping, hunting or fishing groups, Indigenous Guardians programs, or other individuals with lived experience of the land.

The SLUPB could engage Community Monitors in one or more of the following ways:

1. Partnership with existing Community Monitors or Guardian Programs (e.g. the Sahtu Renewable Resource Board's Sahtú Ne K'ádiká - Keepers of the Land Program)
2. Hire its own dedicated monitoring staff
3. Use local experts in each community on an as-needed basis

Community Monitors would be able to gather direct information about changes that are taking place on the land in the Sahtu area. Community-based monitoring from each of the 3 Districts, or each of the 5 communities, would help to reflect the District- and community-level scales within the broader Sahtu Settlement Area.

As an example, in one of this project's case studies (see Appendix A), the Taku River Tlingit use Community Land Guardians to do a pre-permit survey of the land for each proposed development project in their area. The Guardians take photographs of the site and use the Trailmark Systems software to record monitoring data. The Guardians are also used for archaeological surveys, fisheries work, and water sampling by other organizations in the community. In the Sahtu region, Community-Based Monitors have been used to track water data on the [Mackenzie DataStream](#). They've also used Trailmark software for [Winter Track Surveys](#). New Indigenous Guardians programs are emerging in several areas of the Sahtu and offer promising opportunities for collaboration.

The SLUPB's use of Community-Based Monitoring would support the Plan's Vision and Goals for Cultural Integrity and Community Capacity & Decision-Making. While Community-Based Monitoring would have costs, the SLUPB would likely be able to access external funding to help fund such a program.

The following tables present possible values and indicators tied to the four elements of the plan vision and goals.



# ECOLOGICAL INTEGRITY: VALUES & INDICATORS

**Goal:** Maintain the Ecological Integrity of the Sahtu Settlement Area.

**Note:** This table represents initial brainstorming around Stream II monitoring only. Broad communication and discussion with Sahtu communities and planning partners will be needed to identify the values, indicators, and monitoring tools best suited to the region.

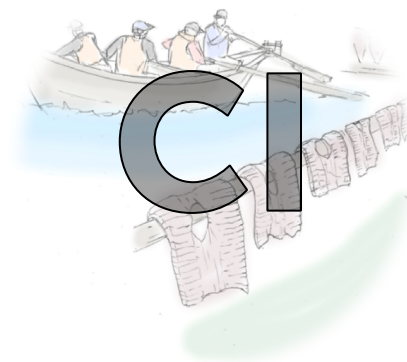


VALUES	POTENTIAL INDICATORS	POSSIBLE PARTNERSHIPS / INFORMATION SOURCES
<b>Water Quality</b>	Water quality measurements	<a href="#">Mackenzie DataStream</a> (Mackenzie DataStream utilizes community-based water monitors to track water data across NWT through the CIMP)
	Indigenous knowledge of the health of the water	State of the Sahtu Workshop Partnerships with local bodies (e.g. local guardian programs / SRRB, etc.)
<b>Wildlife &amp; Fish</b>	Caribou Populations (Bluenose East, Bluenose West, Cape Bathurst)	<a href="#">Published caribou population estimates</a> (GNWT)
	Winter Track Density	Community-based monitoring using Trailmark software for winter wildlife track surveys as part of <a href="#">2014-2021 Winter Track Surveys</a>
	Community Harvesting Data / Indigenous knowledge of animals or fish health and abundance	State of the Sahtu Workshop Harvesting Data (obtained from SRRB and/or GNWT) Partnerships with local bodies
<b>Permafrost</b>	Permafrost Active-Layer Thickness	<a href="#">GNWT Environment and Natural Resources Data</a> <a href="#">Circumpolar Active-Layer Monitoring Program (CALM)</a>
<b>Plan Effectiveness</b>	Survey Results: Increased Opinion that Plan is Contributing to Ecological Integrity	Five-Year Survey

# CULTURAL INTEGRITY: VALUES & INDICATORS

**Goal:** Maintain the or Enhance the Cultural Integrity of the Sahtu Settlement Area.

**Note:** This table represents initial brainstorming around Stream II monitoring only. Broad communication and discussion with Sahtu communities and planning partners will be needed to identify the values, indicators, and monitoring tools best suited to the region.

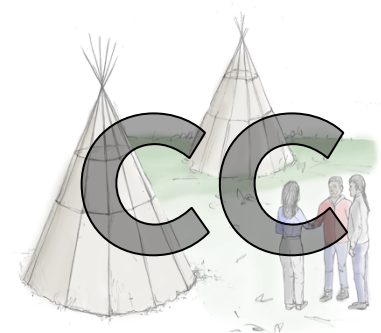


VALUES	POTENTIAL INDICATORS	POSSIBLE PARTNERSHIPS / INFORMATION SOURCES
<b>Harvesting Areas</b>	Traditional knowledge of harvesting practice	State of the Sahtu Workshop
<b>Archaeological Sites &amp; Burial Sites</b>	Status of Burial & Archaeological Sites	State of the Sahtu Workshop
<b>Plan Effectiveness</b>	Survey Results: Increased Opinion that Plan is Contributing to Cultural Integrity	Five-Year Survey
<b>Other Potential Indicators to Consider</b>	Traditional Knowledge studies being undertaken in Sahtu in relation to development projects Indigenous Languages Being Spoken in the Home Construction of new community cultural facilities	Statistics Canada Census Data

# COMMUNITY CAPACITY & DECISION-MAKING: VALUES & INDICATORS

**Goal:** Increase community capacity and decision-making authority in land and resource management.

**Note:** This table represents initial brainstorming around Stream II monitoring only. Broad communication and discussion with Sahtu communities and planning partners will be needed to identify the values, indicators, and monitoring tools best suited to the region.



VALUES	POTENTIAL INDICATORS	POSSIBLE PARTNERSHIPS / INFORMATION SOURCES
<b>Community Engagement</b>	SLUPB communication and engagement with communities	# of meetings in communities
<b>Community Land Use Monitoring</b>	SLUPB collaboration with community monitoring groups	Partnerships with local bodies (e.g. local guardian programs / SRRB, etc.)
<b>Clarity and Understanding</b>	Increase in understanding	Five-Year Survey (see baseline data p. 58 Sahtu Assessment Report 2016)
<b>Plan Effectiveness</b>	Survey Results: Increased Opinion that Plan is Contributing to Community Capacity & Decision-Making	Five-Year Survey
<b>Other Potential Indicators to Consider</b>	<p># of SLUPB Board members and staff who are beneficiaries of the SDMLCA</p> <p>Plan amendments to reflect established Indigenous Protected and Conserved Areas?</p> <p>Use of Sahtu Dene and Metis perspectives in evaluating plan effectiveness</p>	

# ECONOMIC SELF-SUFFICIENCY & SUSTAINABLE DEVELOPMENT: VALUES & INDICATORS

**Goal:** Increase the economic self-sufficiency of the region through sustainable development.

**Note:** This table represents initial brainstorming around Stream II monitoring only. Broad communication and discussion with Sahtu communities and planning partners will be needed to identify the values, indicators, and monitoring tools best suited to the region.



VALUES	POTENTIAL INDICATORS	POSSIBLE PARTNERSHIPS / INFORMATION SOURCES
<b>Areas for Resource Development</b>	Area with high hydrocarbon potential that is zoned under the SLUP to allow resource development	<a href="#">NWT Hydrocarbon Potential Maps</a>
<b>Resource Development Projects</b>	Number of new / active Resource Development Projects in the Sahtu Settlement Area <ul style="list-style-type: none"> <li>○ Renewable</li> <li>○ Non-renewable</li> </ul>	Permits
<b>Employment</b>	Regional Employment Numbers (Particularly in natural resources and related production occupations)	Statistics Canada Census Data
<b>Plan Contributes to Economic Self-Sufficiency and Sustainable Development</b>	Survey Results: Increased Opinion that Plan is Contributing to Economic Self-Sufficiency and Sustainable Development	Five-Year Survey State of the Sahtu Workshop
<b>Other Potential Indicators to Consider</b>	Survey Results: SLUP is reducing barriers to industry investment	Five-Year Survey

## 7. AMENDMENTS & ADJUSTMENTS

By evaluating the outcomes of our monitoring, we can determine where **amendments & adjustments** are needed in plan, or in our approach to implementing it.

### Reporting

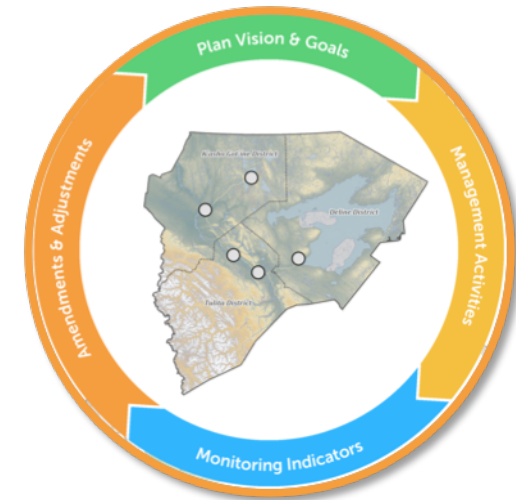
Once a monitoring framework is finalized, it will be essential for the SLUPB to regularly share its monitoring results. This could include a regular **annual monitoring report**, and a periodic **evaluation report**.

The annual monitoring reports would include:

- A table and map of applications and authorizations granted in the Sahtu Region during the year
- A summary of regulatory conformity checks (based on forms gathered from regulatory bodies)
- An annual summary of implementation activities and issues (particularly related to the Plan's Actions and Recommendations)
- Results of monitoring the Plan's values each year

The evaluation reports would present:

- Multiple years of information on applications, authorizations, and active permits
- Outcomes of targeted analysis of implementation of priority CRs
- Discussion of trends in the values being monitored
- Recommendations arising from the monitoring and evaluation work:
  - To improve clarity and consistency of plan implementation,
  - To strengthen communication and monitoring
  - To amend the SLUP if/where needed





## 8. NEXT STEPS

This document has set out a framework to structure implementation monitoring & evaluation for the Sahtu Land Use Plan. This final section provides direction to the SLUPB to further define and implement monitoring under the framework in the period leading up to the next 5-year review.

Work will involve discussion and collaboration with Sahtu communities, regulators, and other planning partners: to gather feedback on the framework; implement a regulatory tracking system; identify appropriate values and indicators; and develop methods for regular monitoring and reporting. We recommend that Stream I monitoring be initiated as soon as possible, while the Board undertakes broad consultation to explore, and gradually begin Stream II monitoring.

Given the limited financial and human capacity of the SLUPB, we recommend that this work start small, growing gradually in scope as monitoring partnerships evolve and funding is secured.

---

### PHASE ONE

#### *Estimated Timeline: Year 1*

In the First Year, we recommend a focus on finalizing and implementing Stream 1 monitoring; and carrying out broad communication and discussion around Stream 2 monitoring.

#### *Tasks*

- Finalize and begin implementing Stream 1 monitoring - gathering data on development approvals from regulators
  - Finalize reporting system through communication with SLWB and GNWT
  - SLUPB Admin Clerk to receive and file records of regulatory decisions provided by the SLWB and GNWT regulators
  - SLUPB GIS Analyst adds shapefiles of new development during previous year on map (for annual report)
- Undertake broad communication and discussions to develop a plan for Stream 2 monitoring:
  - Present the framework and discuss monitoring in each of the Sahtu communities
  - Invite review and discussion of the framework from the SRRB, Indigenous Guardians programs, and GNWT monitoring programs

- Identify a small number of initial values and indicators that are meaningful to communities and could be supported by partnerships (e.g. caribou, culturally-significant harvesting areas, or permafrost melt). This might begin with a single key value or several values representing different aspects of the SLUP Vision.
  - Develop methods for monitoring one or more key indicators
- Produce Annual Report
- Review and revise approach to Phase Two (below).

### **Staffing**

- This work could be undertaken by one or more of the following:
  - Sahtu Land Use Planning Board Staff;
  - Consultant Contract(s); or
  - Ph. D. student research

### **Budget Implications**

- The SLUPB may need to budget for the following expenses in addition to current operating costs:
  - Trips to communities, if these exceed those normally taken by the SLUPB in a year
  - Consulting and/or research fees and expenses
  - Preparation and distribution of an Annual Report Note: the steps shown in Phases Two and Three below are purely theoretical and will need to be adapted to findings in Phase One as well as what is practical, realistic and relevant to the Board and its planning partners.

---

## PHASE TWO

In Phase Two, we propose initiating Stream II monitoring activities using existing staff, and drawing on partnerships with other organizations. At a minimum, this might include a pilot project focused on a key value, with input from partners and knowledge-holders in each of the three Sahtu Districts.

### ***Estimated Timeline: Year 2 – 3***

#### ***Tasks***

- Continue implementing Stream 1 monitoring
- Begin implementing Stream 2 monitoring [either a single pilot project, or broader program aimed at multiple criteria].
  - Finalize partnerships and communicate with partners
  - Collect publicly available data relevant to selected values
  - Visit Sahtu communities to document Indigenous knowledge on key values and indicators (State of the Sahtu, etc.).
- Develop a data management system for monitoring results
- Produce Annual Report

#### ***Staffing***

- Most of this work could be undertaken by existing Sahtu Land Use Planning Board staff
- Near end of Phase Two, and with appropriate funding, the SLUPB could put out an advertisement to hire a Monitoring and Evaluation Coordinator staff person

#### ***Budget Implications***

- To complete these tasks, the SLUPB may need to budget for these expenses in addition to their current operating costs:
  - Trips to communities, if these exceed those normally taken by the SLUPB in a year
  - Financial contributions to monitoring done by partner organizations (E.g. Indigenous Guardians programs)
  - Preparation and distribution of an Annual Report

---

## PHASE THREE

Note: Again, the steps shown in Phase Three below are purely theoretical. They are included for illustrative purposes, and will need to be adapted to the outcomes of Phase One and Two work, and the resources available to the Board at that time.

### ***Estimated Timeline: Year 4 – 5***

#### ***Tasks***

- Hire a dedicated Monitoring and Evaluation Coordinator staff person
- Continue implementing Monitoring Streams 1 & 2
  - Continue to collect available data
  - Ongoing community engagement
  - Go on the land with monitoring partners (e.g. Guardians programs, GNWT monitors)
  - Hold regular meetings with partners, with continued financial contributions to monitoring done by partner organizations
  - Acquire funding for additional monitoring projects (addressing additional criteria and indicators)
  - Continue annual reporting and communication
  - Complete an evaluation of monitoring outcomes to date and facilitate discussion re: amendments for next 5-Year Review

#### ***Staffing***

- Most of this work could be undertaken by the Monitoring and Evaluation Coordinator staff person

#### ***Budget Implications***

- To complete these tasks, the SLUPB may need to budget for these expenses in addition to their current operating costs:
  - Salary and benefits for a Monitoring and Evaluation Coordinator
  - Trips to communities (with some longer stays) for the M&E Coordinator
  - Financial contributions to monitoring done by partner organizations
  - Preparation and distribution of Annual Reports & Evaluation Report(s)

# APPENDICES

## Appendix A: Case Studies

---

### NORTH YUKON REGIONAL LAND USE PLAN NICHIIH GWANAŁ'IN • LOOKING FORWARD

**Planning Area:** Yukon - North Yukon Planning Region - 55,548 km<sup>2</sup>

**Status:** Plan approved in 2009.

**Background:** Plan developed by North Yukon Planning Commission (composed of representatives from the Yukon Government and the government of the Vuntut Gwitchin First Nation). Once the North Yukon Land Use Plan was approved, the Commission ceased its work. The Yukon Land Use Planning Council (YLUPC) is now doing plan conformity checks.

#### Key Planning Features:

- Plan uses a Sustainable Development approach to balance primary concerns of protecting caribou habitat while allowing for oil & gas development up to established thresholds in different Zones.
- Plan has a significant Cumulative Effects component, with Surface Disturbance and Linear Density as indicators.
- Conformity checks are published online for each development application. These conformity checks include analysis on how development proposals address the affected values and general management directions in the Plan.
- The Yukon Government and the government of the Vuntut Gwitchin First Nation publish an Annual Implementation Report.

#### Lessons Learned:

- The Yukon Land Use Planning Council believes there is still a lot of promise to the Cumulative Effects Assessment system developed in this land use plan. The whole point was to create a system that had both certainty and flexibility to maintain caribou habitat while allowing some oil and gas development. This framework is one of the few ways of achieving both.
- However, the main challenge in setting up this Cumulative Effects Assessment system is obtaining quality data. The Planning Commission first used ALCES to model disturbance thresholds. ALCES requires data to be input for many variables. The available data

was limited for some of the required variables, so the reliability of the system was uncertain. Now they are no longer using ALCES to track development. Instead, they are using a GIS system, which incorporates remote sensing, and other data to monitor the key variables like disturbance.

- The Yukon Government and the government of the Vuntut Gwitchin First Nation meet 3 to 4 times per year to discuss and work on Actions and Recommendations in the Plan. One meeting is an annual meeting and produce yearly Implementation Report, which details progress on the Actions and Recommendations, as well as a summary of Conformity Checks during the year.

---

## PIMACHIOWIN AKI MANAGEMENT PLAN

**Planning Area:** Manitoba / Ontario - Pimachiowin Aki Region – 29,040 km<sup>2</sup>

**Status:** Management Plan published 2011. Revised in 2016. Area became UNESCO World Heritage Site in 2018.

**Background:** Pimachiowin Aki, which translates as *the Land that Gives Life*, was chosen by elders from four collaborating First Nations as the name for the 29,040-square-kilometre Aboriginal cultural landscape that was inscribed by UNESCO as a World Heritage Site (WHS) in 2018. Now managed by Pimachiowin Aki Corporation.

### Key Planning Features:

- The framework for monitoring in the Plan identifies two themes: the Anishinaabe cultural landscape and ecosystem health. The Plan proposes indicators linked to these themes that reflect elements of the Outstanding Universal Value of Pimachiowin Aki, as a mixed cultural and natural heritage site. The Pimachiowin Aki Corporation is currently engaging consultants to further develop the proposed monitoring framework.
- Six indicators are proposed for the Anishinaabe cultural landscape theme, four of which address community well-being: population trends, First Nations governance/leadership, community benefits, and traditional livelihood activities. These measures are important because the Anishinaabe communities are integral to the nominated area. The other two indicators are archaeological sites and oral traditions, key examples of the attributes that provide testimony to the cultural tradition.
- Regarding ecosystem health, five indicators have been proposed. The status of species of conservation concern and the presence of invasive species will be monitored as surrogate measures of characteristic conditions of boreal shield biodiversity. These indicators are relatively easy to monitor and provide an early warning of potential major biodiversity shifts. The ongoing status of wildfire regimes will be monitored as a key ecological driver that operates at a temporal scale at which land managers also operate. Site integrity will be monitored through periodic assessment of the human footprint using standard Earth observation techniques.



- Note: the monitoring framework here serves to monitor the values for which the World Heritage Site was established. It is not monitoring “plan implementation” like in the other case studies.

#### **Lessons Learned:**

- The Pimachiowin Aki Corporation is working with communities to identify appropriate criteria and indicators, respecting the autonomy of each community to monitor the things that are important to them. These will be integrated into a larger framework (a bottom-up approach).
- Pimachiowin Aki functions on a strong base of regular meetings / relationship with communities.
- The monitoring will be undertaken by Community Guardians through the Indigenous Guardians Program (following Australian Ranger programs), which builds monitoring activities around an annual calendar of land use and natural cycles.
- Monitoring approach is informed by Janene Shearer’s thesis, “Reading the Signs in the Whitefeather Forest Cultural Landscape, Northwestern Ontario.” Shearer’s approach uses community values and knowledge as the key criteria for monitoring. Indicators are called “signs and signals.” For example, the sign for the value of “Reverence and Respect for All Creation” is the respectful treatment of animal bones. An example includes monitoring to see if moose beards have been hung on trees after the animal is taken for food.

---

## **WÓOSHTIN WUDIDAA - ATLIN TAKU LAND USE PLAN**

**Planning Area:** British Columbia - Atlin Taku Plan Area - 30,409 km<sup>2</sup>

**Status:** Plan approved in 2011.

**Background:** The Atlin Taku Plan Area is a remote and largely unroaded area in the northwest corner of British Columbia. The Plan Area includes those portions of the Taku, Whiting and Yukon watersheds within the province of BC. The western boundary of the Plan Area abuts the Alaska Panhandle, and the northern boundary follows the border with the Yukon Territory.

The Atlin Taku Plan Area is the ancestral home of the Tlingits, who have a long history of occupation across the territory. The Plan was developed and implemented by Taku River Tlingit First Nation. Note that in British Columbia, land use plans are not legislated, so regulators have not necessarily followed the Plan.

### Key Planning Features:

- The Taku River Tlingit had the capacity and resources to conduct a solid community engagement processes.
- Monitoring of the Land Use Plan includes:
  - Assessing the achievement of plan goals and objectives;
  - Strengthening baseline data on priority values;
  - Providing information to improve the management regime for the area; and applying both traditional Tlingit and western knowledge and science.
- Uses adaptive management process to refine the plan based on evaluation.
- Taku River Tlingit is using community Land Guardians to monitor projects. There are currently 3 Guardians working for the community.

### Lessons Learned:

- When Taku River Tlingit receive a development application, the community land Guardians do a pre-permit survey of the land where the project is proposed.
  - They take photographs of the site.
  - They are also using the Trailmark Systems software to record monitoring data. They can also use the software to create forms and use the mobile app system. It was developed by a professor at the University of Victoria for use by First Nations. 30 different FNs are using it right now – the potential is significant.
- The guardians are very busy as the community also uses them for archaeological surveys, fisheries work, water sampling, etc.

---

## GWICH'IN LAND USE PLAN: NÀNH' GEENJIT GWITR'IT T'IGWAA'IN / WORKING FOR THE LAND

**Planning Area:** Northwest Territories - Gwich'in Settlement Region - 56,935 km<sup>2</sup>

**Status:** Plan approved in 2003. Revised version of the plan was in Final Draft Stage in April 2018.

**Background:** Plan developed and implemented by Gwich'in Land Use Planning Board (GLUPB). Guiding agreement and legislation include the Gwich'in Comprehensive Land Claim Agreement and the Mackenzie Valley Resource Management Act.

**Key Planning Features:**

- The Gwich'in region neighbours the Sahtu. The adopted plan is older than the Sahtu Land Use Plan and has been implemented since 2003.
- Annual reports were published until 2007. These included an annual review of land use permits and water licences and an explanation of how the Plan affected those activities.
  - The Plan Implementation Guide says the annual report should include a review of authorisations subject to the Plan for the year with descriptions of:
    - Applications for permits/licences for activities conforming to the Plan and permitted
    - Applications for permits/licences for activities conforming to the Plan but not permitted
    - Non-conforming applications
- The 2003 version of the Gwich'in Plan included a section on Actions and Recommendations. However, the GLUPB found that having the Actions and Recommendations section in the Plan didn't make these items happen any faster than not having them in the Plan. In order to make a streamlined document that would be most useful to regulators, proponents and communities, they chose to take this material out of the Plan. They are now trying to achieve these things through a REGIONAL PLAN OF ACTION.

**Lessons Learned:**

- It is important to remember that conformity should be monitored over the life of the project, not just at the approval stage. There are often changes to a project on the ground from what was originally proposed.
- The GLUPB stopped publishing annual reports due to capacity restrictions. They thought it was a useful tool that showed a summary of what was happening on the land.
- Regional Plan of Action – the GLUPB went through the list of actions and recommendations in the 2003 plan and found that nothing had happened.

- The GLUPB wanted to move the actions and recommendations to a separate document that does not require approval from approving parties to amend. They wanted to be able to remove something from the plan of action once it was completed (if it was still in the plan, the only way to remove or modify an action would be to formally amend the plan).
- Removing this section also helps to make the Land Use Plan more concise, which the Board wanted to do.
- The Regional Plan of Action includes items like research initiatives, such as those that could provide baseline data for a Cumulative Effects Analysis.
- The GLUPB will be the custodians of the Regional Plan of Action. Right now there is no formal working group or dedicated funding, but the GLUPB thought having a core working group would be something to consider.
- The GLUPB is still interested in including a Cumulative Effects Analysis component of the Plan. However, they recognized that good baseline data is necessary to use a program like ALCES, which has parameters for things like forest regeneration period. Right now, they have no data for some of those parameters.

---

## RESPECT FOR THE LAND: THE DEHCHO LAND USE PLAN (2006)

**Planning Area:** Northwest Territories - Dehcho Region - 211,094 km<sup>2</sup>

**Status:** A Final Draft Plan for the Dehcho Region was made in 2006; however, it was not adopted. A new Draft Interim land use plan was completed by the Dehcho Land Use Planning Committee in 2016 and submitted to the Main Table. It is not publicly available.

**Background:** The Interim Dehcho Land Use Plan just went through an internal review by the Parties to the Dehcho First Nations Interim Measures Agreement (Dehcho First Nation, Canada, GNWT). The Dehcho Land Use Planning Committee is now working its way through the comments and the next step is to release a draft plan for public review in April 2020. The Committee would then make final revisions to the draft plan with the intent of submitting a final plan to the Parties for approval in April 2021.

### Key Planning Features:

- Short annual reports (2 pages) were published online until 2014 but did not include monitoring and evaluation. LUP website has not been updated since 2015.
- Draft Plan (2006) had some interesting approaches to Cumulative Effects Assessment and an Economic Development Assessment Model.

- The Committee is also talking about preparing a 5 year implementation plan, similar to the ones prepared for land claims agreements – it would itemize annual tasks by everyone and associated budget cost.

#### **Lessons Learned:**

- The Technical Working Group is going to prepare something like a Performance Evaluation Plan.
  - Currently the plan has a number of goals and indirect goals, which are intended to help, achieve the purpose of the plan (which is described in S. 3 of the Dehcho First Nations Interim Measures Agreement).
  - The Technical Working Group is going to identify measurable actions that could be used to evaluate progress in achieving each goal or indirect goal.
  - This will also allow the Committee to assess whether the current goals and indirect goals are appropriate before the plan is finalized.
- CR #23 of the 2006 Plan says, "The MVLWB will not authorize a land or water use unless the applicant submits digital mapping showing the location of their proposed and actual land use (new roads, seismic, well sites, cut blocks etc...) to Responsible Authorities, the Dehcho Land Use Planning Committee, the affected First Nation(s) and communities at the time the application is submitted and following completion of the activity, to allow monitoring of landscape disturbances. Digital files may be GPS waypoints, shapefiles, digitized air photos, or satellite imagery with a minimum 5-metre resolution, or other file types specified by the MVLWB." This data supports cumulative effects monitoring and would be helpful information for the Sahtu Land Use Planning Board to gather as well.
- The Economic Development Assessment (EDA) Model in the plan is described as "a one-of-a-kind combination of an economic input-output model, an employment model and a population demographic model linked to our database of resource potential and zoning."
  - The model compares the costs and benefits of the scenarios including the Plan's zoning, existing land withdrawals and full development scenario, which represents the maximum level of development expected over the period.
  - However, the model only determines what the economic results will be if the resource gets developed.
  - It is unclear how the EDA model will work in terms of monitoring and evaluation because the Plan has not been approved.

## Appendix B: Literature Review

---

### **CRITERIA AND INDICATORS FOR SUSTAINABLE FOREST MANAGEMENT IN CANADA (CANADIAN COUNCIL OF FOREST MINISTERS 2005)**

Criteria and Indicators of Sustainable Forest Management in Canada: National Status 2005 was intended to help improve public discussion and policy decision making using science-based explanations to show where progress has been made and where improvement is required for the sustainable forest management of Canada's forests. As a broad and nation-wide initiative, it has limited relevance for a SLUP evaluation framework. Nonetheless, it is noteworthy that the six (6) Criteria in this framework reflect core value-based factors for sustainable forest management: 1) Biological Diversity; 2) Ecosystem Condition and Productivity; 3) Soil and Water; 4) Role in Global Ecological Cycles; 5) Economic and Social Benefits and; 6) Society's Responsibility.

Arrayed under each of the Criteria are different levels/orders of Indicators. As example, for the criterion of Biological Diversity, a first level indicator is Ecosystem Diversity and arrayed beneath that, the more specific indicator: Area of forest, by type and age class, and wetlands in each ecozone. Another first level indicator for the criterion of Biological Diversity is Species Diversity and under that, a more specific indicator, population levels of selected forest-associated species and yet further under that: distribution of selected forest-associated species. The overall framework for employing the 6 Criteria thus uses an array of quantitative indicators for each criterion and also some qualitative indicators, such as: status of in situ and ex situ conservation efforts for native species in each ecozone or, availability of forest inventory information to the public.

Thus, core element or values for sustainable forest management are first identified and the state of these are then evaluated through carefully selected indicators for which data are assembled. (See Attachment – Excerpt from Canadian Council of Forest Ministers 2005)

---

### **EVALUATING COLLABORATIVE NATURAL RESOURCE MANAGEMENT (CONLEY & MOOTE 2003)**

This peer-reviewed research article examines the evolving collaborative natural resource management movement in the United States. The authors explore approaches that researchers have used to evaluate both specific efforts and the broader movement. Evaluative criteria show commonalities, as well as differences. Evaluation approaches vary with the evaluation's intent, the type of collaborative effort being evaluated, and the values of the evaluator. The authors suggest the need for evaluators to consider and make explicit their standards for comparison, criteria, and methods in order to clarify the nature of the evaluation and facilitate the synthesis of findings.



Important questions are suggested for evaluation:

- What is the intent of the evaluation?
- What is the type of collaborative endeavour being evaluated?
- What are the values for the evaluation?

The research found that collaborative groups in natural resources management may be initiating monitoring and self-evaluation processes as part of a participatory approach to adaptive management. A typical focus is the process characteristics and outcomes. Goals of the evaluation must be clearly defined in order to select appropriate evaluation criteria and guide the data collection required. Scale was also found to be important. The evaluation can be done at different scales – e.g. spatial, temporal. (See Attachment Excerpt from Conley & Moote 2003)

---

## **RESULTS-BASED MANAGEMENT FOR INTERNATIONAL ASSISTANCE PROGRAMMING AT GLOBAL AFFAIRS CANADA: A HOW-TO GUIDE (GLOBAL AFFAIRS CANADA 2016)**

This publication is an excellent reference manual for the purposes and objectives, operational concepts, definitions and terms of RBM. The Canadian International Development Agency (CIDA) over the past 20 years and more recently, the now international development division of Global Affairs Canada have required that the planning, design and implementation of Canada's overseas development projects and programs be accomplished within an RBM framework. Indeed, RBM concepts have been variously adopted in certain of the planning case studies under consideration, as well as being invoked at several places in the University of Alberta planning student report for the SLUPB.

Several sequential excerpt pieces are taken from this manual to summarize key features of RBM. Also, the manual stresses the need to be clear about project and program assumptions, the risks and the context in which RBM is used. It is not a purely linear process, but rather should be iterative, cyclical and adaptive to changes in context – e.g. fiscal, environmental, social economic and institutional. (See Attachment Excerpts from Global Affairs Canada 2016)

---

## **PROVINCIAL MONITORING FRAMEWORK FOR STRATEGIC LAND USE PLANS: WORKING DRAFT (REAY, G., ZWECK, E. ET AL, GOVERNMENT OF BRITISH COLUMBIA, 1999)**

This framework document was developed to provide guidance for inter-agency management committees planning for implementation and monitoring under British Columbia's strategic land use planning process. The framework divides monitoring and evaluation into two streams: an implementation monitoring system and effectiveness monitoring system. Here, implementation monitoring focuses on tracking progress on project implementation. Effectiveness monitoring assesses whether the goals and objectives of a plan are being met as a result of project implementation. Both streams of monitoring feedback to the plan through monitoring reports and recommendations aimed at improving the plan and its implementation.

The framework is helpful in the context of the SLUP, illustrating a need to monitor what activities are conducted under the plan, as well as how effective those activities are in achieving the fundamental goals of the plan.

---

## **EVALUATING OUTCOMES IN PLANNING: INDICATORS AND REFERENCE VALUES FOR SWISS LANDSCAPES (HERSPERGER ET AL 2017)**

The researchers note that the evaluation of the achievement of set targets is a necessary step in landscape planning in order to learn from the past, reassess implemented measures and enhance trust in public managers and institutions. Though it is commonly accepted that indicators play a major role in such evaluations, they suggest that no accepted framework for evaluating planning outcomes exists. Furthermore, they state that the selection of appropriate indicators and reference values to effectively assess conditions of landscapes and determine whether observed developments can be considered positive or negative remains challenging. They propose an evaluation framework built on goals, indicators and reference values. They analyzed the landscape section of eight Swiss cantonal comprehensive plans to specifically address (1) whether currently tracked indicators are suffice to evaluate landscape-planning goals; (2) what a minimal set of landscape indicators for regional planning might look like; and (3) how the ratified value approach could be operationalized to develop reference values for landscape indicators.

This article provides some very contemporary and innovative perspectives for the evaluation of outcomes in landscape level planning, notwithstanding the sharply contrasting scales and characteristics of Swiss cantons compared to the SLUP landscape. Rather than abstracting this work further in this review some potentially helpful sequential tables are extracted and assembled in an attachment (See Attachment Excerpt from Hersperger et al 2017).

---

## **EVALUATING EFFECTIVENESS: A FRAMEWORK FOR ASSESSING MANAGEMENT EFFECTIVENESS OF PROTECTED AREAS (HOCKINGS ET AL 2006)**

This IUCN publication provides a comprehensive treatment for assessing the management effectiveness of protected areas. It provides detailed definition of key terms and concepts, along with schematic diagrams of frameworks and the sequential steps in the process of assessing management effectiveness. The thematic focus of the methodology and approach is protected areas management. International protected area case studies are a substantial part of this IUCN publication. Several figures and tables are extracted from the work that serve to reinforce similar concepts and logical sequencing of steps in an evaluation framework. (See Attachment Excerpt from Hockings et al 2006)

---

## **A MULTI-OBJECTIVE SCENARIO EVALUATION MODEL FOR SUSTAINABLE FOREST MANAGEMENT USING CRITERIA AND INDICATORS (MANESS & FARRELL 2004)**

This peer-reviewed forest science article features a multi-objective optimization model for medium-term forest development planning for an integrated forest products company located in the East Kootenay area of British Columbia. A set of sustainable forest management criteria and indicators were developed based on information that could be collected from regional geographic information system (GIS) databases and potential outputs from a quantitative model the authors developed. A new forest development planning unit was created (the stewardship unit) in which adjacent forest polygons with similar indicator attributes were aggregated. The planning model was designed to determine appropriate harvest levels and management treatments on each stewardship unit to satisfy objectives determined through a participatory process.

This paper is highly technical with a very specific forest management application and thus has limited application in the SLUPB project. Nevertheless, it introduces an approach and key concepts reinforcing the logic of linking goals, outcomes and management activities featuring iterative evaluations that include stakeholder participation. This approach is characterized as 3-T – Targets – the desired outcomes for each goal; Thresholds – the minimal acceptable outcome for each goal and; Triggers – management activities that set the valuation structure for each iteration in evaluation. This typology reinforces the importance of linking and sequencing goals, objectives, measures/indicators and outcomes in an evaluation process. (See Attachment Excerpt from Maness & Farrell 2004)

---

## **PLAN IMPLEMENTATION AND EVALUATION REPORT FOR THE SAHTU LAND USE PLANNING BOARD (OUM ET AL 2019)**

This report was prepared by planning and human geography students at the University of Alberta for the SLUPB. It describes the geographic, land claim and regulatory context of the SLUP, reviews some of the literature concerning plan implementation and evaluation and looks at four cases from Northern BC, Northern Alberta, Yukon, and Northern Ontario to suggest best practices and lessons learned that could assist the SLUP implementation and evaluation process.

This work offers some noteworthy clarifications of basic terms such as evaluation, indicators, and monitoring (Oum et al, p.9), as well as 'high-level' recommendations for plan evaluation and implementation based upon the four case studies conducted as part of the study (Oum et al, pp. 34-36). The Northern Alberta and Northern Ontario cases were reviewed briefly here but the 'top-down', provincial government - dominated nature of these cases and their social-ecological and institutional settings (e.g. the oil sands dominated Lower Athabasca plan region) are not very comparable for the present SLUP project work. However, the report identifies the Muskwa-Kechika management planning area in BC as potentially comparable to the Sahtu Dene land claim area, as well as the North Yukon Regional Plan case. Both of these cases have been examined as part of the current background research.

---

## **PIMACHIOWIN AKI WORLD HERITAGE PROJECT NOMINATION FOR INSCRIPTION ON THE WORLD HERITAGE LIST (PIMACHIOWIN AKI CORPORATION 2017)**

Pimachiowin Aki was inscribed on the UNESCO World Heritage List in 2018. The World Heritage Site (WHS) meets UNESCO criteria for Outstanding Universal Values associated with the Boreal Shield and Anishinaabe Cultural Landscape encompassed within the 29,040 square kilometre WHS. The site lies within two provincial jurisdictions, Manitoba and Ontario, and reflects an innovative partnership between four Anishinaabe First Nations—Bloodvein River, Little Grand Rapids, Pauingassi, Poplar River—and the two provincial governments.

The nomination process took the project partners over 10 years to complete and it fulfilled UNESCO requirements for a management plan and framework to protect and develop public appreciation for the site's outstanding universal values (OUVs). Plan implementation is just beginning and HTFC has included Pimachiowin Aki as a case study for this project in order to learn more about early priorities, such as a newly established and federally-funded Indigenous Guardians Program. For this literature review the management framework conceived for the WHS and the criteria and indicators to be used in monitoring and management plan evaluation are included here in an attachment. (See Attachment Excerpt Pimachiowin Aki Corporation, 2017).

---

## **READING THE SIGNS IN THE WHITEFEATHER FOREST LANDSCAPE, NORTHWESTERN ONTARIO (SHEARER 2008)**

This research developed a culturally congruent criteria and indicators approach for Keeping the Land in the Pikangikum First Nation's Whitefeather forest landscape of NW Ontario. The work focussed on Anishinaabe ways of knowing and using the Land. Here 'criteria' include Anishinaabe values like "respect for all creation", with indicators that include "respectful treatment of animal bones". It provides an important reminder that indigenous communities like Pikangikum and the Sahtu Dene and Metis communities of the plan area possess profound spiritual, reciprocal relationships with the 'Land ' that are holistically conceived and include the animals, fish, vegetation, waters and landscape features of their cultural landscapes. The research developed a noteworthy cultural landscape framework with Criteria and Indicators. (See Attachment Excerpt from Shearer 2008)

## LITERATURE REVIEW SOURCES

- Canadian Council of Forest Ministers, 2005. *Criteria and Indicators for Sustainable Forest Management in Canada*. Natural Resources Canada, Ottawa.
- Conley A. & M. A. Moote, 2003. Evaluating collaborative natural resource management. *Society and Natural Resources*, 16:371-386
- Global Affairs Canada, 2016. Results-Based Management for International Assistance Programming at Global Affairs Canada: A How-to Guide. Ottawa
- Hersperger, A.M., G.Mueller, M.Knöpfel, A. Siegfried & F. Kienast, 2017. Evaluating outcomes in planning: indicators and reference values for Swiss landscapes. *Ecological Indicators* 77:96-110
- Hockings, M., Stolton, S., Leverington, F., Dudley, N. and Courrau, J. 2006. *Evaluating Effectiveness: A framework for assessing management effectiveness of protected areas. 2nd edition*. IUCN, Gland, Switzerland and Cambridge, UK.
- Maness, T. & R. Farrell, 2004. A multi-objective scenario evaluation model for sustainable forest management using criteria and indicators. *Can. J. For. Res.* 34
- Oum J., L. Macphail, M. Stout & Y. Parmer, 2019. *Plan Implementation and Evaluation Report*. Sahtu Land Use Planning Board.
- Pimachiowin Aki Corporation, 2017. Pimachiowin Aki World Heritage Project Nomination for Inscription on the World Heritage List. Winnipeg.
- Reay, G., Zweck, E. et. al. 1999. Provincial Monitoring Framework For Strategic Land Use Plans: Working Draft. Government Of British Columbia.
- Shearer, J.M. 2008. *Reading the Signs in the Whitefeather Forest Landscape, Northwestern Ontario*. MNRM Thesis, Natural Resources Institute, University of Manitoba



## Appendix C: Monitoring Management Activities Forms

### EXAMPLE

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<i>CR # and name of Conformity Requirement from the Sahtu Land Use Plan</i>	<i>The section(s) of the application <b>provided by the proponent</b> that addresses the requirements in the CR.</i>	<i>A description of the supporting evidence (if any) <b>provided by the proponent</b> in their application regarding how they claim their proposed project will meet the requirements of the CR.</i>	<i>The review comments provided <b>by Regulatory Authority</b> staff or Board members assessing if the evidence provided by the proponent is sufficient to meet the requirements of the CR, according to their interpretation.</i>	<i>Yes / No / More Information Needed</i>
<b>Example:</b> from Sahtu Land and Water Board Staff Report of Evrim Exploration Canada Corp. Project S19C-003, which is available on the public registry.				
CR # 9 Sensitive Species and Features	Wildlife Plan	<p>Communication with ENR. TK Study. RRC engagement. Accessed current data sources from ENR.</p> <p>No activity within 100 m of a known mineral lick.</p> <p>No activity within 500 m of hot or warm springs, or glacial refugia; identification of any warm or hot spring or refugia.</p>	<p>Clarify no activity within 1000 m of a known mineral lick.</p> <p>Potential for impact to maybe-at-risk plants should be confirmed with a plant survey conducted prior to any land disturbance activity. This can be required as a condition of authorization.</p> <p>The project is situated within an area of Ice Patches identified on Map 4 of the SLUP. PWNHC to be contacted to confirm specific locations and if any, to be avoided by 150 m.</p>	<i>More Information Needed (see Review Comments / Rationale Section)</i>

## LAND USE PERMITS & WATER LICENCES

Project Name: \_\_\_\_\_

Issuing Authority: \_\_\_\_\_

Proponent Name: \_\_\_\_\_

\_\_\_\_\_

Location: \_\_\_\_\_

Authorization Granted: Y / N

Date of Application: \_\_\_\_\_

Date of Authorization: \_\_\_\_\_

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				
CR # 2 Community Engagement and Traditional Knowledge				
CR # 3 Community Benefits				
CR # 4 Archaeological Sites and Burial Sites				
CR # 5 Watershed Management				
CR # 6 Drinking Water				

CR # 7 Fish and Wildlife				
CR # 8 Species Introductions				
CR # 9 Sensitive Species and Features				
CR # 10 Permafrost				
CR # 11 Project-Specific Monitoring				
CR # 12 Financial Security				
CR # 13 Closure and Reclamation				
<b><i>Special Management Conformity Requirements</i></b>				
CR # 14 Protection of Special Values				
CR # 15 The Great Bear Lake Watershed				
CR # 16 Fish Farming & Aquaculture				
CR # 17 Disturbance of Lakebed				
CR # 18 Uses of Du K'ets'Edi Conservation Zone				
CR # 19 Water Withdrawal				

## OIL & GAS

Project Name: \_\_\_\_\_

Issuing Authority: \_\_\_\_\_

Proponent Name: \_\_\_\_\_

Location: \_\_\_\_\_

Authorization Granted: Y / N

Date of Application: \_\_\_\_\_

Date of Authorization: \_\_\_\_\_

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				
CR # 2 Community Engagement and Traditional Knowledge <sup>a</sup>				
CR # 3 Community Benefits <sup>b</sup>				
CR # 11 Project-Specific Monitoring <sup>c</sup>				
<sup>a</sup> Only needed for an Exploration Licence, an Authorization for a geological/geological program, OR an Authorization for drilling and production related work <sup>b</sup> Only needed for Authorization for a geological/geological program OR Authorization for drilling and production related work <sup>c</sup> Only needed for Authorization for drilling and production related work				

## MINERAL & COAL TENURE

Project Name: \_\_\_\_\_

Issuing Authority: \_\_\_\_\_

Proponent Name: \_\_\_\_\_

Location: \_\_\_\_\_

Authorization Granted: Y / N

Date of Application: \_\_\_\_\_

Date of Authorization: \_\_\_\_\_

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				

## SURFACE TENURE

Project Name: \_\_\_\_\_

Issuing Authority: \_\_\_\_\_

Proponent Name: \_\_\_\_\_

Location: \_\_\_\_\_

Authorization Granted: Y / N

Date of Application: \_\_\_\_\_

Date of Authorization: \_\_\_\_\_

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				
CR # 2 Community Engagement and Traditional Knowledge				
CR # 4 Archaeological Sites and Burial Sites				
CR # 7 Fish and Wildlife				
CR # 9 Sensitive Species and Features				
<b>Special Management Conformity Requirements</b>				
CR # 14 Protection of Special Values				



## RESEARCH

Project Name: \_\_\_\_\_

Issuing Authority: \_\_\_\_\_

Proponent Name: \_\_\_\_\_

Location: \_\_\_\_\_

Authorization Granted: Y / N

Date of Application: \_\_\_\_\_

Date of Authorization: \_\_\_\_\_

CONFORMITY REQUIREMENT	APPLICATION SECTION(S)	SUPPORTING EVIDENCE	REVIEW COMMENTS / RATIONALE	CONFORMS?
<b>General Conformity Requirements</b>				
CR # 1 Land Use Zoning				
CR # 7 Fish and Wildlife				
CR # 11 Project-Specific Monitoring				
<b>Special Management Conformity Requirements</b>				
CR # 14 Protection of Special Values				