

“Eye on the Wheel”

*A Strategic Plan
for Linking Traditional Knowledge
In Resource Planning and Management
for the Muskwa Kechika Management Area*



prepared for

**The Knowledge & Understanding Committee
of the
Muskwa Kechika Advisory Board**

March 31, 2007

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Preface

In the preface of his book “Little Bit Know Something”, Robin Ridington relates the stories of Dunne-Za Elders to questions from an anthropologist’s perspective. He draws a central lesson from his in-depth experience with these people:

”How a person knows something is as important as what he or she knows....their knowledge of animals and of the land reflects an intelligence that goes back to the earliest human traditions...the Dunne-Za say that a person who speaks from the authority of his or her own experience.. “little bit know something”. Knowledge, the elders say, empowers a person to live in this world with intelligence and understanding. They recognize that knowledge is a distinctively human attribute. They recognize knowledge as a form of power. Since the time of their culture hero, Saya, Dunne-za men and women have sent their children into the bush to gain power from the animals and natural forces of their country. From these experiences, children have grown into adults who “little bit know something”.

R. Ridington p.xiv-xv, ‘Little Bit Know Something’

Indeed, one’s personal experience in any given place in combination with storied human interactions can yield many important, albeit subtle pieces of knowledge, special insights, and even wisdom depending upon the learner’s purpose and depth of their encounter. For the past fifteen years that I have worked, and lived, with the various First Nations people of

north-east BC, valuable insights have been shared with me about life in a northern environment, and powerful lessons from cross-cultural learning.

Northern rural living has also taught me to appreciate the vast wealth of ‘local knowledge’ found amongst pioneer families and other long-time residents. Both forms of traditional and local knowledge, therefore, represent a combined base of experience for improved resource use and management decisions in the Muskwa Kechika Area .

It is with this common perspective in mind, that our team assumed this challenge to help chart a course for the sharing of traditional knowledge in the MK area. In considering the input shared with us, we recognize the sensitivity of this topic and the implications of any new arrangements to share all forms of traditional & local knowledge. It is with the utmost respect that we present our understanding of First Nation community interests and aspirations. And we trust the Board will have a useful planning tool to engage future dialogue, and most importantly, in strengthening relationships.

Reg. C. Whiten, Moberly Lake, 2007

*Only when you come to the place
Where you remember what is happening to you
Will the circle of time
Turn around you
Only when the tracks before you are
your own
Will you turn with the circle
When your feet enter the tracks
Of every other being
You will see them as your own
And leave them all
Behind you*

“Eye on the Wheel” - Dunne-Za myth

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“Eye on the Wheel”

A Strategic Plan for Linking Traditional Knowledge In Resource Planning and Management for the Muskwa Kechika Management Area

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The information contained within this document has been based upon personal interviews, document and literature reviews, as well as the authors' opinions carried out during the project period January-March, 2007. This report was reviewed by representatives of the Muskwa-Kechika Advisory Board prior to submission, and further edits made November, 2007. Any other errors or omissions remain that of the author.

Table of Contents

Executive Summary	6
1. Introduction	9
1.1 Project Context and Methodology	9
2. First Nation Perspectives on Traditional Knowledge Sharing	17
2.1 Summary of Current TK Initiatives in the M-KMA	21
2.2 First Nations Recommendations on TK Integration	23
3. Overview of Government Perspectives on TK Integration	27
4. Strategic Actions for Traditional Knowledge Integration in Resource Management	28
4.1 Recommendations to Government for TK Integration	35
5. Developing Case-Study Applications for Traditional Knowledge in the M-KMA	37
6. Best Practices for Information Sharing	47
6.1 Highlights of TK Integration Practice	47
6.2 Lessons from the Halfway River First Nation/UNBC TK Study	48
6.3 Intellectual Property Rights and Protocols	54
6.4 Components of IPR Protection	55
6.5 Tools for Protecting TK Intellectual Property	58
6.6 Case Study Examples	61
6.7 Best Practices for Protecting Traditional Knowledge	63
6.8 Summary	64
6.9 References on Intellectual Property Rights	65
Appendices	66
A Muskwa-Kechika Management Area First Nations	
A1 Community Profiles	66
A2 Letter of Intent Between Kaska Nation & British Columbia	71
A3 First Nations Territorial Overlap and Treaty & Boundary Interpretation	77
B Resources on Applied Traditional Knowledge	78
B1 Geographic Valuation System: UNBC/Halfway River FN	79
B2 <i>Considering Aboriginal traditional knowledge in environmental assessments conducted under the Canadian Env. Asst Act</i>	80
B3 BC Government Heritage Resource Protection in Land & Resource Management Plans (Fort Nelson LRMP, 1997)	85
B4 First Nations, Heritage & Culture Objectives in Fort Nelson LRMP	86

C	Government Policies and Perspectives on TK Integration	87
3.1	BC Ministry of Energy Mines & Petroleum Resources (including OGC)	87
3.2	BC Ministry of Forests and Range	91
3.3	BC Ministry of Environment (including EAO)	99
3.4	BC Ministry of Agriculture & Lands (Integrated Land Mgt Bureau)	104
3.5	BC Ministry of Tourism, Sport and the Arts	108
3.6	BC Ministry of Aboriginal Relations and Reconciliation	111
3.6	Federal Policies and Legislation Concerning TK	112

D	Sample Agreements and Protocols for Information Sharing	114
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D1	Traditional Knowledge Protocol Template	114
D2	University of BC Law School and Treaty 8 First Nations & Treaty Aboriginal Rights Research	130
D3	Association of Canadian Universities for Northern Studies (ACUNS) Ethical Principles for the Conduct of Research in the North	133
D4	UNBC Consent Form for First Nations Community-Based Research with First Nations	135

Tables

1.0	First Nations TK Initiatives in the M-KMA	21
2.0	Recommended Government Agency Support for Strategic Objective Implementation	35
3.0	Candidate Landscape Units for Applied TK Research	38
4.0	Resource Values in the Sulphur/8 Mile Landscape Unit	40
5.0	Resource Values in the Muskwa/West Landscape Unit	42
6.0	Resource Values in the Besa-Prophet Landscape Unit	44
7.0	Resource Values in the Halfway-Graham Landscape Unit	46
8.0	Components of Intellectual Property Rights Protection	56

Figures

1.0	First Nations of the Muskwa Kechika Management Area	12
2.0	Comparison of TEK and Knowledge from Western Science	14
3.0	The seasonal harvest cycle for Peace region First Nations	16
4.0	Sulphur/8 Mile Landscape Unit of the M-KMA	68
5.0	Muskwa West Landscape Unit of the M-KMA	70
6.0	Besa/Prophet Landscape Unit of the M-KMA	72
7.0	Halfway-Graham Landscape Unit of the M-KMA	74

Executive Summary

For holiday travelers along the Alaska Highway, or to people who live far outside its boundaries, the region known as the ***Muskwa-Kechika Management Area (M-KMA)*** may be thought of as a mysterious, wild-land or wildlife refuge somewhere in the Rocky mountains of northern BC. In fact, residents of the Peace country may regard it in the same way, or perhaps as a unique recreational destination. While these characterizations are largely accurate, the M-KMA is much more. Before the area was formally designated, and its landscapes classified into various resource planning units and sustainable management zones – this world-class resource, has been known as an aboriginal homeland or traditional territory. Either, in whole, or in part, there exist 13 First Nations with connections and rights to the M-KMA. These communities have a mix of tribal origins, customary laws and governance structures that define them as indigenous people of **Treaty 8 BC (1899), the Kaska Dena, and Tsay Key Nay.**

With this homeland connection, comes a long tradition of oral history, cultural practice and resource use throughout the landscape that has evolved in what can be described, as indigenous or *traditional knowledge (TK)*. With the later creation of trap-lines, guide-outfitting territories, and rural communities, other non-aboriginal Canadians have also come to share this sense of place and have gained an intimate *local knowledge* of its natural and man-made features over many years being on the land. More recently, *western-science* understanding about this region - albeit over a much shorter time period - has been gained by a growing number of resource management professionals and research scientists from government, industry and other stakeholder groups.

One can argue that maintaining integrity of the M-KMA as a whole functioning ecosystem, socio-economic and cultural landscape, the wisest management decisions will likely be those drawn upon a combined base of historical and contemporary knowledge. To advance the idea of developing linkages between traditional/local knowledge and western science, the Knowledge and Understanding Committee of the Muskwa-Kechika Advisory Board (M-KAB) has sought a strategy to guide both internal actions, and recommendations to government, in support of this general goal.

Over a three month period, a series of consultations and research were undertaken:

- to appreciate the strengths of what currently exists in the practice of traditional knowledge transfer;
- the issues to be addressed in developing linkages with western-science resource management; including the challenges to be overcome in formalizing this approach, and
- to identify concrete opportunities that can be pursued independently by the M-KAB, or as a recommended action to government agencies.

In shaping this strategy, we present a detailed account of what First Nation representatives and government practitioners have to comment on this topic. From those discussions, we present some key findings and recommendations:

- *success in information-sharing has already been achieved* in the M-KMA, through various initiatives between First Nations, government and industry; though there

are wide discrepancies in methods, formats and standards on how traditional and local knowledge has been gathered, this experience forms a solid foundation for future collaborative information-sharing processes;

- *a formal system of information-sharing/collaborative decision-making* with First Nations in the M-KMA, requires a clear recognition of Treaty and Aboriginal rights enshrined in M-KMA legislation, governance capacity, management protocols and respecting existing statements of intent or negotiations that support this goal;
- practitioners need to come together, to share experiences and understand best practice as a first step to defining *what traditional knowledge is and how it can be applied* in the M-KMA; at present, traditional knowledge is commonly misunderstood for its full scope of meaning and value, and often limited to its application in the form of Traditional Use Studies or Archaeological Assessments – even though this facet is more about historical use rather than documentation about the current relationship of people who are actively living on the land and who possess insights about ecosystem processes etc.;
- there is fear that collection, sharing and *integration* of traditional knowledge, if not properly managed and protected, could result in *sublimation* of information into non-aboriginal systems, rather than true, respectful and meaningful ‘collaboration’ to accommodate aboriginal resource use rights in resource stewardship decisions;
- *building trust* to achieve collaborative information-sharing is recognized as the key, and there is no substitute for the personal interactions and relationships in forming that foundation;
- statements about the *role, and value of integrating traditional knowledge* must be clearly and consistently articulated in government resource agencies statements, goals and service plans;
- a common understanding of *intellectual property rights* is necessary for all parties, and a legally-acceptable “*information-sharing protocol*” put in place to enable First Nations information-sharing, regardless of project scope or purpose;
- *existing efforts by First Nations* to gather traditional knowledge should be supported by the M-KAB and government agencies in an expedited effort to access Elders that are the holders of this information;
- state-of-the-art techniques should be promoted in one or more *pilot project area initiatives* within the M-KMA, using the Geographic Valuation System developed between the UNBC and Halfway River First Nation including substantial field-based components, and other visual means (3D mapping, pictures, recordings, etc.) that is formed into an interactive TK layer as part of a GIS system (both sites and issues in areas of concern);
- once tested and evaluated, the GVS and/or adapted methods can be applied to community objectives (education, training) and various other processes (referrals, env. assessment, planning);

- First Nations tribal councils/resource agencies who possess GIS capabilities may in the best position to *manage the entry, storage and presentation of TK information* and in developing consistent standards for acquiring TK;
- *the M-KA Board and proposed Aboriginal Committee* is viewed by all parties as the principal mechanism for facilitating the integration of traditional and local knowledge, so adequate resources must be provided to expand this specialized advisory and consultation role;
- government resource agencies generally support the increasing participation of First Nations, including traditional knowledge once it is clear that their *respective roles, responsibilities and capacities* have been clearly identified to ensure effective and consistent support.

Indeed, it will be an enormous challenge to formalize the integration of traditional knowledge in the Muskwa-Kechika Management Area given its enormous geography, the division of government agency mandates, the overlap of First Nation traditional territories, and the various negotiation processes in which they are engaged with government concerning resource planning and development. However, our research and consultation effort in this project points to a willingness to pursue this important goal. We trust that the actions recommended will further help ‘turn the wheel’ for effective resource stewardship in a spirit of mutual respect and understanding.

1.0 Introduction

The diverse aboriginal people of north-east British Columbia, like other parts of Canada place very high value in protection of their culture – cultures that include songs, stories, ceremonies, values, beliefs, way of life, and languages. Today's aboriginal people continue the tradition of teaching and sharing their language and traditions so their knowledge can be passed on to future generations. In an effort to capture this valuable *traditional knowledge*, and support the goal of world-class resource stewardship for the Muskwa-Kechika Management Area, its Advisory Board through its Knowledge and Understanding Committee commissioned the preparation of a Strategy for Traditional Knowledge Integration, and specifically to:



- outline of current government policy or direction regarding Traditional Knowledge and it's use in planning and decision making
- determine what kind of protocol agreements are required for using TK
- seek First Nations direction on methodology for collection of TK and their recommendations for incorporating TK into planning and management decisions
- review the M-KAB role in this undertaking.

In its 2006-09 Strategic Plan, TK Integration issues, needs and proposed actions have been either explicitly, or indirectly addressed by the five working Committees of the M-KMA Board. The strategy we have prepared, therefore, recognizes the need to align Committee objectives regarding both TK, and other related M-KAB strategies in recommending measures for achieving the highest standard of resource management decision-making for the M-KMA. It is our hope that the proposed actions will together lead to strengthened relationships with First Nations, and improved decision-making for stewardship of this globally-unique ecosystem, traditional-use territory and resource area.

1.1. Project Context and Methodology

While respecting shared aspects, and differences of First Nation institutions, cultural protocols and political processes, this Strategic Plan has endeavored to distill key insights, experiences and recommendations that can ultimately lead to meaningful participation in resource management planning for the M-KMA. Our effort recognizes that any effort to integrate Traditional Knowledge in resource planning in the M-KMA or elsewhere on First Nation traditional territories must accommodate constitutionally-protected Treaty and Aboriginal rights. It is also developed within the context of the BC Government's New Relationship document which commits to:

- (1) establishing processes and institutions for shared-decision-making about the land and resources;

- (2) ensuring that lands and resources are managed in accordance with First Nations laws, knowledge and values;
- (3) revitalizing and preserving First Nations cultures and languages and restoring literacy and fluency in First Nations languages; and
- (4) achieving First Nations economic self-sufficiency.

In preparing this Strategic Plan, our consultations have included First Nation representatives including Elders, leaders, and land-use staff from individual First Nations and Tribal Councils including the Treaty 8 Tribal Association, and Kaska Dena Council. Our consultation effort included the following activities with First Nations:

- design of a consultation matrix to cover range of TK interest topics and research questions
- telephone interviews, face-to-face meetings and conference calls (14 participants)
- focus group session at Treaty 8 Tribal Association (Feb. 22, 12 participants from member First Nations)
- on-line/telephone interactive learning event with Canadian Sustainability Indicators Network (CSIN) Learning Event #23 on Traditional Ecological Knowledge (TEK) Indicators (Feb.9)

Various government personnel and spokespersons of resource stakeholder organizations were invited to offer their comments by email or telephone interview. These included the following BC Ministry Agencies:

- Energy Mines & Petroleum Resources (including OGC)
- Forests and Range
- Environment (including EAO)
- Agriculture & Lands (Integrated Land Mgt Bureau)
- Tourism, Sport and the Arts
- Aboriginal Relations and Reconciliation¹

Requests were made for input from stakeholder groups included:

- BC Guide & Outfitters Association
- BC Trappers Association
- Northern Rockies Regional District
- Peace River Regional District
- BC Trappers Association
- Peace River Regional Cattlemen's Association
- BC Wildlife Federation
- Canadian Association of Petroleum Producers
- Council of Forest Industries (PG): Canadian Forest Products Ltd. (Fort Nelson) and Abitibi Consolidated (Mackenzie)
- Association for Mineral Exploration BC
- Northern Rockies Alaska Highway Tourism Association
- Council of Tourism Associations of BC

¹ A MARR representative was unavailable for comment

- University of Northern BC
- Friends of the Northern Rockies

For various reasons such as scheduling difficulties, or lack of familiarity with the topic or geographic area, several of the aforementioned groups were not able to participate and an option remains for the M-KAB to solicit comments on this report at a later date.

In addition to the consultation work, a detailed review of MKAB, First Nations, and government documents was completed along with a general literature search on traditional knowledge practice.

Report Outline

Our report begins with an overview of comments and recommendations made by First Nation representatives including land-use managers, Elders and consultants. This is done to focus attention on both the existing work being done in the field of traditional knowledge gathering, and to appreciate how the M-KMA Board can support First Nation community objectives to increase their role in resource use decision-making for the M-KMA .

We then provide a detailed profile of provincial resource Ministries policies regarding the role of traditional knowledge, including specific comments from regional Ministry staff on various aspects of traditional knowledge collection, management and use. This section is followed by a series of strategic action tables drawn from our research and consultation process. This was done to build a foundation for collaboration between First Nations, provincial agencies and other stakeholders. In presenting these options, we have made an effort to consider feasibility factors for implementation based upon cost, time to implement and geographic extent to which these strategic actions would apply. Many actions we propose are initiatives that the Board could undertake either internally, or invite as proposals through its Trust fund program with various partners. Other actions would take the form of recommendations to government, where the Knowledge & Understanding Committee would serve in a facilitating role.

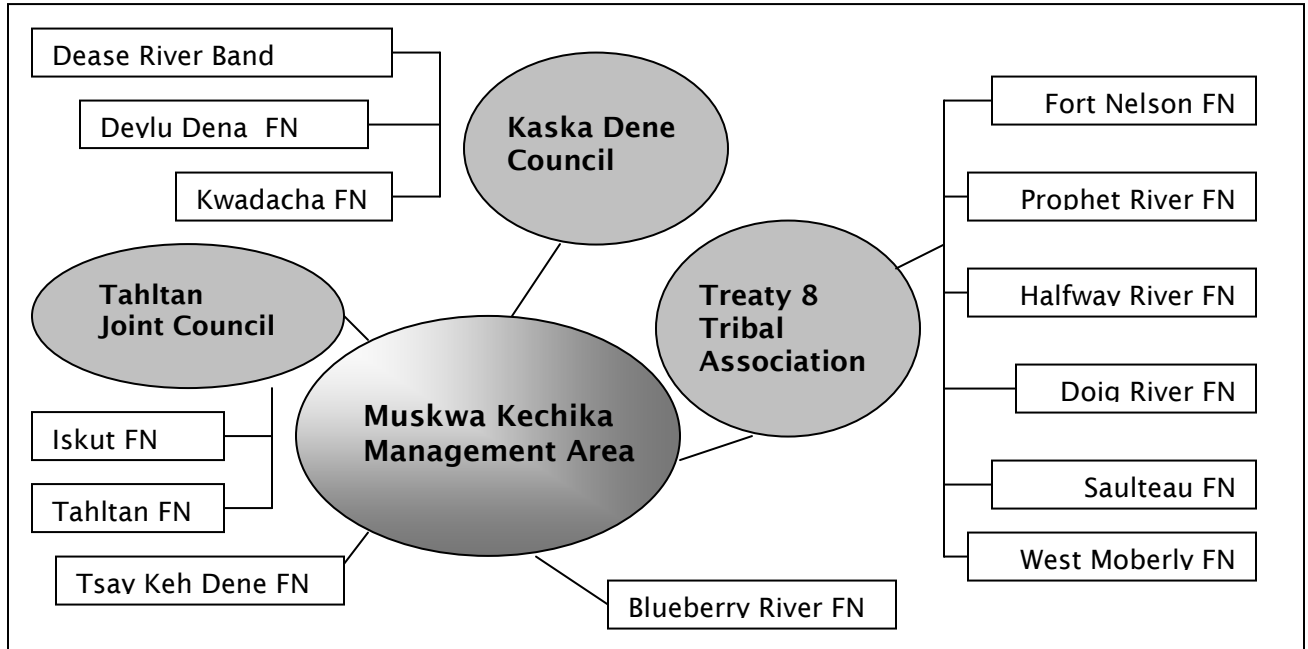
The sections that follow provide direction on implementing a Case-Study for Traditional Knowledge Collaboration including four proposed areas where some resource planning has been completed.

Our report concludes with a summary of best practices for TK, including done within the M-KMA and a discussion on pursuing the protection of Intellectual Property Rights through information-sharing agreements. Our appendices provide valuable background information about the First Nations, resources for further research and samples of information-sharing agreements.

The combined population of the 13 BC/Yukon First Nations (6,871) have varying degrees of interests in the Muskwa Kechika Management Area (M-KMA) based on traditional territory boundaries (see Figure 1). The communities are culturally diverse and geographically dispersed with large-shared traditional territories within the boundaries of Treaty 8 First Nations, the Kaska Nation, the Tahltan Nation, and Tsay

Key Dene (Appendix A1). The ethno-linguistic groups represented in the M-KMA include Slavey (Dene), Beaver (Dane-Zaa), Woodlland Cree, Saulteau, Sicannie (Sikanni).

Figure 1.0 First Nations of the Muskwa Kechika Management Area



Traditional Knowledge and Western Science: Finding Common Ground: Many natural resource scientists and managers have little familiarity with the philosophy upon which traditional knowledge is based, nor training in the extensive cultural protocols through which traditional knowledge is typically accessed and transmitted. There is little recognition that traditional knowledge actually references a complete worldview or cultural paradigm in the broader sense: a knowledge system, grounded in social institutions and mediated by social practices. Traditional knowledge is the outcome of a larger, complex system of social relations and institutions (social capital), founded upon shared beliefs and values (cultural capital), mediated by the practices and protocols (methods of oral tradition (Lertzman² and Lertzman & Vredenburg³). While traditional knowledge is important, even more important are the people and their ways of life which have generated traditional knowledge.

² Lertzman, D. 2003. Caveat on consilience: barriers and bridges for traditional knowledge and conservation science. In: Experiments in Consilience. F. Westley and P. Miller (eds.). Island press, Washington, DC. Pp. 284-297.

³ Lertzman, D. and H. Vredenburg. 2005. Indigenous peoples, resource extraction and sustainable development. An ethical approach. J. Bus. Ethics 56 (3): 239-254.

Two distinct forms of *knowledge* are discussed in this document: *local knowledge* (LK) and *traditional knowledge* (TK). *Traditional knowledge* (including ecological knowledge or TEK) is a term generally reserved for aboriginal people and their communities who have lived in a close relationship with the land for many generations. Others who live, work and use an area for extended periods of time and observation are considered to possess *local knowledge*⁴.

Another distinction made between TK and other forms is that rather than claiming *objectivity* it is recognized as being intertwined with culture, values and spirituality, representing much more than simple observations or *data*.

Local knowledge (LK) and First Nations traditional knowledge (TK) can exist in many formats. The format ranges from personal photographs to a hobbyist's wildlife records. The data can, in some cases, be organized into paintings or oral history that communicates quantitative and



qualitative temporal information, e.g., paintings that show caribou migration based on long term observations. The information is then combined with personal values and beliefs to provide knowledge that can be applied to decision-making. For example, stewardship of fishery resources by local communities might result in a voluntary moratorium on fishing a certain area based on local knowledge and experience (e.g. Moberly Lake Trout Recovery Strategy). Communities and resource-user groups like the Guide & Outfitters or Trappers Associations are also involved in observing and collecting more *scientific information* such as species numbers, water quality, fish counts or the location of shoreline erosion. While traditional science-based organizations are capable of collecting – to certain extent – the same kind of information that communities collect, the context provided by the historical background that LK/TK possesses is almost always missing. Social scientists have long pointed out that using local knowledge may save a considerable amount of scientific effort if problem areas are already identified.

Data: A body of facts or figures that have been gathered systematically and from which conclusions can be drawn e.g. survey field notes.

Information: Data that has been processed into a form that is meaningful to the recipient e.g. statistical data that has been shaped into a pie diagram.

Knowledge: That which is known and acted upon. Implies that one is able to understand and perceive relationships – some fixed and some flexible – among the various sets of data, information, and experience available.

Source: DFO, 2005

⁴ Vodden, K. (2001b). Workshop Report, *Building Capacity for Decision Making: Community Natural Resources Cataloguing Workshops*, August 14-17 2001, Campbell River, North Island. [Online] Accessed 20th April www.sfu.ca/coastalstudies/linking/capacity/proceedings.doc

The general consensus in social science is that local and traditional knowledge can (i) corroborate and compliment scientific information, (ii) confirm scientific hypotheses and (iii) fill in gaps in the technical information. Natural sciences and engineering, on the other hand, have been far less willing to embrace this *subjective* or *non standardized* knowledge in making decisions about how natural resources should be managed or about what types of systems should be in place. Excluding either LK and TK can result in inappropriate solutions and approaches. Our Strategy outlines ways to bridge this understanding and create partnerships in resource planning through shared information as prerequisite to shared decision-making.

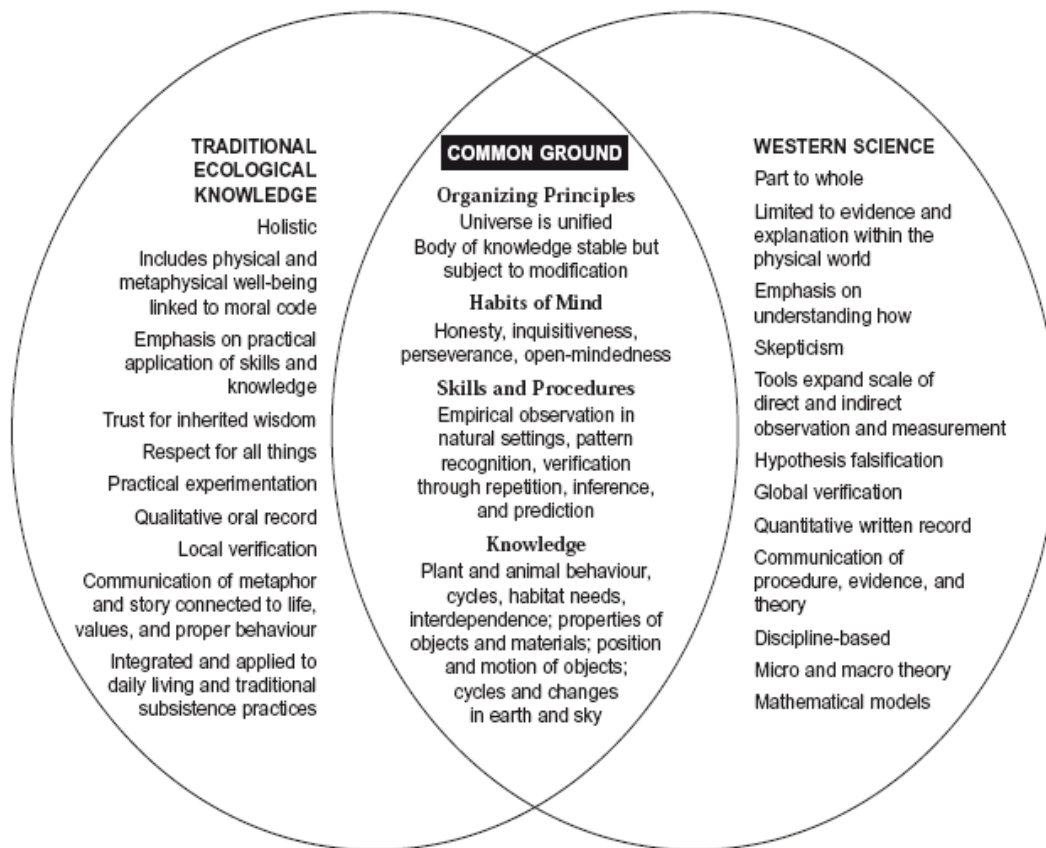


Figure 2 Comparison of TEK and knowledge from Western Science. Diagram from Manitoba Conservation (2003). *A Teacher's Guide for the Video Sila Alangotok—Inuit Observations on Climate Change*, International Institute for Sustainable Development, Manitoba. [Online] Accessed 21st April, 2004. www.edu.gov.mb.ca/ks4/docs/support/sila_video/

In Figure 2 above,, we illustrate differences in Western Science and Traditional Knowledge and the common ground upon which collaboration in resource stewardship can be based.

Information Linking and Integration – A Basis for Collaboration

The need to *link* local knowledge with scientific data implies that there exist two (or more) separate data repositories. On one side are the data sets produced and held by community groups, while on the other side are the groups that produce scientific data. While this document acknowledges that private industry, academia and other groups also collect scientific data, this Strategy identifies the government as a representative group for scientific data producers.

Our Strategy distinguishes between *integration and linking*. *Integration* is considered to be process of blending data items from various distinct sources to create a larger and more comprehensive body of knowledge. *Integration* refers to incorporating data into a common database or providing the technical means to view diverse data sets held in different locations. For example, in data integration users are interested in the form, format, content and location of the data sets because they want the data sets to display correctly once they are blended together. They focus on the map scales, data formats and features – the so-called technical issues of data management – and how these features facilitate data integration. The users do not necessarily focus on what the data is currently used for, or how the combined data will be used.

In contrast, *linking* focuses more on management issues surrounding data. Issues such as data custodianship (including licensing, privacy and security) and data dissemination are particularly important in *linking*. For example, if users are interested in data that deals with a particular landscape unit in the M-KMA, they will be concerned about determining where data is located, who the custodian (or owner) is, the license and pricing policies associated with the data, and what format the data is available in (e.g., hardcopy, softcopy, video etc). In addition, the user may be interested to know how the data was collected and how it is used so that the data can be employed in a number of applications.

Linking therefore deals with the awareness, availability and use of the



Traditional knowledge gathering has long been the basis for planning and sustaining First Nations country food harvests. The process of community information-exchange remains important in guiding livelihood activities like moose hunting, firewood collection, and berry gathering. Traditional land-use mapping is also used to assist community planning. However, more sensitive aspects of seeking knowledge for cultural, spiritual, medicinal plant use purposes involve more subtle protocols with Elders or others given guardianship of information and only passed to a select few deemed worthy to assume this role.

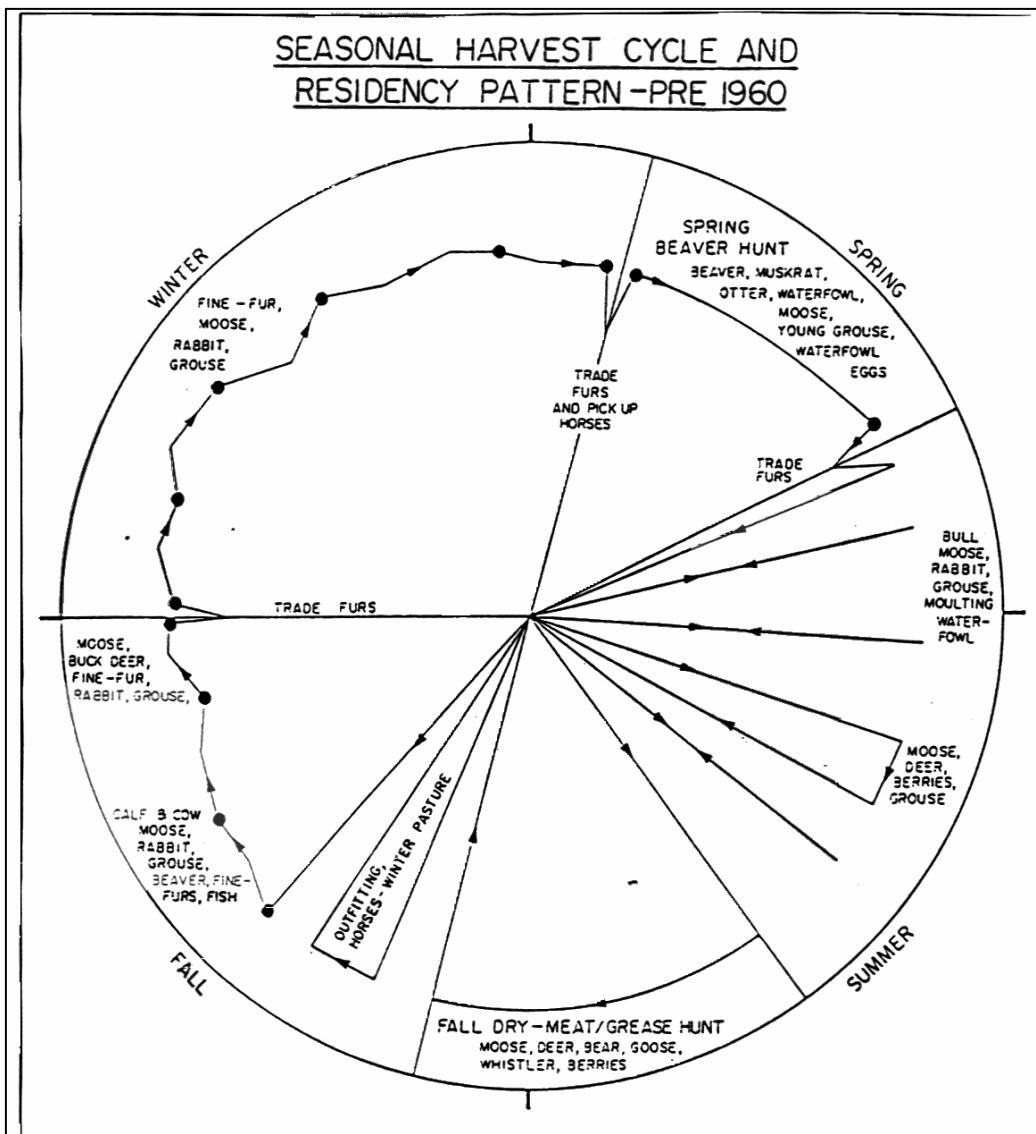


Figure 3: The seasonal harvest cycle illustrates use of TK for Peace region First Nations
 Source: Brody, Hugh, 1988 Maps & Dreams. Vancouver, BC

2.0 First Nation Perspectives on Traditional Knowledge Sharing

Through our literature review and interviews, a number of common issues and themes stood out as key driving forces or issues for the MK Board to consider as it works towards TK Integration. We group this feedback into a summary of key topics, and background on issues. We also provide list *recommendations that were put forward by First Nation representatives* which they deem important for both the M-KAB, and government agencies to consider for TK integration to proceed.



In preparing our Strategy, most of these recommendations are also offered as Strategic Actions (see Section 4). However, we recognize that other negotiation processes such as the provincial government's New Relationship initiative, other Government to Government negotiations, and MKA Board Governance project are also directly relevant to this issue. Such processes will, therefore, need to complement the proposed work of the Knowledge & Understanding Committee on TK Integration.



⊕ **Relationship Building for TK Integration in Resource Management**

It is recognized that much of the general work required to strengthening relationships with First Nations in support of TK access relate to Board governance/policy, as well as other parallel First Nation negotiations concerning government-to-government issues. Specific comments that the M-KMA B should consider are as follows:

First Nations Relations: various negotiations being undertaken with the province have direct bearing on the MKAB's ability to achieve collaborative decision-making, and are prerequisite to formal participation on TK info-sharing; several First Nations indicated need for sustained First Nations representation on the MKAB, formation of an MK Aboriginal Committee, and government-to-government protocols on TK sharing);

Clarity of MK Purpose & Strategic Plans for First Nation Involvement: there is a general lack of clarity and trust among some First Nation representatives about the M-KMAB's purpose in seeking access to TK. Concerns stem from the trend of declining M-KMAB budgets, and limited follow-up to specific prior recommendations on TK integration (e.g. from the conference on 'Incorporating First Nation Values' held Oct. 17-23, 2003). Comments were made by some First Nation representatives that they 'don't believe in it' (i.e. commitment to implementing a TK strategy), that 'First Nations input is often token, and ignored' or 'not used properly, and often when it does not fit into government's agenda or decision-making process'

Traditional Territory Recognition: for T8TA member communities, a current Court challenge they've initiated against the provincial Crown on the definition of the Treaty 8 boundary has direct bearing on the recognition of territorial areas for collaborative management within the MK; they further assert that Treaty rights/territorial boundary must be recognized within MK Act legislation;

Existing Agreements & Negotiations: First Nations throughout the MKA have been involved in various higher-level processes and negotiations which, if fully implemented, provide a foundation for facilitating TK integration. Such pre-existing and current initiatives include the following:

- the Kaska Dene Council have an existing *Letter of Intent* signed in 1997 with the Province of BC as part of the Fort Nelson Land & Resource Mgt Plan that specifies management of Parks, Protected Areas and Resource Management Zones in a way which recognizes Kaska Dena rights, culture, and history; and which acknowledges the existence of a government-to-government relationship which will assist in the implementation of the Fort Nelson LRMP and the Muskwa Kechika Plan in a manner that does not prejudice either the aboriginal rights of the Kaska Dena or the treaty process which the parties are involved in; the KDC has also been involved in Treaty Negotiations (currently suspended) that produced cooperation agreements including one on information sharing, and also New Relationship Discussions with the Province of BC (Appendix A2);
- similarly the Treaty 8 First Nations as representing either independently (as per Blueberry First Nations) and/or collectively the T8TA have been fully engaged in New Relationship Discussions including a Negotiation Protocol Agreement covering Resource Management, Revenue Sharing, Territory Overlaps, Cumulative Effects, and Compensation; T8TA also recently completed an Oil & Gas MOU, and in process of Collaborative Management Agreements on Parks, and on Heritage Conservation
- existing information-sharing & collaboration protocols exist (e.g. Kwadacha/Kaska Dene Council, T8TA) and which form the basis for protection of intellectual property rights

Recommendation 1: until such time as First Nations and the M-KMA B develop an appropriate governance model as discussed in the preliminary SLUIF report and related New Relationship negotiations, it is recommended the Board establish an Interim Working Relationship Agreement with all affected First Nations or the representative Tribal Council to undertake consultations, projects related to TK.

Cross-cultural Awareness: comments were made by First Nation representatives that there exists a disconnect between how a community views and applies TK for its various purposes (e.g. country food harvest, cultural practices, youth instruction, environmental monitoring, planning) and the widespread view of many government/industry representatives that regard TK more narrowly e.g. heritage

site-specific information, or generalized anecdotal observations, and often don't view it as having the same importance as contemporary Western science;

Recommendation 2: provide cross-cultural awareness about the various tribal groups found within the M-KMA , including Elder perspectives on the meaning of “traditional knowledge”, and past/current initiatives that employ traditional knowledge;

Recommendation 3: provide community-based extension about the MK directly to First Nations leadership and community members so they can acquire understanding of the M-KMA , management plans, resource classification, Board roles, etc.

⊕ ***Recognition and Support of Community TK Initiatives***

- First Nations in the MK have undertaken, and currently implementing to varying extents, a range of community-based land-use planning initiatives including traditional-use mapping, community TK data-base, traditional ecological knowledge studies, Treaty implementation/negotiations, land claims, specific Court actions, heritage/archaeological research, environmental monitoring/referrals, and community resource plans;
- a central issue for FN's is the extent to which they make TK information available in the public domain or use by government/industry due to concerns about intellectual property-rights protection

Recommendation 4: proposed new research in the MK should first serve to appreciate community land-use/resource processes as outlined above, and ensure time is taken to fully understand and accommodate community resource-use objectives and needs.

Recommendation 5: Priority for TK collection must be given to i) identification of important cultural sites/sacred areas both within and outside of Park boundaries to ensure their protection ii) delineation of critical wildlife habitats/corridors; iii) review of existing MK plans (Parks, Pre-Tenure, etc.)

- Elders emphasize the importance of youth camps to instruct in traditional skills,

⊕ ***Organizational Capacity for TK Development & Integration***

- to date, several First Nations indicate they have not seen much, if any Trust fund resources directed to support community objectives, or include them as partners in research etc. e.g. wildlife habitat modeling, inventories etc.
- most individual First Nations would only consider TK initiatives that support community objectives and providing adequate financial resources were available (i.e. through Trust fund commitments, and levered funding) to engage in a meaningful process of TK gathering & sharing;
- First Nation Board members indicate a need for personnel support to support existing work, and any additional projects aimed at TK integration would require

“First Nation Resource Specialists that could assist in a community liaison/research/monitoring role.

Recommendation 8: Develop policy for First Nations participation for MK research project agreements including a First Nations extension component with culturally-appropriate presentation formats

Recommendation 9: Consider dedicated aboriginal technical support staff/contracted support to work with the M-KMA B on various business relating to First Nations consultation.

⊕ ***Community Information Sharing***

- although considerable funding has been invested in MK research, the results of studies may not get communicated back to the communities, therefore annual forums to report results of MK activities would be very helpful;
- culturally-appropriate information presentation formats are essential and often not available in presentations; use of 3 dimensional, satellite imagery are a valuable new tool along with other graphic formats to aid in community communication process instead of charts, and words that are beyond the literacy levels of community members.

Recommendation 10: Ensure that all MK research project agreements include a First Nations extension component with culturally-appropriate presentation formats

2.1 Summary of Current TK Initiatives Relevant to the M-KMA

To appreciate the extent of past and present initiatives that First Nations and other stakeholder organizations have employed traditional and local knowledge, Table 1.0 outlines the various TK-related initiatives and their approximate geographic interest in the M-KMA⁵. In Appendix A1, we provide a profile of the First Nations with interest in the M-KMA, along with other relevant background information.

Table 1.0 First Nations TK Initiatives in the M-KMA		
Proponent	TK Initiatives	MK Landscape Unit Interests⁶
Treaty 8 Tribal Assoc.	<ul style="list-style-type: none"> • TU Study (T8TA/MoF, 1998 -2000) involving PR, BR, DR, HR, S First Nations • Treaty 8 Negotiations Project (2003- ongoing) • Treaty 8 MOU (Oil & Gas 1999, 2006) • Treaty 8/MoE Biologist Program 	entire M-KMA is area of interest within Treaty 8 boundary
Fort Nelson FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) • Stone Sheep research • MK Youth Camp • Forest Stewardship Plan reviews (ongoing) 	Muncho Lk, LR Hotsprings LR Corridor, 8 Mile/Sulpher, Toad River Corridor, Toad River Hot-Springs, Tetsa River, Stone Mtn, Muskwa West, Muskwa River Corridor, Alaska Hwy Corridor
Prophet River FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) • Canfor Benefit-Sharing Agreement • Prophet River Moose Study, (Houwers, 2002 in Pink Mtn- Buckingham -Nevis Ck areas) 	Muskwa West, Northern Rocky Mtns, Muskwa River Corridor, Prophet River/Hotsprings, Redfearn-Keily, Sekanni Chief River, Kwadacha/ Addition
Halfway River FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) • UNBC (NARDA, Geographic Valuation System, 2003) • Co-Operative Forestry/ Wildlife Assessment Project (1994-97) 	Northern Rocky Mtns, Prophet River/ Hotsprings, Sikanni Chief River, Halfway River, Besa-Halfway Chowade Graham Laurier Graham-North RMZ1, Graham-North RMZ2, Upper Ackie, McCusker Ospika Cones
Blueberry River FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) • Co-Operative Forestry/ Wildlife Ass't Project (1994-97) 	Besa-Halfway

⁵ This does not represent an exhaustive list but rather an illustration of the current scope of TK activities or studies within the M-KMA

⁶ This classification by the author is intended only to highlight particular landscape units defined in the Muskwa Kechika Management Plan, and is intended only to highlight overlap with publicly-documented traditional-use areas within the M-KMA, and in no way suggests areas a limitation or exclusive designation of areas that listed First Nations communities claim interest, or where their members practice constitutionally-protected Treaty and aboriginal rights.

Table 1.0 First Nations TK Initiatives in the M-KMA (cont'd)		
Proponent	TK Initiatives	MK Landscape Unit Interest
Doig River FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) • Co-operative Forestry/Wildlife Ass't Project (1994-97) 	Besa-Halfway
Saulteau FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) 	Graham-Laurier, Graham-North RMZ 1&2
West Moberly FN	<ul style="list-style-type: none"> • TU mapping (UBCIC, 1977-79) 	Graham-Laurier, Graham-North RMZ 1&2
Tsay Keh Dene FN	<ul style="list-style-type: none"> • Kmess Mining Project Review • Ongoing Land-Use Planning • Env Health Study with community monitor training 	Upper Ackie & McCusker Ospika Cones, Graham-Laurier PA
Kaska Dene Council representing: - Deylu Dena FN - Dease River Band Council - Kwadacha FN	<ul style="list-style-type: none"> • TU mapping (1985, 1995-1996) & development of multi-purpose data-base • Letter of Intent for the MKA with in Fort Nelson LRMP (see Appendix A) • Sustainable Res. Mgt Plans (Dease-Liard, North Liard) • BC/Canada Treaty Negotiations • Wilderness Guide Training & MK Youth Camps • Forest Stewardship Plan reviews (ongoing) • "Grandfather's Map with GPS mapping of special places • TK Training Manual (2004-06) • Kaska Spiritual Laws • Dena Kayeh Institute 	- combined traditional territories including all M-KMA landscape units <i>except</i> McCusker Ospika Cones SWA's, Halfway Chowade, Graham Laurier PA, Graham North RMZ1 & RMZ2, Redfern Keily PA, Prophet River Hotspring LU's
Kwadacha FN	<ul style="list-style-type: none"> • TU mapping • Industry MOU's • TK Protocol with Canfor, Abitibi, CPAWS, Can. Boreal Initiative • BC/Canada Treaty Negotiations 	Obo, Fox, Upper Pelly SWA, Finlay Russel PA, Upper Ackie PA, Frog & Braid SWAs
Tahltan Nation (Tahltan FN & Iskut FN)	<ul style="list-style-type: none"> • Treaty Negotiations • Env Impact Assessments • Tahltan Technical Advisory Committee on Mining 	Rainbow and Sandpile

2.2 First Nation Recommendations on Traditional Knowledge Integration

As indicated in the proceeding section, the issue of TK Integration is of concern to both individual First Nations and their affiliated Tribal Councils, and to date, this work has been driven by a combination of i) internal-use objectives carried out in-house or in partnership with other agencies , and ii) initiatives that respond to external objectives by government or industry; the latter includes Crown resource-use or management plans, major development project reviews, ongoing resource development referrals, research projects, or other special purpose. The following are a list of key comments and recommendations that were offered by one or more First Nation representatives during our study. Though they do not reflect a consensus opinion, they do highlight a range of important issues related to both the policy, and operational aspects of TK sharing:

2.2.1 TK Research Interests

- to date there has been very limited integration of First Nations in the various environmental studies done in the M-KMA (notably M-KMA Historical Fisheries Information, 2001; and Stone Sheep Study, ongoing); other projects that should be re-evaluated to incorporate TK include:
 - Conservation Area Design project
 - Caribou Populations and Ecology
 - Kechika Grizzly Inventory
 - Moose Management
 - Habitat Capability Modeling/Predator-Prey n Besa-Prophet
 - Cumulative Effects Management
 - Wildlife Habitat Ratings Model
 - MKMA Research Gaps

2.2.2 Collection, Storage, Presentation & Retrieval

- well-tested methodologies have been employed by M-KMA -based First Nations for many years in Traditional Use Mapping/Oral History Interviews and there exists other excellent best-practices resources on TK/TEK information collection (see Appendix B1-B4); key issues for several First Nations is a) to undertake follow-up analyses of existing hard-copy map information through field GPS work to ensure site-specific TUS map data is verified and accurately represented; b) define TUS/TK gaps where further research is required;
- there has, however, been a historical problem of researchers, industry appropriating Traditional Use study information without a protocol in place; TK may end up having no protection for intellectual property rights as it becomes part of public domain; other problem is that TUS only go back to living memory and may not paint an adequate picture of traditional ecological knowledge;
- Retention of the language is very important; TK needs to be transmitted within the community; acculturation pressures need to be combated as they can be fatal to the culture

- TK information is complementary knowledge and should not just be sublimated into Western Science with the result that complexities of TK become lost in the process
- priority for TK data collection is the completion of Elder videographies as many individuals are passing and may not have been interviewed to gain insights on range of traditional knowledge topics including but not limited to traditional resource use; linked to this is training of community members in use of this technology (e.g. videography, editing with current software technology);
- it will be important to undertake a case-study in one or more selected Landscape Units (Special Mgt Zone) in the MK as determined by First Nations; needs to have limited scope to ensure completion; critical to have shared interests of resource industry, stakeholder groups, and government; best if there is a good baseline of biophysical data and traditional use information to work with, and existing gov't resource plans that can be evaluated; lessons learned about TK collection, accommodation of resource-use rights/values, information-sharing processes, etc. can be documented and applied elsewhere in the MK.
- UNBC project with Halfway River FN (Geographic Valuation System) tested methodologies for gathering, storing/retrieving and presenting First Nation resource values; tools like the GVS are more powerful because they rest within the community, and the government has come to the table to discuss it's potential use; the key to success is when First Nations can adapt WS tools for themselves to open up communication
- resource industry support/relationship-building agreements for TK collection can help in community capacity-building; this can include fly-over of traditional territories; on-site presentation by biologists and consultants to show development plans in person with Elders, First Nations to get on-the-ground information exchange or at least field demonstration of how industry is trying to address First Nations resource-protection issues (e.g. Canfor/Prophet River FN MOU; Kwadacha/Abitibi/Canfor MOU's); other support can be for training/education, monitoring, archaeological assessments.
- when asked about the appropriate mechanism for housing traditional knowledge data-base and technical support capacity, First Nation respondents indicated a preference for strengthening the existing regional/Tribal Council land-use offices (e.g. T8TA or KDC land-use offices) where much of the specialized capacity already exists including GIS staff for TK data-entry, information storage and presentation, community training and management of info-sharing protocols, and the ability to facilitate policy level and operational implementation for TK collection across individual First Nation territorial boundaries;

2.2.3 Involvement in Impact Assessment Processes

- Given federal legislation that specifies the incorporation of TK in environmental assessment (e.g. Canadian Environmental Assessment Act (2003), Species-At-Risk Act (2003), and Canadian Environmental Protection Act (1999), First Nations land-use managers recognize considerable potential for proposed resource development; guidelines for engaging in TK data collection have been provided by Environment Canada (see Appendix B2)
- Mining development is of particular interest of both the Kwadacha/KDC and Tsay Keh Dene with respect to hard-rock mineral extraction in areas including the Upper Gitaga, Frog and Churchill LU's and they have been actively involved in setting out terms for community participation in certain project reviews (e.g. Northgate Minerals - Kemess North Copper-Gold Mine project) including communication, environmental standards, mitigation & monitoring; there is concern about the rapid on-line staking of mineral claims in the northern M-KMA that prevents pre-tenure notifications regarding First Nations concerns;
- a high priority to many First Nations/Tribal Councils is the need to address cumulative impacts in intensive community-use and environmentally-sensitive areas; any proposed Cumulative Effects Management models or studies in the M-KMA need to include a TK component and process to enable meaningful community participation at the both the Screening & full Review stage;
- the CAD model is recognized as having a significant opportunity to integrate TK, and the next workplan for CAD implementation could include this component, providing suitable protocols are in place for information-sharing with the affected First Nation;
- the T8TA/First Nations are implementing a new Oil & Gas MOU that provides for a higher degree of review in 'complex consultation areas' that will require greater integration of TK; this will be particularly significant for Landscape Units covered in the M-KMA Oil & Gas Pre-tenure Plans.

2.2.4 Resource Planning, Consultations & Allocation

- to date the principal First Nation involvement in MK resource planning include the original Fort Nelson FN and Kaska Dene Council's inclusion of a Letter of Intent regarding the MKA Fort Nelson LRMP, **Treaty Negotiations and Interim Measures, as well as** the Kwadacha & Tsay Keh Dene involvement in the McKenzie LRMP that included MK Management Plan/Regulation and Landscape Unit Objectives;
- aside from comments at the M-KMA B/Committee level, there has been very limited **or no individual First Nation/Tribal Council participation or government-to-government consultation regarding** M-KMA resource plans, including Oil & Gas Pre-Tenure Plans, Park Master Plans, Recreation Plan, Wildlife Mgt Plan and Access Management Area; recent allocations (2004) of MK trust funds to support First Nations involvement in Oil & Gas Pre-Tenure, Wildlife Plans,

Mackenzie Recreation Management Planning demonstrate positive direction, and continued support for this work is essential to determine specific opportunities for TK integration;

- Wildlife management including annual allocations for sport and commercial hunting are a high priority for First Nations given their own sustenance, and commercial involvement in the industry. Traditional knowledge could be applied in the following ways:
 - identification of critical wildlife habitats, migration corridors and behaviours with emphasis in Special Management areas;
 - review of government commercial & sports hunting allocations for sustainable harvest;
 - annual First Nations' community-based meetings between BC Guide & Outfitters Association and active First Nation resource-users to discuss wildlife management issues in the M-KMA , possibly as a component of the proposed Peace Region Wildlife Mgt Committee;
 - enhanced participation in the Omineca Wildlife Committee providing there is dedicated capacity to enable First Nations involvement (e.g. Kwadacha, Tsay Keh Dene FN's).

2.2.5 Environmental Monitoring & Enforcement

- Environmental monitoring of resource development or community research purposes is seen as a key component of First Nations capacity building and is being implemented in varying ways through agreement between First Nations, government and industry (e.g. Oil & Gas MOU, Canfor/Prophet River Agreement, Kwadacha/Abitibi & Canfor Agreements, Health Canada/Tsay Key Dene); opportunities for TK sharing and resource mgt. skill transfer is being implemented with success, and forms a foundation for continued operational participation throughout other areas of the M-KMA ;
- A major issue with environmental monitoring is achieving consistency and competency of community monitors in gathering and presenting TK information; efforts are being made in Treaty 8 First Nations to provide standardized training

2.2.6 Implementation Capacity

- resources (financial, skill development, physical resources) are essential if First Nations are to become more fully engaged in joint decision-making with government; this issue is part of all government-to-government negotiations (Treaty, New Relationship)
- some capacity can be levered by individual First Nations/Tribal Councils with federal and industry sources – and as an extension of existing community initiatives providing incremental support is obtained and the necessary protocols are in place to support all aspects of TK integration (collection verification, storage/presentation, decision-making)

3.0 Overview of Government Policies on TK Integration

Since 2001, the current BC Government has been working with First Nations to provide economic growth and opportunities, especially in the resource development and management sectors. The Government has also committed to strengthening relationships with First Nations based on reconciliation, negotiation and constructive consultation on social and economic issues. In this study, we consulted with a wide range of relevant government resource agency personnel with responsibilities at the technical, management and/or policy-making levels. In Appendix C, we present summaries of those interviews including perspectives and suggestions for achieving “integration” of traditional knowledge in resource management and land-use decision-making within the MKA.

A number of BC Government service plans for the period 2007/08 – 2009/10 were also reviewed to ascertain the Government’s level of meaningful commitment to better relationships with First Nations, better recognize First Nations interests, and meaningfully engage with First Nations in the province’s economic development and social growth, and, in particular, information sharing.

Throughout the Province of BC Ministry service plans reviewed, the explicit recognition of First Nations traditional knowledge and its role in decision-making is very limited. There is also no recognition of First Nations own land and resource management needs, nor policy statements that articulate how these community needs or objectives will be addressed in higher-level resource plans. Some agencies, including the OGC and MSTA, and MoE (Collaborative Management Agreements) are addressing the need to incorporate traditional knowledge, while other agencies rely on general aboriginal consultation policies and procedures.

Most effort in government service plans is directed at achieving First Nations support for government and industry land and resource development initiatives, and is likely driven by Court-directed/legal obligations. Current policy appears, therefore, to be more focused on assimilating First Nations social and economic needs into the province’s economic strategy. There is little recognition of most First Nation’s view that traditional knowledge actually references a complete worldview, or cultural paradigm in the broader sense, and must be accommodated as a component of exercising Treaty and Aboriginal rights.

Shifting from a review of government policy statements to practice, we find there is a range of valuable experience, understanding and insight about the meaning of traditional knowledge amongst regional Managers. Many individuals we consulted recognize the potential of TK to enhance decision-making, and enable collaboration, once a relationship of trust has been established. They present valuable, concrete suggestions on how this new role can evolve within the context of ongoing government-to-government negotiations with First Nations, and recognize that the M-KMA is a logical place to test and evaluate this approach. They do however, express clear concern that regional government agencies must have a concomitant increase in financial capacity if New Relationship commitments, including TK integration is to be achieved.

4.0 Strategic Actions for TK Integration in Resource Management

Based upon our research on best practices, review of and consultations with First Nation, government and stakeholder organizations, a series of Strategic Goals and Actions have been proposed to achieve integration of Traditional Knowledge for the M-KMA . As stated at the outset of our report, we have endeavored to employ an interest-based approach that recognizes past and current efforts by First Nations, and stakeholder organizations to document and share knowledge for improved resource stewardship.

While a significant gap exists at the policy level of provincial resource management agencies in articulating the meaning, value and role of incorporating traditional knowledge, we found that many practitioners do appreciate its importance and wide scope of meaning to First Nations. Still, however, many consider First Nations consultation, traditional use studies and traditional knowledge as interesting, but primarily as “anecdotal” observations to be used in evaluating pre-determined short-term government resource planning, or management objectives, rather seeing its full potential to develop a greater understanding of ecosystem processes, and long-term community objectives. As we see from the proceeding discussion, guidance in this area can be drawn from federal environmental agency policy and legislation.

Our strategy, therefore, include initiatives that strive to:

- Increase ***understanding and communication*** about the meaning and role of TK to enhance resource stewardship decisions in the M-KMA
- Establish ***working relationships*** to enable information-sharing that link with ongoing First Nation negotiation processes that impact on M-KMA
- Address need to ***support existing and proposed First Nation TK initiatives*** that recognize their priorities and capacity limitations
- Strengthen ***development of TK practice and implementation capacity***, including capacity of the Board and government agencies to implement recommended strategic actions
- Seek to achieve ***cohesive government policy*** on the role and process of achieving TK integration through pilot-application in the M-KMA .

In trying to shape a foundation for TK integration, we present a layered strategy that focuses on the central issues of importance to First Nations then follow with a proposed set of objectives and strategic actions (or tactics) that bridge gaps and build capacity. Linkages are also made to existing strategies/tactics already supported by the M-KMA -B in an effort to bring consistency to its work. Some of the proposed objectives and strategic actions outlined in the following Strategic Action Tables (SAT's), have been also highlighted with shading to indicate a need for implementation support (i.e. policy, financial, staff or other resources), in whole or part, from government line agencies (see Section 4.1).

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ⁷	Time ⁸	Area ⁹
(A) Community Awareness & Consultation						
A.1 Strengthen First Nation Community Understanding of MK Research, Planning & Management	Utilize workshops and seminars to bring together interested parties including IAMC, identify key issues, and scope out a comprehensive research agenda for the M-KMA	Hold Workshop on First Nations Research Opportunities in the M-KMA	- MK Research results findings presented to FN community representatives - Agenda for Action is maintained to support community research goals	\$\$	M	M
	Convene annual formal meetings between the M-K Advisory Board and First Nations with traditional territories in the M-KMA	Present annual summaries of M-KMA B & Trust Fund projects in culturally-appropriate formats	Increased understanding of M-KMA B progress towards Strategic Plan & Business Plan Objectives	\$	S	N
(B) Relationship-Building for TK Integration						
B.1 Develop M-KMA B advisory capacity and specialized expertise for TK initiatives	Establish a process with BC and relevant First Nations to determine appropriate mechanisms for First Nations representation on the Board in a manner that is consistent with 'New Relationship' and that maintains effective decision-making arrangements for the Board (O/D)	<i>Establish a Traditional & Local Knowledge Working Group to develop policy on TK integration (including protocols for research, contract terms, priority setting)</i> <i>Initiate call for qualifications for TK Advisory Capacity on as-needed basis to support Board objectives</i>	Confidence of First Nations & Stakeholder Organizations that TK & IPR are Protected	\$	S	F
B.2 Ensure Protection of TK With Appropriate Oversight by the M-KMA B	Establish an Ad Hoc Committee of the Board, with additional members with specialized expertise in this area, to scope out models of protocols and agreements for the protection of intellectual property rights (K/U)	<i>Review existing consultation agreements & information-sharing protocols used by M-KMA -First Nations</i>	Design of an MK protocol for TK information-sharing that respects First Nation objectives & rights	\$	S-M	F

⁷ Cost Factor: \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

⁸ Implementation Time Factor: S – Short term ≤ 1 yr M – Medium term 1-2 yr, L – Long term 3 yr +

⁹ Area Factor (MK Landscape Units): N – Narrow range M – Moderate range F – Full range

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ¹⁰	Time ¹¹	Area ¹²
(B) Relationship-Building for TK Integration (cont'd)						
	Seek out partnerships with organizations that have successfully developed and implemented approaches for the protection of intellectual property rights (e.g., UN Special Committee) K/U	<i>Engage in dialogue with national & international bodies through organization membership, representation on committees</i>	External partnerships developed to support MK initiatives on protecting intellectual property rights	\$	S	n/a
B.3 Establish Working Relationship Agreements with First Nations/Rep Org's (KDC, T8TA)	Convene annual formal meetings between the MK Advisory Board and First Nations with traditional territories in the M-KMA (O/D)	<i>Determine First Nation annual priorities for TK capacity-building, research, data-base development</i>	First Nation priorities are addressed	\$	S	F
(C) Recognition & Support of Community Initiatives						
	Identify priority TK needs for planning & management-focus initial efforts in these areas					
C.1 Support for Community Strategic Land-Use & Resource Stewardship Plans		<i>Complete Inventory of First Nation Planning & Mgt Initiatives in the MK by Landscape Unit</i>	Ongoing tracking of FN Land-Use & Mgt Initiatives to support community objectives	\$\$-\$	S	F
C.2 Support Video Documentation of Elder TK		<i>Invite partnership proposals to enable Elder videographies on various aspects of TK</i>	Preservation of unique TK for later transfer	\$\$-\$	S-M	N
C.3 Support for TK data-base development for FNs		<i>Support development of a central TK storage system at T8TA/KDC</i>	Increased protection & use opportunities for TK	\$\$\$	M-L	F
C.4 Support First Nations Efforts to Protect Culturally-Sensitive Sites		<i>Provide funding to undertake First Nation Sacred Areas Identification & Area Protection Plans</i>	Minimized conflict with culturally-sensitive sites	\$\$\$	M	N
C.5 Support Identification of Economic Opportunities in MK Resource Management		<i>Undertake study to identify new opportunities for First Nations e.g. development in resource mgt</i>	Increased economic participation of First Nations	\$	S	M

¹⁰ **Cost Factor:** \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

¹¹ **Implementation Time Factor:** S - Short term ≤ 1 yr M - Medium term 1-2 yr, L - Long term 3 yr +

¹² **Area Application Factor (MK Landscape Units):** N - Narrow range M - Moderate range F - Full range

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ¹³	Time ¹⁴	Area ¹⁵
(D) Development of TK Practice & Implementation Capacity						
D1. Increase ability of M-KMA First Nation representatives to provide community input	Conduct a needs assessment to determine the adequacy of current staffing levels for the Board (OD/C)	<i>Provide First Nation liaison positions to support Board objectives with FN's</i>	Community input and direction is maintained	\$\$\$	M	M
D2. Develop common understanding of First Nations work in TK	Investigate and catalyze case studies to illustrate the role of TK in planning and management (KU/C)	<i>Document existing TK Best Practices in the MK</i>	Ongoing assessment of current TK practice, lessons learned & skill enhancement	\$	S	F
D3. Provide TK resource manuals to share amongst First Nations		<i>Support Development of a TK Practice Manual with</i>	Culturally-appropriate tool to support skill transfer in TK	\$\$	S-M	F
D4. Enable First Nations to consolidate & GPS existing TUS information		<i>Support proposals by M-KMA First Nations for TUS reviews & site mapping</i>	First Nation information base is internally reviewed for accuracy	\$\$\$	M	F
D5. Enable cross-sector learning & innovation with TK practices	Host a workshop to distill lessons from other jurisdictions and identify priorities for application of concepts in the M-KMA (KU/C)	<i>Hold a Regional Workshop in TK Practice featuring FN's work on TK with gov't agencies & industry</i>	Evaluate & adapt culturally-appropriate methodologies for TK use	\$\$	S	F
D6. Facilitate linkages and understanding of TK in resource evaluation tools		<i>Recommend review of current resource inventory tools & standards to promote TK integration</i>	Resource inventory practice has evolved to include Traditional Knowledge to enhance Western-Science based methods (e.g. as per RIC standards with TEM/PEM mapping)	SSS	L	F

¹³ **Cost Factor:** \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

¹⁴ **Implementation Time Factor:** S - Short term ≤ 1 yr M - Medium term 1-2 yr, L - Long term 3 yr +

¹⁵ **Area Application Factor (MK Landscape Units):** N - Narrow range M - Moderate range F - Full range

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ¹⁶	Time ¹⁷	Area ¹⁸
D7. Create awareness about utility of CAD as a tool to address FN needs	Pilot test the M-K Conservation Areas Design (CAD) as a potential tool to being new information into the decision- making process for the MKMA (R/MC) Pursue opportunities to incorporate TK into a revised CAD toolkit (RM/C)	<i>Organize a workshop with all interested First Nations land-use managers to highlight CAD</i>	CAD research outputs are understood and TK integration terms of reference prepared	\$	S	F
(E) First Nations Collaboration in M-KMA Resource Planning & Mgt Decisions						
E1. Increase awareness by government about value & importance of TK	Collaborate with IAMC on mechanisms to promote inter-agency coordination (RM/C)	<i>Convene a meeting with IAMC (Peace-Managers) to conduct policy review for TK Integration</i>	Policy gaps are overcome between resource agencies on TK recognition, use and sharing	\$	S	F
E2. Work towards collaboration in higher level resource plans with recognition of Treaty & Aboriginal rights	Encourage the review and update the Fort St. John, Fort Nelson and Mackenzie LRMPs by the end of the period 2006-2009. (MRA/C)	<i>Complete a Review of M-KMA LRMP's to assess achievement of First Nation objectives & further incorporation of TK as agreed by FN's</i>	New opportunities are identified to align Nations & government land-use mgt objectives	\$	S	F
E3. Strengthen linkages between Traditional Ecological Knowledge & Western Science	Identify and pilot the implementation of a suite of 'State of the M-KMA Indicators', including environmental, social and economic, by which to assess baseline conditions and trends in the M-KMA (MRA/C)	<i>Conduct research on State of the M-KMA indicators that address First Nation values & TEK integration (e.g. as per Env. Can Arctic reports)</i>	First Nation participation in State of M-KMA reporting is achieved with appropriate indicators	\$\$	M	F
E4. Strengthen monitoring & compliance role for First Nations in the M-KMA	Investigate innovative mechanisms for encouraging compliance through discussions with agency representatives, industry associations, First Nations, user groups, (MRA/C)	<i>Define opportunities for field-based employment as M-KMA First Nation environmental monitors with industry</i>	Capability to identify, and protect or manage First Nation values is increased	\$	S	N

¹⁶ **Financial Factor:** \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

¹⁷ **Time Factor:** S - Short term ≤ 1 yr M - Medium term 1-2 yr, L - Long term 3 yr +

¹⁸ **Area Application Factor (MK Landscape Units):** N - Narrow range M - Moderate range F - Full range

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ¹⁹	Time ²⁰	Area ²¹
(E) First Nations Collaboration in M-KMA Resource Planning & Mgt Decisions						
E4. Strengthen monitoring & compliance role for First Nations in the M-KMA		<i>Recommend First Nations Conservation-Officer position(s) dedicated to the M-KMA</i>	Supports regulatory compliance for fish & wildlife protection	\$\$	M-L	M
E.5 Support First Nations involvement in MK Parks & Protected Areas		<i>Facilitate Implementation of Guardianship for First Nations role in major Parks (e.g. Rocky Redfern/Keilly, PR Hotsprings)</i>	Increased First Nations capacity for Cultural & Environmental stewardship in MK Parks as per FN-CBA's	\$\$\$	L	M
E6. Apply community TK in M-KMA Wildlife Management Research		<i>Support proposals for TEK documentation in ecosystem studies (e.g. habitats, population changes, behaviours)</i>	Board policy developed to address need for TK inclusion in ecosystem research	\$	S	G
E7. Find systematic means of gathering field data about wildlife trends		<i>Investigate the feasibility of re-introducing a Resource Harvesters Survey program as per former Trappers Survey program as once run by MoE</i>	Increased collection of fur-bearer data and TEK from both Native and non-Native trappers	\$	M	N
E8. Promote dialogue on resource management between First Nations & stakeholder groups with interest in the MK	Bring together knowledgeable individuals and groups in a workshop format to inform discussions regarding a management framework for the M-KMA. Include key decision-makers from the M-KMA in these discussions (RM/C)	<i>Facilitate periodic exchange between First Nations and fish & wildlife stakeholder organizations on M-KMA management framework</i>	Common understanding of fish & wildlife management issues is achieved	\$\$	M	M

¹⁹ **Cost Factor:** \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

²⁰ **Implementation Time Factor:** S - Short term ≤ 1 yr M - Medium term 1-2 yr, L - Long term 3 yr +

²¹ **Area Application Factor (MK Landscape Units):** N - Narrow range M - Moderate range F - Full range

Strategic Objectives (2006-09)	Link to MK Strategic & Business Plan Actions (2006-09)	Strategic Actions	Performance Targets	Prioritization Criteria		
				Cost ²²	Time ²³	Area ²⁴
(F) Pilot Application of TK Integration in the MK						
F1. Demonstrate Best-Practices for TK integration with Pilot Project(s)	Experiment with the rationalization of resource management objectives by RMZ and sector in one pilot area of the M-KMA (RM./C)	TK Working Group to select a candidate Landscape Unit in the Special Management Zone, to test TK Integration best-practices including GVS	TK Pilot Project objectives defined and Terms of Reference agreed by First Nations partners	\$	S	N
		Select additional LU's to test other aspects of TK Integration issues (Protected Area/Park, Special Wildlands)	TK Application Projects objectives defined and Terms of Reference agreed by First Nations partners	\$	S	N
		Partner with First Nations & UNBC to develop project proposals & seek levered funding as an MK special project	Project Proposals Prepared and levered Funding secured	\$	S	N

²² **Cost Factor:** \$ < \$50K, \$\$ < \$50-100K, \$\$\$ > \$100 K

²³ **Implementation Time Factor:** S - Short term ≤ 1 yr M - Medium term 1-2 yr, L - Long term 3 yr +

²⁴ **Area Application Factor (MK Landscape Units):** N - Narrow range M - Moderate range F - Full range

4.1 Recommendations to Government for TK Integration in the Muskwa-Kechika Management Area

Some of the objectives and actions proposed in the foregoing Strategic Action Tables (shaded objectives), will necessitate support from other government agencies by the M-KMA B and its Knowledge & Understanding Committee. In making recommendations for TK Integration to government, Table 2.0 has been prepared with sub-headings to indicate TK Integration objectives (with reference to SAT's), recommended action items, and responsible agency(ies). The summary below, does not represent an exhaustive list, nor necessarily an accurate reflection of First Nation negotiation points, but rather a basis upon which to engage in a dialogue to support the general goal of TK Integration.

TK Integration Objective	Recommended Action Item	Lead Government Agency Responsible ²⁵						
		EMPR	OGC	ILMB	MOE	MFR	MSTA	MARR
Develop M-KMA B advisory capacity /specialized TK policy expertise (B1)	Seek interagency funding to support M-KMA B capacity for TK integration		2					1
Centralized TK Data-Base for FN's (C3)	Undertake inter-agency technical and financial feasibility analysis for GIS/GVS interface with First Nations data-base		2	1				
Support First Nations efforts to Protect Culturally-Sensitive Sites (C4)	Assign representative from Heritage Branch (MSTA) to collaborate with proposed TK Working Group in getting to record heritage sites of importance to interested FN's as per the Heritage Conservation Act		3	2			1	
Increase ability of M-KMA B First Nations representatives to provide community input (D1)	Facilitate proposal and funding request to support First Nations liaison capacity for the M-KMA B (note: link to B1)							1
Provide TK Resource Manuals to share amongst First Nations (D3)	Facilitate levered funding for development of this resource (e.g. SCEK funding through OGC)		1					

²⁵ It is acknowledge that principal review and coordination of these recommendations is through the Peace Managers Committee of the Northern Inter Agency Committee and suggested lead responsible agency will be subject to further examination.

Table 2.0 (cont'd) Recommended Government Agency Support for Strategic Objective Implementation								
TK Integration Objective	Recommended Action Item	Lead Government Agency Responsible						
		EMPR	OGC	ILMB	MOE	MFR	MSTA	MARR
Facilitate linkages and understanding of TK in resource evaluation tools (D6)	Facilitate review of Traditional Ecological/Knowledge component by <i>Resource Inventory Committee</i> & Standards development for use in TEM/PEM mapping through MK Pilot (building on use of TUS information)				1	1		
Increase awareness by government about value & importance of TK (E1)	Conduct policy review by all relevant government agencies on articulation of TK in Agency Service Plans	Lead by IAMC						
				1				
Work towards collaboration in higher level resource plans with recognition of Treaty & Aboriginal rights (E2)	(1) Update LRMP's with statements to recognize Treaty & Aboriginal rights according to asserted traditional boundaries (2) Establish protocol for First Nations to undertake review/update or articulation of land-use planning objectives by LU			2				1
Strengthen monitoring and compliance role for First Nations in the M-KMA (E4)	Review opportunity to create First Nations compliance and monitoring roles in M-KMA (Conservation Officer, and Parks)				1			
Find systematic means of gathering field data about wildlife trends (E7)	Investigate opportunity with M-KMA - First Nations to re-establish Resource Harvesters Survey program				1			
Demonstrate Best-Practices for TK Integration with Pilot Project in M-KMA (F1)	Champion a TK Integration Best-Practices Project with support of key resource agency staff commitment over 3 yr period			2	1			

5.0 Developing Case-Study Applications of TK Integration in the M-KMA

One of the stated objectives of the Knowledge & Understanding Committee in developing this TK Integration Strategy is to i) identify areas within the M-KMA for the collection of TK, and ii) to outline how these could be used as a test case for meeting the above objective of incorporating this knowledge into land management decisions. Based upon our consultations with First Nations, government and stakeholders, we proposed up to five Landscape Units for consideration as case-studies in TK collection and integration into land management (see Table 3.0):

In evaluating areas for a comprehensive evaluation of First Nations TK Integration in the M-KMA, we asked participants to consider multiple factors that would contribute to project success. The criteria that First Nations felt were most important include:

- Interest of at least one (or preferably) more First Nations to take ownership of the initiative for the purposes of supporting Community Land-Use Planning and other community development objectives
- Availability of existing Traditional Use Studies upon which to build further analyses, and/or enable digitization of sites
- Existence of higher level resource plans (LRMP, Pre-Tenure Oil & Gas Plan) to consider management objectives, but not limit how those landscape unit objectives could be modified to reflect First Nations traditional knowledge and objectives
- Ability to build upon existing Western Science studies and base-line research (fisheries, wildlife) where First Nations have already contributed, or can most effectively supplement with Traditional Knowledge
- Capacity-building support (training, staffing, equipment) to enable extension of the Geographic Valuation System methods already employed in the M-KMA
- Relative ease of physical access to enable cost-effectiveness for travel by community Elders and others
- An area where industrial development pressures exist but sufficient time is available (e.g. 3-5 years) to develop base-line of TK, information-sharing protocols, and pilot testing of collaborative decision-making
- Clear Executive level support by provincial resource Ministries to provide mandate, direction and capacity at regional management level to ensure likelihood of success
- Inclusion of third-party interest groups only as deemed appropriate and necessary by First Nations
- Development of project Terms of Reference by affected First Nations, including selection of external resource persons

Table 3.0 Candidate Landscape Units for Applied TK Research			
Candidate Landscapes	First Nation Interest	Reasons for Selection	Resource Information Baseline
(A) 8 Mile/Sulphur (entire landscape unit, see Fig. 2)	Kaska Dena First Nations Fort Nelson First Nation	<ul style="list-style-type: none"> • Shared First Nations territory with significant range of values • Multiple industrial values (see Table 4.0) – timber, gas • Significant multiple non-industrial values (see Table 4.0) wilderness, recreation, guiding • First Nations Culture & Heritage Protection Strategies defined in Fort Nelson LRMP • Pre-Tenure Plan complete • Relative ease of access from Alaska highway 	<ul style="list-style-type: none"> • Traditional Use • Archaeological • Stone Sheep Study (in progress) • Caribou Study, 2004 • Fort Nelson LRMP • OGC Pre-Tenure Plan • Industry Biophysical • Stakeholder local knowledge
(B) Muskwa-West (entire LU, see Fig.3)	Kaska Dena First Nations Fort Nelson First Nation Prophet River First Nations	<ul style="list-style-type: none"> • Shared traditional territory by Treaty 8 & Kaska Dena First Nations with significant & current use • Very high gas, mineral & timber values (see Table 5.0) • Active trappers could supply TK • Considerable experience of individual FN's as guides/packers • Critical wildlife habitats & environmentally sensitive areas (e.g. Stone sheep) 	<ul style="list-style-type: none"> • Traditional Use Studies • Fort Nelson LRMP • Stone Sheep study also applies to this LU • Industry assessments
(C) Besa-Prophet (entire LU, see Fig.4)	Fort Nelson Prophet River Halfway River First Nations	<ul style="list-style-type: none"> • Shared traditional territories of Treaty 8 First Nations • Very high gas value, moderate mineral, critical wildlife (see Table 6.0) • Considerable First Nations with TK from history in guiding • Proximity to high value wilderness, & recreation sites create economic opportunities in applying TK 	<ul style="list-style-type: none"> • Predatory-Prey Relationship Study/UNBC • TUS studies • OGC Pre-tenure • Fort Nelson & Fort St. John LRMP
(D) Graham-Laurier/Upper Ackie/McCusker Cones LU (see Fig 5.)	Halfway River Prophet River First Nations Tsay Keh Dene FN Kwadacha FN	<ul style="list-style-type: none"> • Applied research in TK documentation/presentation (GVS project) • UNBC partnership • Good baseline of fish and wildlife information • Completed resource plans • Industry support for research 	<ul style="list-style-type: none"> • TUS mapping • GVS project (2004-07) • Graham Caribou study (2005)

Figure 4 Sulphur/8 Mile Landscape Unit of the M-KMA

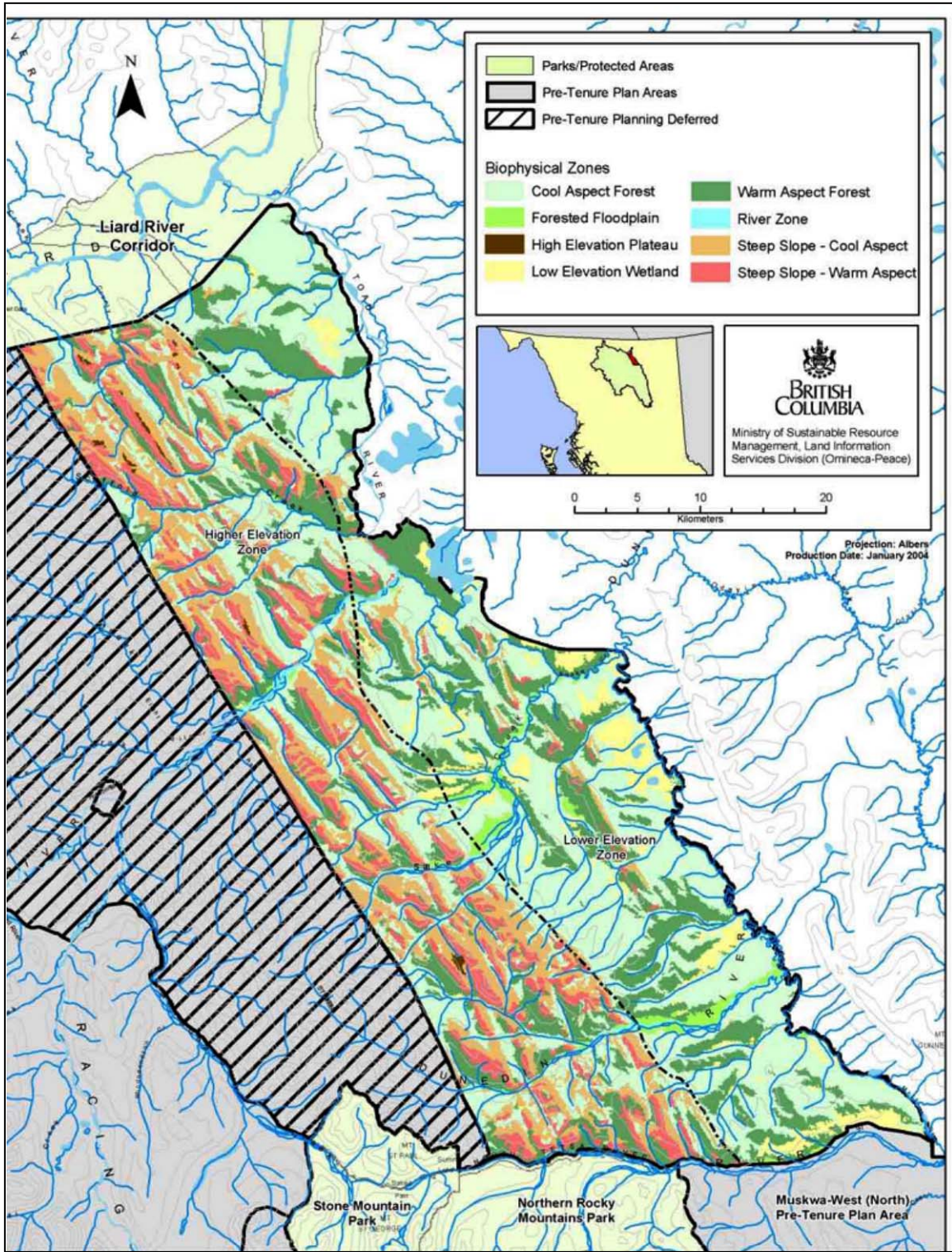


Table 4.0 Resource Values in the Sulphur/8 Mile Landscape Unit

Key Resource Values	Description	
	Higher Elevation Zone	Lower Elevation Zone
Wildlife	<ul style="list-style-type: none"> - ungulates: moose, elk, deer and caribou. Of particular management concern is the resident Stone's sheep and mountain goat population - predators: e.g. wolf, grizzly bear, wolverine - furbearers: e.g. wolverine, lynx, marten, beaver - studies: an active (as of September 2003) caribou study encompassing the southern portion of the pre-tenure plan area; Stone's sheep studies are being initiated in 2004 	<ul style="list-style-type: none"> - ungulates: moose, elk, deer and caribou. predators: e.g. wolf, grizzly bear, wolverine - furbearers: e.g. wolverine, lynx, marten, beaver other: black bear - studies: an active (as of September 2003) caribou study encompassing the southern portion of the pre-tenure plan area
Fish	<ul style="list-style-type: none"> - all major sport fishing species (e.g. arctic grayling, mountain whitefish, rainbow trout) present in major watersheds 	<ul style="list-style-type: none"> - all major sport fishing species (e.g. arctic grayling, mountain whitefish, rainbow trout) present in major watersheds
Oil and Gas	<ul style="list-style-type: none"> - potential rated as medium to high - existing Alaska Pipeline Right-of-Way in northeast corner of pre-tenure plan area²⁵ 	<ul style="list-style-type: none"> - potential rated as medium to high - existing Alaska Pipeline Right-of-Way in northeast corner of pre-tenure plan area²⁶
Visual Quality	<ul style="list-style-type: none"> - Visual quality for recreational river boating (private and commercial) from all navigable watercourses, particularly within the Toad River Corridor Special Management Zone - Visual quality along the southern plan boundary adjacent to the Alaska Highway Corridor Special Management Zone - Visual quality along the northern plan boundary adjacent to the Liard River Corridor Protected Area 	<ul style="list-style-type: none"> - Visual quality for recreational river boating (private and commercial) from all navigable watercourses, particularly within the Toad River Corridor Special Management Zone - Visual quality along the southern plan boundary adjacent to the Alaska Highway Corridor Special Management Zone - Visual quality along the northern plan boundary adjacent to the Liard River Corridor Protected Area

Figure 5 Muskwa West Landscape Unit of the M-KMA

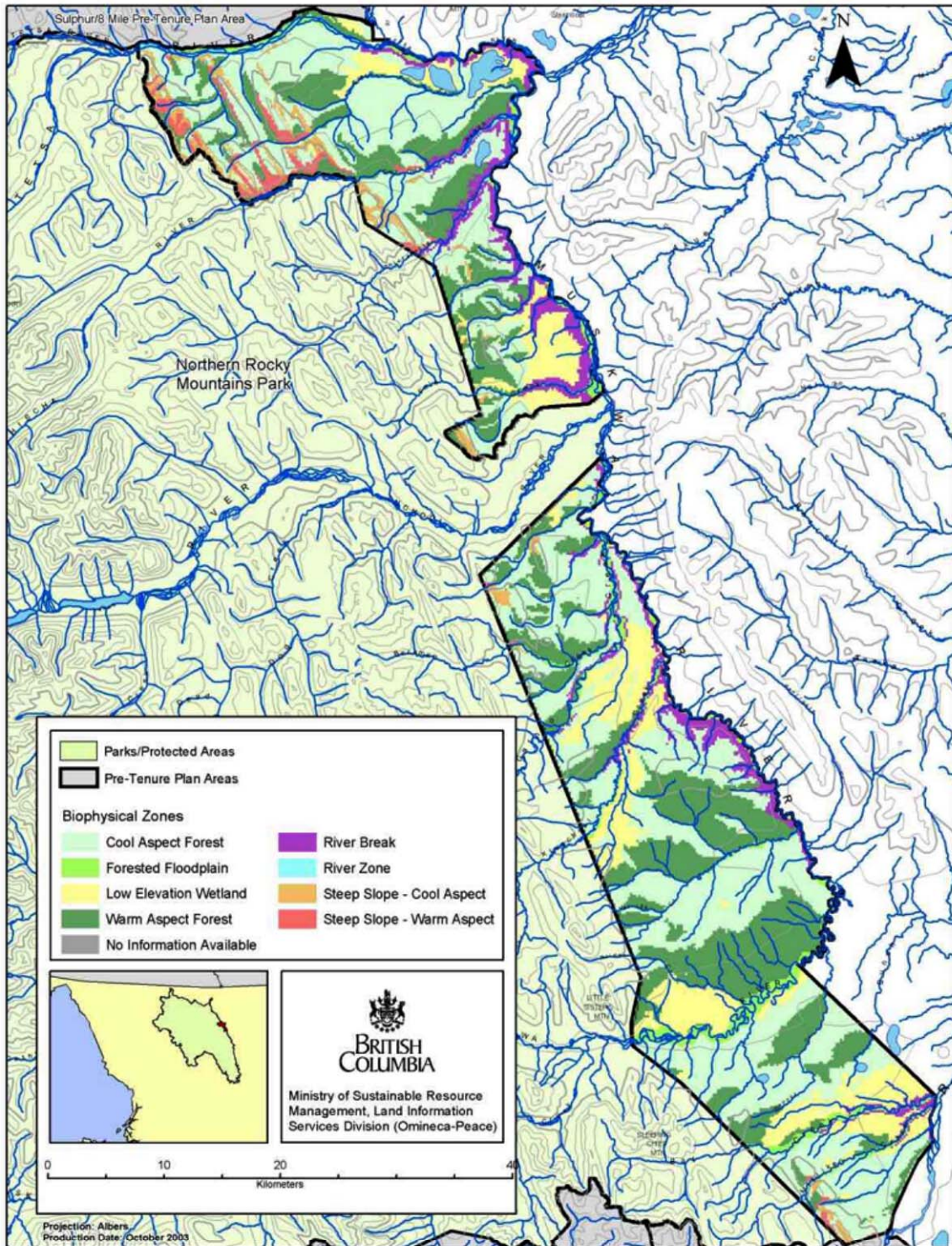


Table 5.0 Resource Values in the Muskwa/West Landscape Unit

Key Resource Values	Description	
	Higher Elevation Zone	Lower Elevation Zone
Other Industrial Uses		
Mineral Exploration	- low - moderate metallic mineral potential. Moderate industrial mineral potential	- low - moderate metallic mineral potential. Moderate industrial mineral potential
Forestry	- approximately 13,500 hectares of merchantable timber (entire Sulphur/8 Mile area)	- approximately 13,500 hectares of merchantable timber (entire Sulphur/8 Mile area)
Trapping	- trappers operate in the pre-tenure plan area - have trapline cabins and trail access network	- trappers operate in the pre-tenure plan area - have trapline cabins and trail access network
Geothermal	- high potential surrounding the Toad River Hotsprings; medium potential over most of the remainder and low potential near the eastern boundary.	- low potential
Non-Industrial Uses		
First Nations	cultural and heritage values. traditional use sites and trails	cultural and heritage sites traditional use sites and trails
Guide Outfitters	- guide outfitters operate in the pre-tenure plan area - have base camps, airstrips, cabins, horse corrals and trail access network	- guide outfitters operate in the pre-tenure plan area - have base camps, airstrips, cabins, horse corrals and trail access network
Range	- range tenures associated with First Nations, guide outfitters, commercial horse operators, non-commercial hunters, trappers and recreationalists	- range tenures associated with First Nations, guide outfitters, commercial horse operators, non-commercial hunters, trappers and recreationalists
Commercial Backcountry Operators	- pending commercial backcountry tenures (under consideration as of Spring 2004)	- pending commercial backcountry tenures (under consideration as of Spring 2004)
Recreation	- both resident and non-resident activities: Includes: hiking, ATViing, river boating, horse riding, resident hunting	- both resident and non-resident activities: Includes: hiking, ATViing, river boating, horse riding, resident hunting
Wilderness	- high wilderness values; ecologically intact, remote and variety of viewsapes	- high ecological integrity, variety of viewsapes

Figure 6 Besa/Prophet Landscape Unit of the M-KMA

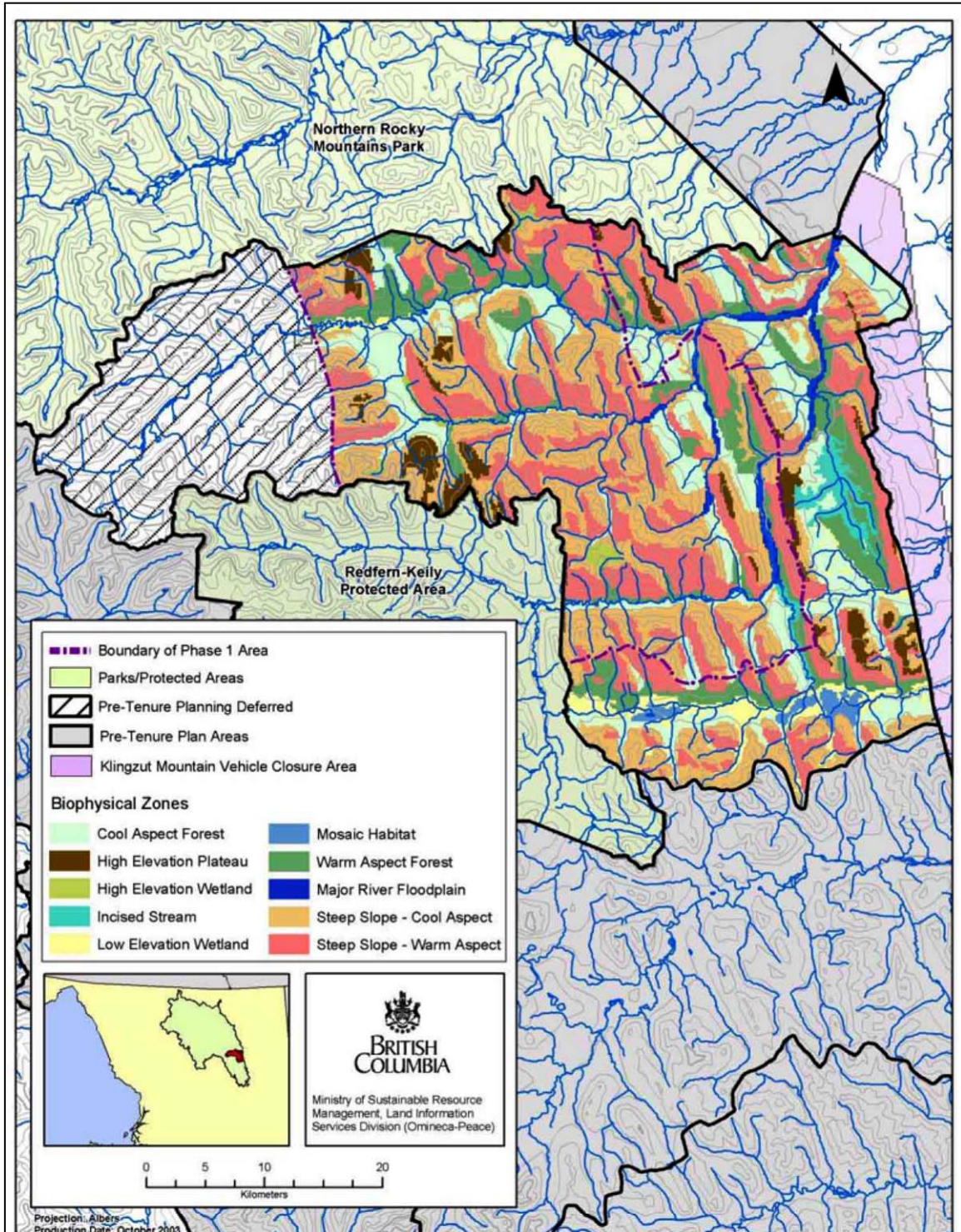


Table 6.0 Resource Values in the Besa-Prophet Landscape Unit

Key Resource Values	Description
Wildlife	ungulates: moose, elk, caribou, Stone's sheep, mountain goat, deer predators: wolf, grizzly bear, wolverine furbearers: wolverine, lynx, marten, beaver studies: several active (as of September 2003) wildlife studies in the pre-tenure plan area
Stone's sheep	critical mid to late winter habitat is located predominantly within the steep warm aspect and high elevation plateau biophysical zones
Fish	all major sport fishing species (e.g. Arctic grayling, mountain whitefish, rainbow trout) present in major watersheds, however western portion of plan area is inaccessible to fish movement Bull trout populations are likely migratory; spawning sites in the plan area
Oil and Gas	potential rated as high to very high
Other Industrial Uses	
Mineral Exploration	low to moderate mineral potential (possibly higher for industrial minerals) recent valid mineral tenures along the north side of Prophet River
Forestry	forest stands considered to be uneconomical at this time, due to stand types, total volumes produced and tree size
Trapping	trappers operate in the area and have trapline cabins and a trail access network
Geothermal	parts of the area have high geothermal potential, as demonstrated by Prophet River Hotsprings (Prophet River Hotsprings Park is excluded from the pre-tenure plan area)
Non-Industrial Uses	
First Nations	cultural and heritage values traditional use sites
Guide Outfitters	guide outfitters operate in the area and have base camps, airstrips, cabins, horse corrals and a trails access network
Range	range users include First Nations, commercial horse operators, non-commercial hunters, trappers and recreationists; range tenures associated with guide outfitters
Recreation	both resident and non-resident activities, including hunting, camping, fishing, hiking, snowmobiling, wildlife viewing the Redfern Trail, a M-KMA designated access route, runs the length of the Nevis/Buckinghorse valley across the plan area the <i>Eastern Rockies High Trail</i> and the <i>Bedeaux Trail</i> cross the area Prophet River Hotsprings Park
Commercial Recreation	there is potential for licensed commercial recreation activities in this area
Wilderness	Prophet and Besa drainage systems Very high wilderness values; ecologically intact, remote and variety of viewsapes Nevis drainage system Existing motorized access route and disturbance diminish wilderness values

Figure 7 Halfway-Graham Landscape Unit of the M-KMA

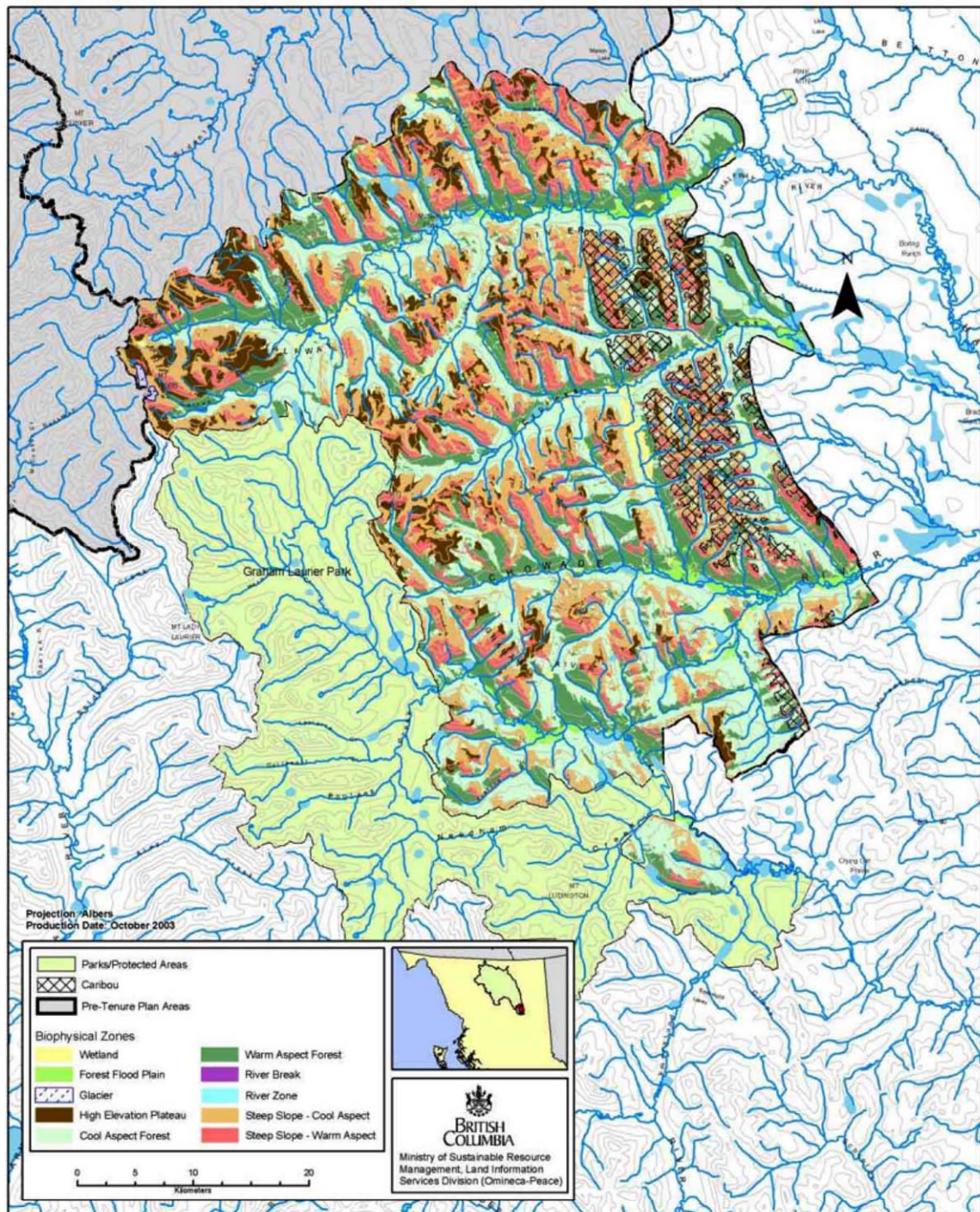


Table 7.0 Resource Values in the Halfway-Graham Landscape Unit

Key Resource Values	Description
Wildlife	<ul style="list-style-type: none"> - ungulates: moose, elk, caribou, Stone’s sheep, mountain goat, deer - predators: e.g. wolf, grizzly bear, wolverine - furbearers: e.g. wolverine, lynx, marten, beaver - stable population of plains bison inhabit the northern portion of the area in the Halfway River drainage
Fish	<ul style="list-style-type: none"> - Bull trout Wildlife Habitat Areas (WHA) - all major sport fishing species (e.g. arctic grayling, mountain whitefish, - rainbow trout) present in major watersheds - resident bull trout upstream of Christina Falls on the Graham River
Caribou Biophysical Zone	<ul style="list-style-type: none"> - Caribou Zone delineating caribou critical winter habitat along the eastern edge of the pre-tenure plan area
Oil and Gas	<ul style="list-style-type: none"> - potential rated as high to very high
Other Industrial Uses	
Mineral Exploration	<ul style="list-style-type: none"> - mineral potential varies from low to high Significant lead-zinc mineralization in the Robb Lake area has been explored intermittently since the 1970’s and mineral tenures exist in this area
Forestry	<ul style="list-style-type: none"> - merchantable timber in the valleys and foothills of the southern portion of the pre-tenure plan area
Trapping	<ul style="list-style-type: none"> - trappers operate in the pre-tenure plan area – have trapline cabins and trail access network
Geothermal	<ul style="list-style-type: none"> - moderate low temperature potential
Non-Industrial Uses	
First Nations	<ul style="list-style-type: none"> - cultural and heritage values & traditional use sites
Guide Outfitters	<ul style="list-style-type: none"> - guide outfitters operate in the pre-tenure plan area – have base camps, airstrips, cabins, horse corrals and trail access network
Range	<ul style="list-style-type: none"> - range tenures associated with First Nations, guide outfitters, commercial horse operators, non-commercial hunters, trappers and recreationists
Recreation	<ul style="list-style-type: none"> - both resident and non-resident activities. Includes: hiking, ATVing, river boating, horse riding, resident hunting the - <i>Historic High Trail</i> present in pre-tenure plan area the <i>Peace River-Yukon Heritage Trail</i> located in the Cypress River drainage designated motorized access routes in the Chowade, Halfway, Graham and Cypress drainages
Commercial Recreation	<ul style="list-style-type: none"> - there is potential for licensed commercial recreation activities in the pre-tenure plan area
Wilderness	<ul style="list-style-type: none"> - good ecological integrity but existing motorized access routes and disturbances diminish wilderness values

6.0 Best Practices for Information Sharing

6.1 Highlights of Traditional Knowledge Integration Practice

New TK integration initiatives to support First Nation resource management objectives in the MK should build upon the solid foundation of experience that exists within the MK, in BC and throughout North America. where TK has been effectively applied to satisfy multiple objectives: other examples include:

- **“Geographic Valuation System” (GVS) – UNBC/Halfway River First Nation, 2002-03:** this MK-supported participatory research project had very effective collaboration with Halfway First Nations community-members, and led to development of open-source software for TK presentation and decision-making
- **Dene Cultural Institute Pilot Project:** The Dene Cultural Institute Pilot Project is one example of a participatory community project designed to document the traditional environmental knowledge of the people of Fort Good Hope and Colville Lake. For the past two years, a team of local researchers, a biologist, and an anthropologist have been developing methods to document TEK. The ultimate goal of the research is to integrate TEK and western science for the purpose of community based natural resource management. The pilot project has only begun to uncover the wealth of ecological information available and to understand the traditional system that governs Dene use of natural resources. However, these preliminary results do reveal important similarities and differences between Dene TEK and western science. They also identify some of the problems of trying to integrate the two knowledge systems (Document: <http://www.carc.org/pubs/v20no1/dene.htm>)
- **“Yukon/BC Traditional Knowledge Initiatives”** – there are successful co-management examples in the Yukon which include Parks and Protected Areas, wildlife management (Porcupine Caribou Herd), Ecological Reserves efforts include development of community-based TK coordinators; the Kaska Nation has focused considerable effort in TK collection, application to resource planning, youth education and skill development including training & designation of TK coordinators.
- **“Focal Species Habitat Suitability Models”:** **Round River Conservation Studies, 2003** that applied traditional and indigenous Ecological Knowledge as part of spatial habitat analyses, including information on species distribution, ecology and habitat use patterns – *A Conservation Area Design for the Territory of the Taku River Tlingit First Nation: Preliminary Analyses and Results*. A Report prepared for the Taku River Tlingit First Nation by Round River Conservation Studies
Documents: <http://roundriver.org/TAKUCADrpt.pdf> & <http://roundriver.org/TRTVDMSummary.pdf>

- **“TEK Vitality Index”** – Research by TerraLingua: development of a locally-appropriate, globally-applicable data instrument that can be used to measure and assess the vitality status of TEK (i.e. inferable trends of retention or loss over time) within selected groups and allow for relative comparisons of that status among groups at different scales of inclusiveness (Contact Stanford Zent:
Powerpoint : www.csin-cid.ca/downloads/ind_presentation1.ppt
- **“State of Great Lakes Conference (SOLEC 2000-2006)”**: series of annual conferences focusing on managing Great Lakes Ecosystem health with emphasis in applying TEK; state-of-the-art work profiled include Anishinabek/Ontario Fisheries Council and The Haudenosaunee Environmental Protection Process (Contact; Deborah MacGregor: Environment Canada:
Presentation: http://www.csin-rcid.ca/downloads/ind_presentation2.pdf

6.2 Lessons from the Halfway River/UNBC Traditional Knowledge Study

Given its potential for further application as a TK collection, presentation and planning tool, the participatory research done on development of the Geographic Valuation System, the project researchers Nancy Elliot and Erin Sherry from UNBC offered the comments on a range of topics.

TK info collection or related inventory

- The tradition land use and occupancy studies were good for what they were intended for: a starting point for discussion
- The weighted model doesn't contribute to the process of how decision-making occurs in First Nations' systems
- With no background in contemporary mapping, the whole process is outside their realm of experience
- There is a need for commitment of money for information collection and training
- How to collect the information when the transmission is observation- based; methods are often too top down and field-based work is often expensive and difficult to budget for
- Community to maintain a role as a data collector – hard for First Nations to refuse the oil and gas dollars and it further reduces capacity within the community when limited number of skilled people are assigned to other work
- Many people (erroneously) assume the TUS is traditional knowledge
- The best data is often not available
- There are other open source products that can assist people
- The multi-media approach will increase; the recent popularity of *YouTube* demonstrates this; digital cameras are decreasing in cost, same with GPS; all of this is becoming increasingly accessible
- The Taku River approach (“Our land Our River” publication) works well because it is also a community-based tool
- The ones that have worked well were the collaborative projects

- Improve on group mapping exercises; don't just use 2D maps, but do land-based activities, use pictures, hold meetings at the site where the issue or development is happening

TK data storage, presentation and retrieval

- Methods involve integrating geospatial tools with TUS and map biography collection (including existing MOF TUS information and new TK information gathering)
- MOF TUS: information was categorized by the MOF and did not fit well with the knowledge because it was a very top-down approach – was used to make decisions on behalf of First Nations – they were good for historic documentation but not for people who live on the land
- Buffering points and lines doesn't capture the connections – tends to oversimplify the knowledge
- Many TUS are not being used by First Nations because they are not oral
- The research that produced the GVS include testing how people responded to different standard ways of representing knowledge including weighted knowledge; much of it was too abstract and hard to update, people didn't understand
- In the GVS, multimedia files were used including audio and video files; the project included training to provide independence over the information gathering; uses a hyperlink to call up videos about different places on the landscape; the principle behind it involved putting the people before the map; it has CAD-like information products – using TK as a layer – try to take the knowledge and apply it to the landscape
- The GVS is open source code to that it is accessible by all; it is what the community (Halfway) needed to communication internally and externally
- GVS outputs a product that is an “area of concern” and stimulates a conversation between the First Nations and industry or government
- Information sharing; First Nations need to decide what they want to share
- Community access to the internet is a challenge; also keeping the information up-to-date; the onus would be on the First Nations to upload information and it may be difficult for them to make deadlines
- GVS presents an opportunity; can apply it to other communities; the linkage to government (feeding information to government) may be a secondary benefit
- CAD – can validate it over time and can use GVS as a tool to do that
- Confidentiality, and the potential for stealing information; the government operates on the internet, but GVS is on the intranet due to security concerns; Halfway River saved it on an external hard drive and locked it up
- The way that data is stored changes all the time so how do you convert it (eg analogue vs digital)? need to make sure the raw information is archived properly
- Could misinterpret the shared spatial information - TK is a process – one consultation with a community may not be enough – the knowledge come out in bits over time – need to revisit issues and sites
- Tools like the GVS are more powerful because they rest within the community, and the government has come to the table to discuss it's potential use

- The key to success is when First Nations can adapt WS tools for themselves to open up communication
- Tendency is to “remove the knowledge from the knowledge holder” and this cannot happen; this goes back to understanding the characteristics of TK systems; TK isn’t just information or data, it includes belief, a social structure and much more
- There are risks in an over reliance on written versus oral communication; they represent two knowledge systems; therefore there is a risk in making a database out of TK; alternatively, the GVS always attributed knowledge to a person which makes it transparent and you can validate the information
- There are risks/issues around updating the database and how to do it
- There is a need for serious discussions of ethics, intellectual property rights, acknowledgement and sharing of TK; for example there are communities that don’t even share information to their own people because they are not deserving (eg drug or alcohol abuse); in order to get the information you have to be responsible; so resource managers need to accept a vague answer sometimes and need to respect that

Impact assessment processes

- the tool is good for dealing with sensitive areas, and allows for conducting cumulative impact assessments which the government has been poor at doing; GVS allows for industrial development to be incorporated with TUS (not the other way around!) and can develop feedback opportunities from First Nations – information is power
- Scale is an issue – knowledge is collected at a local scale and planning happens at a large scale so there is a gap between the two; planning happens on a shorter cycle (3-5 years) while TK is multi-generational

Resource Planning Processes

- Misuse of information; keeping First Nations engaged in decision-making; sharing spatial information with no knowledge attached to it
- To have a working GVS model in a community you would need some certainty over land use decisions
- Attributing equal respect to both TK and WS rather than integrating one into the other is a key to applying it in resource planning
- Potential for eco-cultural tourism development to bring employment to communities; e.g., the project on the Police Trail cultural use study with the GVS; conduct trail project on areas with a common interest to preserve culture and teach youth at the same time
- Consultation using TUS has resulted in taking the information out of context
- Examples include Kaska, and initiative in the Skeena region; First Nations are fully engaged, unlike in the LRMPs
- Any type of shared decision-making is an opportunity
- There are opportunities for land use planning, and collaborative decision-making; for example the Carrier Sekani Tribal Council this year has started putting out a Land Use Planning Newsletter that talks about coordinated initiatives

Working relationships

- The GVS operates on the principles that the traditional decision-makers need to be involved and the right people in the community need to be involved (traditional leaders and elected)
- teaching industry who the First Nations are without going to the sites all the time because not every one is “prepared” to obtain some of the knowledge (Beaver society); don’t want the GPS points getting out to the public
- In the development of tools like the GVS we want to stimulate community discussion with industry
- Time limits are too short; oil and gas are the worst for short timelines usually 10days – First Nations don’t have the capacity to deal with this, and you can’t get just anyone to work with TK; the existing appeals process has not teeth
- Worldview filters are applied by non-natives and creates judgments
- There is a need to develop those personal relationships
- Connections often happen at a “high level” but cannot forget those who are “on the ground” ; it’s those small personal level experiences leads to bigger things
- Litigation prevents First Nations from working together with government; the government orientation is consultation rather than relationship building
- In the M-K there are opportunities for industry and First Nations to work with communities and to work out problems
- Politics within First Nations communities can be unstable
- Working with only the elected leadership to the exclusion of hereditary leadership; both are important and there are different ways of engaging them
- The New Relationship provides little direction and there are different perspectives on what it means;
- Government has to recognize their power in working with these small communities (like a big brother and a little brother); small communities have a lots of problems that need to be recognized
- Need to manage risks of assuming a common understanding when one doesn’t exist; for example, the term “resource management” – First Nations may use it but they don’t believe it, they believe in managing people’s behaviour, not the environment; there is a need to take the time to understand each other
- ACUNS, the Dene Cultural Institute, VGFN have examples of intellectual property protocols; each one needs to be tailored to the community and can be adapted to resource management as long as it is specific to the situation
- The term “integration” is not really reflective of what should be happening; it’s more about relationships
- Bring communities together to solve an issue

TK implementation capacity

- GVS can be used as an education tool – so much more than resource management
- Monitoring is a huge area of opportunity
- Development of cultural criteria and indicators
- Most resource managers are not aware of TK/WS differences

- Capacity around scientists and resource managers; they need the opportunity to sit with First Nations and spend time on the land with them
- The quality and skills involved make the difference; not their position in their organization, but who they are; they need to be empowered in that position
- Story-telling is lost on many resource managers; skills are needed to understand the value of them; use community translators to do the cultural translation; GVS and Delphi are good tools but you still need the people involved
- There are opportunities for capacity building

Research suggestions

- Relating to the GVS, it is still just a basic tool and more work could be done on it:
- More interaction and testing; interface with cultural and individual perspective; make it more auditory-based (like MSVista – you could talk to it) data entry and you could potentially try to use analogue recording (tapes) and transfer the information into a digital format this way
- Databases and TK classification systems; create an environment that they can build on
- Visualization tools, the technology is changing – avenues for the future – could link GVS with 3D visualizations and produce output that people can use
- Re-educating non-First Nations; giving up that information is power; “allowing” First Nations to take control of the information and make decisions
- TK collection should be left to the First Nations themselves to determine (priorities, approach); with the help of skilled people, they should document it on their own and to keep it a “living” system in that in doing so the knowledge is continuously transmitted through people and is a source of cultural revival as well as decision-making
- Further development of tools like the GVS which allow the community to control TK themselves and to be used as launching points for further discussion
- A project could pilot the GVS and place it in different contexts – such as referrals, consultation, and other resource uses, discussions and problem solving to address issues, challenges and risks
- Some effort could be placed into how to best represent and communicate TK to non-First Nations; GVS could be used as a communication tool for cross-cultural learning and exchange

Other Comments

- Overall, past efforts have been poor despite good intentions
- There has been appropriation of knowledge
- TK “integration” has typically resulted in the sublimation of the knowledge within Western Science; complexities of TK are lost and over simplified
- Delphi, GVS, C&I: address barriers related to communication and participation

- There are successful co-management examples in the Yukon which include Parks and Protected Areas, wildlife management (Porcupine Caribou Herd), Ecological Reserves
- A good starting point is to focus on a specific area and the co-management model is a good way to address the issues
- Co-management elaborates and evolves; takes time and needs an adaptive management approach (learning by doing); this is critical to TK integration; usually developed from a crisis (like development pressure)
- The MK could be an opportunity to build co-management into the area
- Resolution of land claims promotes integration of knowledge systems
- Retention of the language; it need to be transmitted within the community; acculturative pressures need to be combated and are fatal to the culture
- T8 Area would present a good launching point for developing integration
- TK and WS are complimentary; rather than integrate, amalgamate; they operate a different scales; the trick is to find the point (in resource management processes at which the two connect
- For example, get hunters to work with an issue and solve a problem using the TK expertise
- Cultural revitalization for youth and communities (this is a need and an opportunity); for example the Chunt'oh Society (TI'azt'en Nation) Camps has traditional knowledge as part of their core curriculum
- The M-K board has the opportunity to play a role in applying this dual purpose of land management and education; very attractive to communities.
- It is important to shy away from top down initiatives and focus on locally based initiatives
- Risk that there will be a lack of appreciation of time and resources put into culturally-based work; these projects are often under-funded and tend not to support the multi-faceted benefits that communities are looking for (which reflects the First Nations holistic approach); it's a matter of understanding other goals and benefits

6.3 Intellectual Property Rights and Protocols

Over the last decade, many natural resource industries and land and resource management government agencies in British Columbia have developed an appreciation for the value and importance of integrating First Nations perspectives into the planning and decision-making. This shift is reflected in the numerous and increasingly prevalent agreements between First Nations and government, non-governmental organizations and/or industry stakeholders. This perspective is also clearly reflected by the comments from non-Aboriginal participants on this project. Government and industry professionals want to be good stewards of BC's natural resources, they accept that First Nation's knowledge plays an important role in accomplishing this, and are interested in working towards a common solution for knowledge and benefits sharing.

However, overcoming the lack of trust in sharing traditional knowledge is a significant challenge. Part of this may, in fact, not be a trust issue, but rather simply a reflection of the importance that communities place on having formal protocols to determine what information is shared, and with whom; other misgivings are found amongst government and industry resource management professionals, many of whom recognize that they don't really understand the full potential of traditional knowledge as applied to resource stewardship, and accept that there is a lot for them to learn about it.

From an intellectual property perspective, the lack of trust, or perhaps lack of certainty, may well be justified. Aboriginal people face real risks of losing control and influence over the use of their knowledge if their information is open for public access. As stated by Brascoupe and Endemann (1999):

Public disclosure of traditional knowledge has the potential to jeopardize an Aboriginal community's ability to obtain protection under Canada's [intellectual property] laws. This is because knowledge that is disclosed may no longer qualify for [intellectual property] protection because it is in the public domain... Even though the principles for sharing traditional knowledge with individuals, companies or organizations may be similar, the legal approach used may vary ..pg.4

This challenge is further complicated when it is considered that Western-based legal instruments (patents, trademarks etc.), which are typically used to protect intellectual property, can often be in contradiction with indigenous customary laws. Customary law refers to aspects of indigenous traditional knowledge systems that include rules and protocol for knowledge protection. Current intellectual property laws are rooted in protecting *commercial* interests however the evolution of protecting indigenous traditional knowledge involved the development of a "rights"-based approach (Mann, 1997). This is particularly the case with "those laws that acknowledge proprietary rights to the individual rather, than the collective, which in itself can erode the cultural integrity of traditional knowledge" (Hanson and VanFleet, 2003). Therefore the act of protecting knowledge using existing Western-based legal tools could essentially erode the very traditional knowledge system that it attempts to protect.

The purpose of these laws is to encourage individuals and corporations to create artistic works and to invest in new innovation. In the case of traditional knowledge, the primary goal of Aboriginal people is usually preservation rather than innovation. Indigenous knowledge frequently has intangible and spiritual manifestations that relate to a community or nation rather than to an individual (Brascoupe and Endemann, 1999)

Analysis into legal tools, systems and protocols with respect to protecting indigenous traditional has its roots in the international arena. The 1992 Biological Diversity plays a pivotal role in establishing global recognition for indigenous knowledge and its need for protection. While existing Intellectual property laws can provide some protection in some circumstances, depending on the nature of the knowledge being protected, they may provide limited utility for many applications of TK particularly in the context of natural resource planning and decision-making where the knowledge may not always have a commercial value.

The intention of this section is to provide an overview of the existing legal tools for intellectual property, innovative ideas where further exploration is warranted, as well as currently implemented practices used to protect traditional knowledge in various situations. There is a list of Best Practices that outline the essential components of protecting Aboriginal knowledge. The following overview should be used as a tool for forming a general intellectual property strategy to protect and sustain a community's knowledge. Any intellectual property agreement or statute should not be pursued without consulting appropriate expert advisors, legal or otherwise, particularly when there are constitutionally-protected Treaty and aboriginal rights involved (see Appendix D1)

6.4 Components of IPR Protection

Existing intellectual property laws can be characterized by their various components. The following table 8.0, summarized from Brascoupe and Endemann (1999), outline these components and their implications in an Aboriginal traditional knowledge protection context. The table further illustrates the limitation of current tools for address protection needs of First Nations' in resource management applications.

Table 8.0 Components of Intellectual Property Rights Protection		
Component	Description	Implications for TK
Ownership	<p>Intellectual property rights can be obtained by legal entities such as companies, as well as by individuals.</p> <p>The inventor(s) or author(s) need to be identified when IP is registered, even if the creation is being assigned to an employer or to another party.</p>	<p>An Aboriginal government or Aboriginal community organization that is entitled to sign contracts has the legal right to register IP</p> <p>Identifying a single source of traditional knowledge is not easy due to the collective ownership of this knowledge, and the fact that it has been passed on orally for many generations.</p> <p>However, some traditional knowledge may not be eligible for protection because it is held so widely that it is considered public knowledge. In other instances, several Aboriginal groups or communities may claim ownership of the same, or similar, knowledge and may differ as to how this knowledge should be protected or shared.</p>
Nature of Rights	<p>Through intellectual property rights, the government gives the inventor or creator the right to exclude others from making, using, copying or selling the holder's intellectual property for a fixed period of time. In addition to these economic rights, copyright law provides "moral rights" which prevent others from modifying or mutilating copyrighted works in a way which affects the creator's honour or reputation.</p>	<p>Intellectual property rights are not absolute; they are an attempt by government to balance the rights of IP holders with those of consumers and other stakeholders.</p>

Criteria for protection	Intellectual property must be new, novel, original or distinctive. The standard of originality required for IP protection in Canada varies with the category. The practical commercial aspect of IP rights is reflected in the criteria that IP must have “utility”, be “fixed” or be “used” to be protected.	These concepts make it difficult for Aboriginal people to gain legal IP protection for traditional knowledge that has been handed down for generations and whose original creators are unknown.
Scope of protection	There is wide variation in subject matter and in scope of protection between different forms of IP.	May benefit traditional knowledge protection as it also comes in various forms.
Duration	The length of IP protection varies with the type of IP involved. Depending on the instrument, 10-50 years	A temporary measure since Aboriginal people and communities usually want to protect their traditional knowledge for generations to come.
Registration costs	Some forms of IP are relatively inexpensive to register, while others are costly. Can range from >\$100 to >\$20,000 depending on type.	Limits options for communities with limited financial capacity
Enforcement	Obtaining a Canadian patent or trademark with CIPO* allows the holder to enforce IP rights in Canada, but not in foreign countries. Registering IP is no guarantee against infringement – the illegal use of someone else’s IP - but it does establish title to intellectual property in cases where there are disputes with others. Enforcement of IP rights is the IP holder’s responsibility.	Obtaining and enforcing IP rights can be expensive for organizations with limited resources, such as small businesses and Aboriginal communities. As a result, in some cases, Aboriginal IP holders may be at a disadvantage when negotiating appropriate arrangements and defending their IP rights.
International protection	Protection for IP in most industrialized countries is effective because they have signed TRIPs** and the major WIPO*** treaties.	Current IP standards and enforcement in some developing countries’ laws may not be sufficient to protect an IP holder’s interests. IP rights protection usually must be sought each country where protection is desired

*Canadian Intellectual Property Office

** Treaty on Rights and Intellectual Property

***World Intellectual Property Organization

6.5 Tools for protecting TK intellectual property

The following list of tools provides an overview of the types and forms of protection that are currently implemented. All of these tools provide protection to varying degrees. For instance, the *Copyright Act*, the *Patent Act*, the *Trade-marks Act* and the *Industrial Designs Act* are examples of Canadian intellectual property statutes. Trade secrets also receive some protection through the courts. The *Canadian Intellectual Property Office* (CIPO) administers most intellectual property law. To understand the full nature of intellectual property law, one needs to consult the various intellectual property acts, CIPO regulations and guidelines and court decisions on specific cases (Brascoupe and Endemann 1999). Agreements can be defended in civil courts, but are subject to interpretation, and thus represent a “grey area” in terms of their level of protection.

Existing Legal Tools

1. **Copyright:** Protect original literary, artistic, dramatic or musical works and computer software when they are expressed or fixed in a material form
2. **Trademarks:** Protect words, symbols or pictures used to distinguish goods or services of an individual or organization from those of others in the marketplace x
3. **Patents:** Protect new technological products and processes
4. **Neighbouring rights:** Refer to the rights of performers and producers to be compensated when their performances and sound recordings are performed publicly or broadcast
5. **Industrial design:** Protect the shape, pattern or ornamentation applied to a manufactured product
6. **Trade secrecy:** Law protects trade secrets and confidential information from public disclosure and unauthorized use
7. **Plant breeder’s rights:** Protect new varieties of plants developed by plant breeders
8. **Integrated circuit topographies:** Protect the three-dimensional configuration of electronic circuits developed for integrated circuit products
9. **Moral rights:** Historically associated with written works and copyright; In the context of TK, moral rights would pertain to the rights of the knowledge holders to have acknowledgement of their TK, with modifications allowed through permission only, and the right to have it used in a way the does not discredit TK holders (Hanson and VanFleet 2003)
10. **Exclusive licenses:** Grant rights only to a licensee regarding the use of any specified knowledge, and the original owner loses the right to that knowledge. Exclusive licensing transfers the rights over the knowledge to an

outside party and the traditional knowledge holders lose all of their rights to control the knowledge. Sole licensing differs in that although rights to the knowledge are granted to an outside party, the original traditional knowledge holders maintain their rights.

11. **Non-exclusive licensing agreements:** These agreements set no limits on the licensing of the knowledge by the traditional knowledge holders. The holders may grant an unlimited amount of licenses to outside parties.
12. **Material Transfer Agreements:** Material transfer agreements specify conditions, uses, and access to tangible biological items. Biological material shared by indigenous peoples often include ethno-botanical knowledge. This type of contractual agreement specifies the conditions, use, and access to the biological resources. It is important in this type of agreement to consider both the short-term and long-term interests of the community. For instance, these agreements include upfront compensation for the material, either in a lump sum payment or royalty. However, if the other party successfully commercializes products based on the resources that were shared, further compensation would be warranted;

Source: (Brascoupe and Endemann 1999, Hanson and Endemann 2003).

Informal contracts and agreements

1. **Access and benefit sharing:** Involves an exchange between contracting parties where sharing of traditional knowledge and resources is shared by the community with those who wish to use it for research or other purposes, and the other party would shared other benefits with the community (Hanson and VanFleet 2003) . Community-directed benefits typically focus on capacity-building arrangements such as financial, infrastructure or equipment transfers; extending expertise, mentoring and training through joint projects; royalty payments from the commercialization of a product; and/or moral, relationship and trust-building benefits which are typically transferred in an informal arrangement.
2. **Prior Informed Consent:** This is one of the key tools in conducting ethical research with indigenous communities. It involves acquiring advance approval for the use of an individual's traditional knowledge. Essential components of a prior informed consent agreement include: detailed information about the project including it's purpose, objectives, methods and possible outcomes; the possible risks or impacts to the community or the individual; arrangements ownership and possession of the information; opportunities to verify, validate and share the results; compensation for the knowledge if the information is used commercially (Brascoupe and Endemann 1999; Hanson and VanFleet 2003)
3. **Confidentiality/and non-disclosure agreements:** Confidentiality and non-disclosure agreements are typically specific to trade secrets. These

agreements keep transferred information private are used to specify the restrictions relating to the access and use of the knowledge. This approach allows Aboriginal communities to share information involving traditional knowledge, without giving up ownership or control. The agreement can be designed to either prevent the other party from using or disclosing the information for an agreed period of time, or to limit its use for a specific period of time after which it would either be destroyed or returned to the community.

Terms for such agreements are often three to five years. Brascoupe and Endemann (1999) recommend that other parties who may have access to the knowledge (e.g., government employees, consultants, or contractors) also sign the agreement. Confidentiality clauses can be integrated into prior informed consent agreements and contracts with government or resource industry. Provisions to deal with confidentiality and use of traditional knowledge are increasingly included in resource co-management agreements between governments and Aboriginal people (Brascoupe and Endemann 1999)

4. **Contracts:** Contractual agreements are legally binding between parties involved and serve to clarify the use of traditional knowledge, often by integrating several elements of protection such as confidentiality, prior informed consent and benefit sharing. Key components include: parties to the agreement; duration of the agreement; rights and responsibilities of the parties; participation of the community and other parties; knowledge included in the agreement; uses of the knowledge; restrictions placed on the knowledge's use; restrictions placed on confidentiality; and details around benefit-sharing or compensation (Brascoupe and Endemann 1999; Hanson and VanFleet 2003).

Areas for Exploration and Innovation

The most challenging part of future developments with traditional knowledge and intellectual property will be to explore how traditional Aboriginal approaches to protecting knowledge can be combined with existing intellectual property laws. This exploration would involve some hybridization of approaches to encompass all the complexities of the Western and customary laws needed for knowledge protection. The literature points to several areas where creative solutions could be explored:

1. **Customary law:** A critical area for further investigation. Emphasis choice of law clause in favour of Aboriginal customary law in all disputes (Mann)
2. **New legislation:** Develop new legislation that addressed the special protection needs and applications of traditional knowledge (Brascoupe and Endemann 1999)
3. ***Sui generis* protection systems:** *Sui generis* means "of its own kind". It might consist of some combination of standard forms of intellectual

property protections with other types of protection (Hanson and VanFleet 2003).

4. **Codes of conduct:** Educate and encourage firms, trades and professional associations to adopt codes of conduct. Communities themselves can develop guidelines that establish codes of conduct which provide detail on the accepted standards of behaviour for internal and external employees and association members when accessing traditional knowledge., Guidelines and codes of conduct, however, are not legally binding (Brascoupe and Endemann 1999)
5. **Voluntary labeling or certification:** Designation of a “masters of indigenous knowledge”. Expand the existing traditional concepts of expertise to some form of accreditation (e.g. CSA), (Mann 1997)

6.6 Case Study Examples

For the purposes of integrating traditional knowledge into resource management decision-making BC and other examples relating to intellectual property protection and management between First Nations, and government or other groups that could be adapted or adopted.

- Community Guidelines: Tl'azt'en Nation Guidelines for Research in Tl'azt'en Territory (<http://cura.unbc.ca/governance/CEM-Tlazten%20Guidelines.pdf>)

Tl'azt'en Nation is located near the community of Fort St. James BC. In 1999, they entered into a partnership with the University of Northern British Columbia (UNBC) with whom they co-manage a 13,000 hectare research forest tenured to their shared non-profit company, Chuzghun Resources Corporation. Through this partnership, Tl'azt'en Nation enters into numerous research collaborations with faculty and graduate students at UNBC, and as such as placed considerable effort into developing research guidelines and protocols (see Appendix D3 and D4).

- Prior Informed Consent/Confidentiality Agreement: University of Northern British Columbia Research Using Human Subjects

All university research methods involving human subjects or live animals is reviewed by a committee to ensure that the work follow ethical protocols. This example includes a detailed consent form was approved by the University of Northern BC ethics committee. The research involved interviewing both Aboriginal and non-Aboriginal subjects to elicit their opinions on a particular topic, and similar consent forms have been used to interview Aboriginal subjects to document traditional knowledge. The critical components of this consent form include: project name, contact names, and detailed contact information; participant's name; project summary; informed consent detailing how the information will be used including how long the researcher will possess the information, where the information will be stored during and after this time period, voluntary participation and right to

withdraw participation, and confidentiality restrictions; standard ethical protocols to be followed, and signatures for all parties.

- Codes of Conduct: The Association of Canadian Universities for Northern Studies (ACUNS) (<http://www.acuns.ca/ethical.htm>)

ACUNS has been developing ethical principles for research in the North since 1982. The list of 20 principles, found in Appendix D3, applies mainly to activities involving human subjects, but also selected principles should be followed for any technical activity including exploration and surveys where applicable. ACUNS emphasizes that researchers should always abide by any local laws, regulations or protocols that may be in place in the region(s) in which they work

- Benefit Sharing Agreement: Clayquot Sound Interim Measures Extension Agreement (<http://www.centralregionboard.com/IMEA/imea-2006%20May.pdf>)

The Clayquot Sound interim measures agreement establishes a working relationship between government and First Nations to work together on resource management issues without prejudice to treaty negotiations. Traditional knowledge or knowledge protection in this agreement are not addressed. References are made to the protection important sites, protection of culturally modified trees, and the incorporation of First Nations perspectives in resource management, however it is silent on if or how this information will be protected. It is unclear if knowledge protection is address on a verbal basis or in another agreement.

- Legislation: Northwest Territories Licensing Requirements

Brascoupe and Endemann (1999) provide the following example in their Canadian overview of intellectual property and traditional knowledge: “The *Scientists’ Act* of the Northwest Territories (NWT) requires all scientists conducting research in the NWT to obtain a license from the territorial government before beginning any research. In applying for a license, the researcher must provide complete details about the scientific research, including its general goals, maintenance of confidentiality, intellectual property arrangements, use of data and how findings will be communicated back to the communities involved. This *Act* sets a precedent both in Canada and internationally; it has helped to establish the principle of prior informed consent in Canada for researchers seeking access to the traditional knowledge of Canada’s Aboriginal people.” (p 6)

- Materials Transfer Agreement: Ecuador materials transfer agreements

Hanson and VanFleet (2003) provide the following example in their workbook on intellectual property options for protecting indigenous knowledge: “In Ecuador, the Inter-American Development Bank and several NGOs have launched a project entitled “The Transformation of Traditional Knowledge into Trade Secrets.” The goal of the project is to catalogue traditional knowledge and then maintain the database at regional centers, access to which will be safeguarded. Each participating community will have

its own file in the database and will not be able to access files of any other community. The collected knowledge will be reviewed, and that knowledge which is not common to multiple communities may be negotiated as trade secrets through Material Transfer Agreements (MTA) [See section “Contracts – The Basics”]. The benefits from any MTAs are to be split between the Government of Ecuador and the communities that deposited the knowledge in the database. Payments to communities will then used to finance public projects previously identified by each community.” (p 29)

6.7 Best Practices for Protecting Traditional Knowledge

For Aboriginal peoples, spirituality is intrinsically connected to a sense of place. [there is a need] to understand ethics protocols to guard against fragmenting and misrepresenting the holistic nature of Aboriginal knowledge. [We] must not confuse Aboriginal knowledge as being something that can be packaged and transferred to other people It is not to be appropriated and disguised as an extension of Western scientific knowledge. (Kynoch 2003, p)

Significant differences exist between Aboriginal people’s view of traditional knowledge and the principles underlying Western legal institutions, especially with regard to intellectual property rights. Given this, it is important that Aboriginal communities develop their own strategy to protect traditional knowledge. This will help them avoid losing control over this knowledge to third parties seeking academic advancement or commercial gain. Informal mechanisms such as guidelines and codes of conduct may be effective if they are supported by the community, but the ability to enforce these mechanisms in court is limited. Federal statutes are enforceable nation-wide. Legal agreements and contracts between parties are enforceable in civil courts, but do not extend to third parties (i.e., those that are not a party to the contract) (Brascoupe and Endemann 1999). Hanson and VanFleet (2003) warn that agreements may be at risk if not all parties are involved and represented. Therefore it is important to ensure that all the appropriate knowledge-holders are informed or involved prior to choosing an intellectual property protection option. Otherwise there is a risk that the option could be challenged.

Given that various forms of contractual and other agreements are, at present, commonly used to establish working relationships between First Nations and other groups in British Columbia, this section on Best Practices will focus on the essential components to incorporate in agreements that include information sharing. This list was developed based on a range of sources including standard protocols from governmental and non-governmental organizations, suggestions from government and stakeholder interviews, and published literature addressing the topic.

1. *Use community-developed protocols or guidelines for research and/or information sharing as a basis for development of an intellectual protocol agreement. Many communities, however have not have established access protocols for either internal or external uses of documented traditional knowledge (Sherry et al., 2005).*

2. *Incorporate existing patents, trademarks or other intellectual property law instruments where and if appropriate*
3. *Address benefit sharing opportunities for the duration of the agreement; these can include employment and training opportunities (field verification and monitoring, community-based research, information management), program development opportunities (cultural revitalization and education), infrastructure and capacity building opportunities (donations of equipment, expertise, of financial)*
4. *Address any limitations for the employees, contractors and consultants who will have access to the information. This could encompass an orientation for approved external users of the information to ensure full understanding of local protocols and information management systems*
5. *Outline roles and responsibilities of the parties involved*
6. *Clarify restrictions on types, access, and confidentiality around the information*
7. *Establish parameters around aboriginal supervision and direction to verify the use and interpretation of the information and a collaborative framework of developing decisions that relate to the information.*
8. *Establish parameters around consent requirements around certain types of information if not already outlined in existing local guidelines. Identify all representatives that need to be involved in approving the protocol and the information sharing process*
9. *Address expectations for full and appropriate acknowledgement of the community and knowledge holders.*

6.8 Summary

The benefit of using current intellectual property laws to protect indigenous knowledge is that it already exists and is enforceable across the country (Brascoupe and Endemann 1999), however communities need to determine whether or not the existing legal tools are adequate or appropriate for protecting different types of knowledge. In some cases, the existing legal tools can form part of a comprehensive intellectual property strategy.

As a starting point, Hanson and VanFleet (2003) recommend developing a Community Intellectual Property Committee to conduct research on other communities' experiences with addressing intellectual property. The committee could develop community guidelines; review proposals of information or research requests; collect community input through meetings and follow-up and report on intellectual property decisions and issues; and facilitate and enforce the implementation of the guidelines (e.g., acquiring informed consent). Several options exist for forming such a committee: it could be an internal process formed to serve one community; it could encompass several communities that share the same principles for protection; or it could also include exert

representative(s) from other organizations, such as universities, non-profit organizations, or the private sector, to provide an objective review of the proposed agreements.

Brascoupe and Endemann (1999) stress that Aboriginal people and communities will ultimately need to decide how best to protect their knowledge. They state that “Under today’s laws, the best results are likely to come from an approach that combines traditional knowledge systems, existing intellectual property laws and alternative mechanisms such as access agreements and licensing...”(p 1). This approach can be used to form a network of strategies to help Aboriginal communities better protect and control their traditional knowledge, and to ensure benefits are shared in a way that meets community needs.

6.9 References on Intellectual Property Rights

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Appendix A Profile of Muskwa-Kechika Management Area First Nations

A1 Community Profiles

Treaty 8 Tribal Association/Member First Nations:

i) Treaty & Aboriginal Rights Research Department, T8TA , Director: Debra Smithson

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This office focuses on Specific/Treaty Land Entitlement Claims research and maintains an archive of oral history interviews covering a range of topics related to people's understanding of provisions in Treaty 8 (1899), their use of the territory, etc.

ii) Treaty 8 Land-Use Department - Director, Kieran Broderick 250785-0612 kbroderick@treaty8.bc.ca

This office is responsible for supporting member First Nations/leadership on a range of resource management and land-use issues affecting Treaty and aboriginal rights; including Wildlife Management , and Geographic Information Systems Management. The feasibility of a new initiative referred to as the Central Land Office to principally manage oil & gas referrals through the new Oil & Gas MOU with T8TA First Nations, would include functions of data-management, cultural-use/oral history collection, community liaison/translation.

iii) Community Land-Use Management

Each of the T8TA member First Nations, maintain Land-Use Departments that are responsible for a combination of land-use referrals with different government agencies, resource industry project reviews, TUS research, land-use planning and other related initiatives aimed at supporting and protecting Treaty resource-use rights.

Fort Nelson Indian Band

Four reserves on 9,558 hectares. The majority community is on the Fort Nelson Indian Reserve #2, 6 kilometres south of the Town of Fort Nelson. The other reserves being Fontas River, Snake River, Moose Lake, Sandy Creek and Khantah.

There are also four small reserves at Maxhamish Lake. Reserves obtained under Treaty 8, one of two treaties signed in BC. Treaty 8 covers the entire Fort Nelson LRMP planning area. Originally called the Slave' River Indian Band, the name was changed in 1962 to the Fort Nelson Indian Band. The Band split in 1974 when part of the membership broke away to form the Prophet River Band. The Band is characterized by Slavey, Cree and Beaver cultures, and is part of the Athapaskan linguistic group. Approximately 768+ members (2001).

Land-Use Manager: Laurie Montour 250-774-6313 Laurie.montour@fnnation.ca

Prophet River Indian Band

One 374 hectare reserve. The Prophet River Indian Band was created when it split from the Fort Nelson Indian Band in 1974. The community is located just off the Alaska Highway, approximately 100 kilometres south of the Town of Fort Nelson. The Beaver people recognized certain people as “Dreamers” or “Prophets” who could foretell certain events. The Band may be named for the recent Prophet of the Beaver people, Notseta, or it may be named for Decutla, a Prophet of an earlier generation. The band is covered by Treaty 8 and was originally part of the Slavey band, which changed its name to the Fort Nelson Indian Band in 1974. The band is part of the Nahanni linguistic group and has Slavey, Beaver and Fort Nelson Land And Resource Management Plan Cree cultures. Approximately 223 band members (2001)

Land-Use Manager: Robin Tsakoza 250-73-6304

Halfway River

Originally from Chowade River (Stony River), the **Halfway River First Nation** was the last tribe to move to its new location in the early sixties. The Nation was once the Hudson Hope Band formed with West Moberly First Nations and Halfway River First Nation. The communities separated in 1971. Facilities available on the reserve include the band office, community hall, health clinic, band school, and lands office. The community is located 75km northwest of Fort St. John, BC. Its population is approximately 227 (2001).

Land-Use Manager: Bernice Lily 250-772-5058 bernice_lily@yahoo.ca

Doig River

The **Doig River First Nation** takes its name from the Doig River running through the reserve and has strong ties with the Blueberry River First Nation.

Facilities available on the reserve include a large Administrative and Cultural Centre (opened in July 2003), a learning centre, a convenience store, and a day care (in progress). Every July, Doig River First Nation hosts a weekend rodeo on its rodeo grounds. Current population is 249 (2001)

Land-Use Manager: Jane Calvert 250- 827-3776 jcalvert@doigriverfn.com

Saulteau First Nation

The **Saulteau First Nations** originated from Manitoba. The Band has been formed by the amalgamation of Beaver, Cree, and Saulteau residents. This First Nations community is covered by Treaty 8. Facilities available on the reserve include the band office, band hall, healing centre, daycare, teen centre, and learning centre.

The community is located at the east end of Moberly Lake, which is about 100km southwest of Fort St. John on Highway 29. There is one reserve, East Moberly Lake No.169, spread over 3025.8 hectares . Approximately 840+ members (2001).

Land-Use Manager: Clayton Davis 250-788-1275 Cdavis@saulteau.com

West Moberly First Nation

The **West Moberly First Nations** was originally part of the Hudson Hope Band, which split into West Moberly and Halfway River Bands in 1977. West Moberly First Nations is covered by Treaty 8. Facilities available on the reserve include the band office and a community centre. The community is located at the west end of Moberly Lake, approximately 90km southwest of Fort St. John. It has one reserve situated on 2033.6 hectares. There are three principal mechanisms for gathering oral history, traditional use, and traditional ecological knowledge. Current population is 193 (2001)

Land-Use Manager: Bruce Muir 250-788-3676 bmuir@westmo.org

In the M-KMA area, there is one Treaty organization and two Tribal Councils **with traditional territories** situated within its boundaries - the **Kaska Dena Council representing the BC Kaska people** (Deylu Dena Council, Dease River Band Council and Kwadacha First Nation); the **Treaty 8 Tribal Association** (representing 6 First Nations: Fort Nelson, Prophet River, Halfway River, Doig River, West Moberly and Saulteau First Nations) Tsay Key Dene First Nation and Blueberry River First Nation (Treaty 8) both operate as independent First Nations.

The Kaska Nation is made up of the Ross River Dena Council, Fort Liard First Nation Deylu Dena Council, Dease River Band Council and Kwadacha First Nation. It operates the Kaska Joint Natural Resource Agency.

Kaska Nation communities have TK Coordinators and Elder Councils and some also have GIS Technicians

Contact: Corrine Porter, Executive Director, Dena Kayeh Cultural Institute Tel: 250-779-3181 Email: cporter_25@hotmail.com

Dease River Band Council

The DRB consists of four reserves along the Dease River totaling 80.2 hectares. There are 158 registered Band members (INAC, 2007). The nearest settlement serving the community is Good Hope Lake which has a health station and high-speed Internet access Dease River Band Council Contact: **Pat Edzerza**, Band Manager P.O. Box 79 Good Hope Lake, B.C. V0C 2Z0 Phone: (250) 239-3000 Fax: (250) 239-3003

Deylu Dena, (formerly referred to as the Lower Post First Nations)

The main community, 65 hectares in size, is located 1 kilometre off of the Alaska Highway approximately 27 kilometres south of Watson Lake, Yukon, or 500 kilometres (6.5 hours) northwest of the Town of Fort Nelson with smaller communities located at Fireside and Muncho Lake. **The Lower Post First Nations headquarters is in Lower Post, BC, and is a subgroup of the larger Kaska Nation which includes all Kaska in BC and the Yukon. The traditional land use area of these First Nations covers the western half portion of the Fort Nelson LRMP area. The band is characterized by the Kaska Dena culture and is part of the Athapaskan linguistic group. Approximately 200+ members. Contact: Roma Walker, Ex. Dir. 250-779-3161 Fax 779-3371**

The Gutcho Natural Resource Agency is the land-management agency for the Dease River Band Council and Deylu Dena.

Ross River Dena Council

The **Ross River Dena Council** is a First Nation in the eastern Yukon Territory . Its main centre is in Ross River, Yukon at the junction of the Campbell Highway and the Canol Road, near the confluence of the Pelly River and the Ross River. The language originally spoken by the people of this First Nation was mainly Kaska, although a number of the First Nation's citizens are Slavey speakers. The Ross River Dena Council is affiliated with the Kaska Tribal Council, which connects the people to their close Kaska relations in northern British Columbia and to the Liard First Nation. The Kaska of Ross River are also closely connected and related to their neighbours in Fort Norman, NWT, who make frequent visits to cultural events held at Coffee Lake, a traditional gathering area of the Kaska. About 100 members live outside the community. Population is estimated 468 (2007)

Kwadacha First Nation

The **Kwadacha Nation** (home of the Tsek'ene people) is located at Fort Ware, approximately 570 km north of Prince George in British Columbia, Canada. The village lies at the confluence of the Fox, the Kwadacha, and Finlay rivers in the Rocky Mountain Trench. The Kwadacha Band has three reserves in the Plan Area totaling 392 hectares; Fort Ware (387.8 ha), Weissener Lake (2 ha) and Sucker lake (2 ha). The community of Fort Ware is located near the confluence of the Finlay, Fox and Kwadacha Rivers, approximately 70 kilometres north of Williston Lake. The settlement has roughly 50 dwellings, a store, landing field and a weather station. Current population is 425 (2007)

Land-use matters of the Kwadacha First Nation are represented by the Kwadacha Natural Resource Agency:

Land Manager: Danny Case, TK Elder Advisor John Armakook,
Councillor Land-Use Portfolio Tim Trapp: Contact 250-471-2201

Tahltan Nation

The eastern edge of Tahltan Traditional territory (including both the Tahltan and Iskut borders on part of the M-KMA along upper Turnagain River area (<http://www.firstnations.de/img/05-3-map-b.jpg>), and is located in the vicinity of the Stikine River. Telegraph Creek, Dease Lake, and Iskut are the towns today. The Tahltan people are comprised of two bands, each with an elected council: the **Tahltan First Nation** (with headquarters at Telegraph Creek); and the **Iskut First Nation** (with headquarters at Iskut). The overarching Tahltan Central Council (with offices at Dease Lake) is comprised of representatives of 10 families from each band. The TCC links the Tahltan bands and has represented them on issues of joint concern, specifically on asserted inherent rights and title. Neither the Tahltan Indian Band nor the Iskut First Nation are affiliated with a tribal council and are recognized as separate, unaffiliated Indian bands by Indian and Northern Affairs Canada. However, the TCC is a registered society under the B.C. Society Act. Total band members 2,189 (Source: Registered Indian Population by Sex and Residence September 2005, Indian and Northern Affairs Canada)

Tahltan First Nation: P.O. BOX 46, Telegraph Creek, B.C. VOJ 2W0 Phone: (250) 235-3241 Fax: (250) 235-3244 Population: 1,578 Contact: Wenda Day - Assistant Band Manager

Iskut First Nation P.O. Box 30 Iskut, BC Phone: (250) 234-3331 Fax: (250) 234-3200 Population: 611 Contact: Marie Louie

Tsay Keh Dene

The Tsay Key Dene employ a Lands Manager, and is currently involved in various resource development project reviews, ongoing community land-use planning. Population is 380 (2007)

Land Use Manager Karl Sturmanis 250-562-8882

Blueberry River First Nations

The **Blueberry River First Nations** was given this name because of the abundant supply of blueberries found in the valley by the river. Blueberry River First Nations is covered under Treaty 8. This community was recognized as the St. John Beaver Band in 1950. Facilities available on the reserve include a band office, band hall, elementary school and headstart building, gymnasium, firehall, and garage.

The main community is located on Blue Berry River I.R. No.205, approximately 80km northwest of Fort St. John. There are two reserves, which are located on 1505.8 hectares. Population is approximately 401 (2001). Blueberry River maintains a Land Use office that performs similar functions to other T8 First Nations, and with respect to the MK works with their Economic Development office in managing a Guide-Outfitting Territory in the Pink Mountain area.

Contact: Darlene Davis, Lands Manager 250-630-2584

**Muskwa_Kechika Management Area
Related Information - Kaskalou**



Letter of Understanding
Amongst:
Government of British Columbia and
The Kaska Dena Council

September 24, 1997

This Understanding is:

BETWEEN: **THE KASKA DENA COUNCIL** (Inc. No S19141); a society incorporated under the *Society Act*, having its registered office at P.O. Box 8, Watson Lake, Yukon Territory, Y0A 1C0

as represented by its Chairman, Walter Carlick (the "Kaska Dena Council")

AND: HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA

as represented by the Premier of British Columbia ("British Columbia")

Whereas:

A. The Kaska Dena Council and British Columbia, with Canada, are negotiating a Treaty under the British Columbia Treaty Commission Process;

B. British Columbia wishes to approve the Fort Nelson LRMP and to establish an area known as the Muskwa Kechika Area, defined in this Understanding;

C. A significant portion of the Fort Nelson LRMP area lies within the Kaska Dena Traditional Territory;

D. The Kaska Dena assert that they have a special relationship with the land and its resources, including wildlife, and that they use and have traditionally used lands in the LOU Area for resource harvesting and for cultural and spiritual purposes;

E. The lands and resources in the LOU area, including wildlife and wildlife habitat, are recognised and respected for their global significance;

²⁶ **Representatives of the Kaska Nation indicate that this agreement has had varying levels of implementation over the past 10 years with only some activities that currently being undertaken.**



F. The Parties wish to ensure that the approval and implementation of the Fort Nelson LRMP and the establishment of the Muskwa Kechika Area and the Muskwa Kechika Plan does not undermine either the aboriginal rights of the Kaska Dena or the treaty process;

G. British Columbia intends to establish a Muskwa Kechika Advisory Committee, involving the Kaska Dena, to offer public oversight of implementation of the Fort Nelson LRMP's objectives for the Muskwa Kechika Area;

H. It is appropriate that the Kaska Dena and British Columbia have a mutually recognised understanding of their interests and relationships in the ongoing management of lands and resources within the LOU area;

I. The Parties acknowledge the existence of a government-to-government relationship which will assist in the implementation of the Fort Nelson LRMP and the Muskwa Kechika Plan in a manner that does not prejudice either the aboriginal rights of the Kaska Dena or the treaty process which the parties are involved in;

J. The Parties anticipate that British Columbia may, following Consultation with the Kaska Dena, pass an Order-in-Council under the *Environment and Land Use Act* or will otherwise establish the boundaries, objectives, and strategies for land and resource management in the Muskwa Kechika Area and a Muskwa Kechika Plan which will establish the management for the Muskwa Kechika Area;

K. Both Parties welcome this opportunity to work together in a spirit of mutual respect and understanding to wisely manage and sustain the land and its resources for this and future generations.

Therefore the Parties agree as follows:

1.0 DEFINITIONS:

1.0 "Fort Nelson LRMP" means the land and resource management plan approved by government which is based on the recommendations from the Fort Nelson LRMP table.

- "Kaska Dena" means the Kaska Dena people and communities located in the Kaska Dena Traditional Territory as represented, for the purpose of this LOU, by the Kaska Dena Council.
- "Kaska Dena Traditional Territory" means that portion of British Columbia outlined on the map attached as Schedule A to this Understanding, asserted to be the Traditional Territory of the Kaska Dena, a copy of which is filed with the BC Treaty Commission.
- "Letter of Understanding (LOU) Area" is that part of British Columbia defined as the Fort Nelson Land and Resource Management Plan area that lies within the Kaska Dena Traditional Territory, as identified in Schedule B to this Understanding.
- "Muskwa Kechika Area" is the existing parks and the proposed protected areas and the special resource management zones (RMZs) recommended by the Fort Nelson and Fort St. John LRMPs to form the Muskwa Kechika Area.
- "Muskwa Kechika Plan" is the combined objectives and strategies from the Fort Nelson and Fort St. John LRMPs for the parks, proposed protected areas and other RMZs that constitute the Muskwa Kechika Area.
- "Consult" or "Consultation" between the Kaska Dena Council and British Columbia means that before a decision is made on a matter relating to this Understanding, the Party making the decision will provide the other Party with:

(a) reasonable notice of the matter to be decided, including information sufficient in form and detail to ensure that the other Party understands the matter, in order to assess it and prepare a meaningful response;

(b) a reasonable period of time to consider the matter having regard to:

(i) the nature and complexity of the matter to be decided;

(ii) the need for the other Party to consult with their respective communities or constituencies, when necessary; and

(iii) timelines prescribed by applicable legislation.

(c) full and fair consideration by the Party obliged to consult, of any concerns or recommendations presented.

2.0 PURPOSE:

2.1 This Understanding sets out the relationship between the parties with respect to the planning and management of lands and resources in the LOU Area from the date of signing of this Understanding until such time as it is terminated according to the provisions of this Understanding.

3.0 GENERAL PROVISIONS:

3.1 Nothing in this Understanding affects the aboriginal claims, rights or interests of the Kaska Dena in British Columbia.

3.2 Each party represents and warrants to the other party as follows:

(a) that the execution of this Understanding has been duly authorised and that it has the power and capacity to perform its covenants under this Understanding;

(b) that this Understanding is a valid and binding agreement enforceable against it in accordance with its terms.

3.3 While this Understanding is in effect, the Kaska Dena Council will not, except to enforce this Understanding, commence any legal proceedings or otherwise conduct itself to challenge the validity of the Muskwa Kechika OIC, or the approval and implementation of the Fort Nelson LRMP.

3.4 This Understanding will not be interpreted as an acknowledgement by either party that its legislative authority or jurisdiction is limited by the provisions of this Understanding.

3.5 This Understanding is without prejudice to:

(a) any position the parties may take in the Kaska Dena Treaty Negotiations;

a. the aboriginal and treaty rights and interests of the Kaska Dena and any other First Nation which may have rights in the area; and land selections which the Kaska Dena may pursue in the treaty process within parks or protected areas recommended to be established under the Fort Nelson LRMP.

3.6 This Understanding will be interpreted in accordance with the laws of British Columbia.

3.7 The Parties will execute further documents and assurances as may be necessary to carry out the intent of this Understanding.

3.8 British Columbia will ensure that the spirit and intent of this Agreement are conveyed to government agencies, including enforcement agencies.

3.9 British Columbia will:

(a) Consult the Kaska Dena Council with respect to any OICs prepared for recommendation to the Lieutenant Governor in Council to establish the boundaries, objectives, plans, and strategies for land and resource management in the Muskwa Kechika Area; and

(b) recommend to the Lieutenant Governor in Council that any such OICs respect the spirit and intent of this Understanding.

4.0 OBJECTIVES:

4.1 The objectives of this Understanding are:

(a) to address the rights, interests and opportunities of the parties set out in this Understanding in the planning and management of lands and resources in the LOU Area, in a spirit of mutual respect and understanding, and in accordance with mutually agreed upon principles;

(b) to provide for the planning and management of lands and resources in the LOU Area in a manner which:

(i) provides the Kaska Dena with input, as agreed in this Understanding, consistent with a government-to-government relationship between the Kaska Dena and British Columbia, into the planning and management of lands and resources;

(ii) is consistent with the objectives and strategies of the Fort Nelson LRMP;

(iii) recognises, respects and accommodates the traditional uses of lands and resources, and contemporary expressions of those traditional uses by the Kaska Dena in the exercise of their aboriginal rights;

(iv) conserves the natural resources of parks for their intrinsic and scientific values and for compatible recreational opportunities;

(v) integrates traditional and scientific knowledge in the management of the natural and cultural resources;

(vi) recognises that oral history is a valid and relevant form of research for establishing the historical significance of heritage sites and objects; and

(vii) recognises the authority of the Kaska Dena in the interpretation of Kaska Dena place names and heritage resources;

(c) to identify and provide economic opportunities for the Kaska Dena in the LOU Area.

5.0 RESOURCE MANAGEMENT OBJECTIVES AND KASKA DENA RIGHTS, CULTURE AND HISTORY:

5.1 The Parties intend:

(a) that in the LOU area the globally significant wildlife and natural wilderness environment and the heritage values of parks, protected areas, and special resource management zones be protected, while allowing resource development in a manner which is consistent with this intent and the objectives of the Fort Nelson LRMP;

(b) that one of the objectives of parks and protected areas in the LOU Area be the recognition of Kaska Dena rights, culture, and history;

(c) to protect and conserve parks and protected areas in the LOU Area for the benefit, education, and enjoyment of all people in accordance with their designation as parks and protected areas and the terms of this Understanding; and

(d) to manage the natural resources of the Resource Management Zones outside the parks and protected areas in a way which recognises Kaska Dena rights, culture, and history.

5.2 The Parties recognise that the Kaska Dena may harvest fish and wildlife in parks and protected areas and other unoccupied Crown lands in the LOU area, using traditional or contemporary harvesting methods; in accordance with their aboriginal rights to harvest for sustenance, social and ceremonial purposes.

5.3 The Parties mutually recognise and will adhere to the Muskwa Kechika Access Management Area regulation under the *Wildlife Act*.

6.0 CONSULTATION AND REPRESENTATION

6.1 British Columbia will ensure that there is Consultation with the Kaska Dena in respect of those matters addressed in this Understanding, and in particular on matters relating to the establishment of parks and protected areas in the LOU area, management plans for these parks and protected areas and other related matters.

6.2 The Kaska Dena will be represented on the Muskwa Kechika Advisory Committee. Kaska Dena representation will include, at a minimum, one representative from each of the communities of Lower Post, Good Hope Lake and Fort Ware, and one representative from the Kaska Dena Council.

6.3 The Kaska Dena will have the opportunity to be represented, if they so wish, on other committees or other similar bodies, such as ad hoc government land and resource planning groups, which may be established by British Columbia from time to time to advise on the implementation of the Fort Nelson LRMP and the Muskwa Kechika Plan

and related matters. Kaska Dena representation will include, where agreed to, one representative from each of the communities of Lower Post, Good Hope Lake and Fort Ware, and one representative from the Kaska Dena Council.

6.4 British Columbia will ensure that if no other committee or other similar body is established the Kaska Dena will have opportunity to provide direct advisory input.

6.5 Where there is a significant dispute between the parties on any matters which arise under this Understanding:

(a) the Parties will refer the dispute to the Kaska Dena Council staff and British Columbia staff for resolution; and

(b) if staff can not resolve the dispute, the Kaska Dena may discuss the dispute directly with the Ministers of: Environment, Lands and Parks; Employment and Investment; and, Forests. Any decision of the Ministers will be final and will be implemented.

6.6 The parties agree that the attached Schedule C reflects the Kaska Dena and British Columbia relationship for the Muskwa Kechika Area and the Fort Nelson LRMP area.

7.0 PARKS AND PROTECTED AREAS

7.1 British Columbia will ensure that the Kaska Dena are given a formal role, consistent with Sec. 6.0 of this Understanding, in the planning and management of parks and protected areas in the LOU Area.

7.2 The parties will:

(a) use both Kaska Dena and British Columbia names for parks and protected areas in the LOU Area;

(b) recommend to the Lieutenant Governor in Council or the Government of British Columbia that any OIC or legislation which is tabled to establish the parks and protected areas in the LOU Area will include the Kaska Dena as well as British Columbia names; and

(c) work together in a timely manner to establish names for parks and protected areas in the LOU Area.

7.3 The Parties recognise Kaska Dena authority to interpret and provide Kaska Dena names for parks and protected areas, place names, heritage sites, and other similar features within the parks and protected areas within the LOU Area, consistent with this Understanding.

7.4 Park and protected area management plans will respect the fact that the Kaska Dena are entitled to exercise their aboriginal rights within parks and protected areas within the LOU Area, consistent with this Understanding, and law on aboriginal rights.

8.0 ECONOMIC OPPORTUNITIES AND FUNDING:

8.1 Economic opportunities for the Kaska Dena will be identified and provided in the implementation of the Fort Nelson LRMP and the Muskwa Kechika Plan, including the parks and protected areas. The Parties will endeavour to negotiate in good faith an economic opportunities agreement which, once completed, will become part of this Understanding.

8.2 The Parties will work together to address funding issues as they arise. Financing for the implementation for any specific project or activities stemming from this Understanding may be negotiated by the Parties. Where appropriate, the Parties will endeavour to secure resources from other sources that may be available to each of them.

8.3 It is anticipated that there will be a Muskwa Kechika Fund which will be a central funding source for supporting research, inventory, planning, and management projects in the Muskwa Kechika Area. Recommendations on expenditures from this fund will be made by the Muskwa Kechika Advisory Committee. The Parties recognise that contributions to this fund may come from a number of sources. The Parties agree that this fund will be available to support Kaska Dena and British Columbia's interests and needs as determined by the Muskwa Kechika Advisory Committee. The use of this fund for Kaska Dena-led projects will constitute partial fulfilment of the intent of Section 8.1.

8.4 Kaska Dena travel and other related expenses incurred to attend meetings of the Muskwa Kechika Advisory Committee, and other committees or other similar bodies which may be established by British Columbia from time to time to advise on the implementation of the Fort Nelson LRMP, the Muskwa Kechika Plan and other related matters will be the responsibility of British Columbia. These travel and other related expenses will be determined by, and paid according to, policies established by British Columbia from time to time.

9.0 AMENDMENT AND TERMINATION:

9.1 This Understanding may be amended by written agreement of the parties.

9.2 British Columbia will negotiate in good faith with the Kaska Dena any amendments to this Understanding which may be required as a result of amendments to legislation or regulations which affect the rights of the Kaska Dena under this Understanding.

9.3 The Parties anticipate that this Understanding may be amended to apply to the portion of the Kaska Dena Traditional Territory falling within the Mackenzie or other LRMP planning areas.

9.4 This Understanding shall remain in effect until:

(a) terminated by either party on six (6) months written notice to the other party stating the reasons for termination; or (b) unless otherwise agreed, until a Kaska Dena treaty is signed and ratified by the parties and the Government of Canada and is in effect.

9.5 The parties will review this Understanding annually, on or about the anniversary date of this Understanding, to ensure that its objectives continue to be met, and will consider amendments to this Understanding which may be required to further its objectives.

10.0 NOTICE:

10.1 For the purposes of this Understanding, notice shall be deemed received at being hand delivered or transmitted by facsimile and sent to the attention of the following persons at the respective address:

To the Kaska Dena: Facsimile: 250-779-3371

Walter Carlick, Chairman
Kaska Dena Council P.O. Box 8m Watson Lake, YT Y0A 1C0

To British Columbia: Facsimile: 250-387-1356
Minister of Environment, Lands and Parks
Chair, Environment and Land Use Committee, Parliament Buildings Victoria, BC V8W 1X4

or to any other persons or addresses which one party may, by notice in writing, advise the other of, from time to time.

11.0 COUNTERPART:

11.1 The parties may execute this Understanding in counterparts. All counterparts will, for all purposes constitute one Understanding, despite the fact that the parties may have executed different counterparts.

IN WITNESS THEREOF the parties have executed this Understanding on the _____ day of , 1997.

SIGNED on behalf of Kaska Dena Council

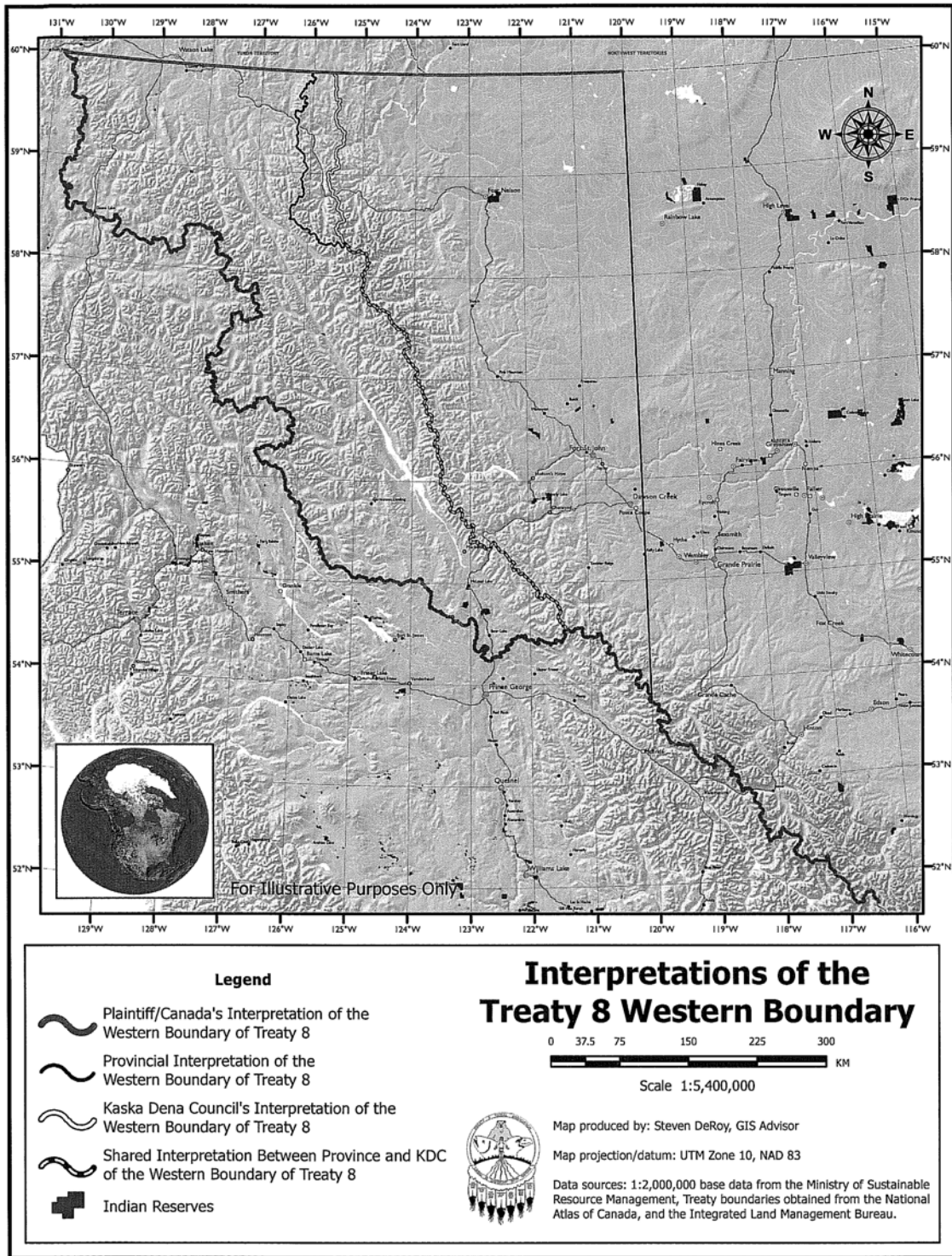
Chairperson Walter Carlick

SIGNED on behalf of Her Majesty the Queen

in Right of the Province of British Columbia

Glen Clark, Premier

A3 First Nations Territorial Overlap and Treaty 8 Boundary Interpretation



Appendix B: Resources on Applied Traditional Knowledge

(1) Brockman, A., 1997. *When all peoples have the same story, humans will cease to exist. Protecting and conserving traditional knowledge.* Prepared by the Dene Cultural Institute for the Biodiversity Convention Office.

http://www.nativemaps.org/abstracts/all_peoples.pdf

(2) Convention on Biological Diversity Web Site; existing instruments related to traditional knowledge:

<http://www.biodiv.org/programmes/socio-eco/traditional/instruments.asp#GLN>

(3) Council of Yukon First Nations, 2000. *Traditional Knowledge Research Guidelines. A Guide for Researchers in the Yukon.*

(4) Dene Cultural Institute, 1991. *Guidelines for the conduct of participatory community research to document traditional ecological knowledge for the purpose of environmental assessment and environmental management.* Posted at the following Web address:

<http://www.idrc.ca/books/847/7-App1.html>

(5) Emery, A.R., 2000. *Guidelines: Integrating Indigenous Knowledge in Project Planning and Implementation.* Prepared by KIVU Inc. for the World Bank and the Canadian International Development Agency.

<http://www.worldbank.org/afr/ik/guidelines>

(6) Grenier, L., 1998. *Working With Indigenous Knowledge. A Guide For Researchers.*

International Development Research Centre, Ottawa, Canada.

(7) Inuit Tapirisat of Canada. *Research principles for community-controlled research with the Inuit Tapirisat of Canada.*

<http://www.idrc.ca/books/847/7-App1.html>

(8) Management of Social Transformation Programme and Centre for International Research and Advisory Networks, 1999. *Best Practices on Indigenous Knowledge.*

<http://www.unesco.org/most/bpikpub.htm#general>

(9) Pearce, T. and A. Hillyer, 2004. *Environmental Assessment Tool-kit for British Columbia First Nations.* In progress.

(10) Tobias, T.N., 2000. *Chief Kerry's Moose. A Guidebook to Land Use and Occupancy Mapping, Research Design and Data Collection.* Published jointly by the Union of British Columbia Indian Chiefs and Ecotrust Canada.

<http://www.nativemaps.org/chiefkerrysmoose/index.html>

(11) Heinomeyer, K., T. Lind, and R. Tingey, 2003 *A Conservation Area Design for the Territory of the Taku River Tlingit First Nation: Preliminary Analyses and Results.* A Report prepared for the Taku River Tlingit First Nation. Round River Conservation Studies, Salt Lake City. Utah 84103, 96 pp, http://roundriver.org/pub_main.html

(12) MacDonald, M. L Arragutainaq, Z Novalinga, 1997 *Voices from the Bay,* Canadian Arctic Resources Committee, 7 Hinton Avenue N., Suite 200, Ottawa, Ontario, Can

B1 Geographic Valuation System: UNBC/Halfway River FN



<http://datashare.gis.unbc.ca/gvs/>

Project Team: Roslyn Pokiak, Alex Hawley, and Nancy Elliot, Halfway River First Nation participants, and FIST creator Aaron Koning.

Geographic Valuation System

Welcome to the Geographic Valuation System (GVS) download and documentation site.

Maps and Geographic Information System(s) (GIS) are designed to represent the world schematically for specific applications. These approaches reflect the values, perceptions, and priorities of a Western Scientific worldview. This worldview can be very different from a traditional Aboriginal worldview. The current approaches used by mapping, GIS and related geospatial technologies fail to include Aboriginal values without manipulating and altering the content and context of Traditional Environmental Knowledge (TEK). Maps and GIS may actually hinder the communication of traditional Aboriginal worldviews to resource managers and planners.

This collaborative project involving Halfway River First Nation (HRFN) and researchers at the University of Northern British Columbia (UNBC) had the goal of evaluating and enhancing the capacity to incorporate a traditional Aboriginal worldview in modern resource management and planning using innovative geospatial approaches. We have been successful in creating the Geographic Valuation System (GVS), a system which is designed to enable First Nations to participate in resource management planning and decisions in a way that is simultaneously, a) consistent with the mapping and Geographic Information System-based approaches of government and industry resource managers and b) accommodates traditional Aboriginal values and approaches in resource management deliberations and decisions. The system facilitates and streamlines resolution of resource management issues that relate to First Nation's interests because it enables First Nations to participate as they choose in resource management and planning in ways meaningful to them and consistent with their traditional values.

The GVS is not a one-off, HRFN-only system. It is designed and structured to be useful to any First Nation that wishes to use it. We have planned the system so that it could be freely and openly available as open source software, a key factor contributing to its utility to other First Nations.

The GVS employs the Flexible Internet Spatial Template (FIST) as its software foundation. The FIST is an open-source application under development in the UNBC GIS lab and by contributors of the FIST User's Community (www.freelists.org/lists/fist-users). The FIST began in January 2004 as an undergraduate project undertaken by Aaron Koning for his Honours thesis, under the supervision of Scott Emmons, Senior GIS Lab Instructor and Roger Wheate, UNBC GIS Coordinator. Beginning in the fall of 2004, Aaron Koning was contracted in order to support development of the FIST and to mentor Nancy Elliot in FIST operation, PHP scripting and miscellaneous tasks.

The FIST is registered under the GNU Public License (GPL). The GVS uses the FIST and it is made freely available for other First Nations to acquire and use, and to also modify for their own needs and to better reflect their own culture. If you use the GVS and FIST you are obligated to publish the copyright and the warranty disclaimer (see www.gnu.org/copyleft/gpl.html).

B2 Considering Aboriginal traditional knowledge in environmental assessments conducted under the *Canadian Environmental Assessment Act -- Interim Principles*



Canadian Environmental
Assessment Agency

Agence canadienne
d'évaluation environnementale



I. Introduction

There is growing recognition--both in Canada and abroad--that Aboriginal peoples have a unique knowledge about the local environment, how it functions, and its characteristic ecological relationships. This Aboriginal traditional knowledge (ATK) is increasingly being recognized as an important part of project planning, resource management, and environmental assessment (EA).

Aboriginal traditional knowledge under the *Canadian Environmental Assessment Act*

Section 16.1 of the recently amended *Canadian Environmental Assessment Act* (CEAA), gives responsible authorities conducting an EA the discretion to consider Aboriginal traditional knowledge in any EA:

"Community knowledge and **Aboriginal traditional knowledge** may be considered in conducting an environmental assessment."

Purpose of these interim principles

These principles are voluntary and intended to provide general guidance on the consideration of ATK

This principles document is intended to provide general guidance on the consideration of ATK in EA. It has been written specifically for EA practitioners. The principles are voluntary and are not intended to replace any existing legislative process or requirements. They are intended to provide a framework for the consideration of ATK, where it has been determined that the provision of ATK is both desirable and appropriate.

These are interim principles. They will be replaced by more detailed guidance that will be developed by the Aboriginal Advisory Committee (AAC), a body that will be established by the Canadian Environmental Assessment Agency.

What is Aboriginal traditional knowledge?

"ATK is knowledge that is held by, and unique to, Aboriginal peoples"

All cultures have traditional knowledge. In this broad context, Aboriginal traditional knowledge can be viewed as knowledge that is held by, and unique to, Aboriginal peoples.

Thus, ATK is a body of knowledge built up by a group of people through generations of living in close contact with nature. ATK is cumulative and dynamic. It builds upon the historic experiences of a people and adapts to social, economic, environmental, spiritual and political change.

While those involved in environmental assessment will likely be most interested in traditional knowledge about the environment (or, traditional ecological knowledge), it must be understood to form a part of a larger body of knowledge which encompasses knowledge about cultural, environmental, economic, political and spiritual inter-relationships.

Although there are many different definitions of ATK in the literature, there is no one universally accepted definition. For this reason, a definition of ATK has not been provided in this document.

Note: the term traditional ecological knowledge (TEK) is often used interchangeably with ATK. For the purposes of this paper, TEK can be considered a subset of ATK that is primarily concerned with the environment.

Why consider Aboriginal traditional knowledge in an environmental assessment?

ATK is held by the Aboriginal people who live in the area of a proposed project, and who have a long relationship with the lands and resources likely to be affected. As such, the input of ATK into the EA process can assist in an EA in many ways. For instance, ATK can:

- provide relevant biophysical information, including historical information, that may otherwise have been unavailable;
- help identify potential environmental effects;
- lead to improved project design;
- strengthen mitigation measures;
- contribute to the building of enhanced long-term relationships between proponents, Aboriginal groups, and/or responsible authorities;
- lead to better decisions; and
- contribute to the building of EA and ATK capacity within Aboriginal communities and build an awareness of, and appreciation for, ATK in non-Aboriginal communities.

When can Aboriginal traditional knowledge be brought into environmental assessments?

“ATK can be brought into an environmental assessment at any time”

ATK can be brought into an EA at any time. For instance, in an EA, ATK can assist with:

- scoping the project and the assessment;
- the collection of baseline information;
- consideration of the environmental effects of a project;
- evaluation of environmental effects and the determination of their significance;
- evaluation of any cumulative environmental effects of the project;
- evaluation of the effects of the environment on the project;
- identification or modification of mitigation measures; and
- design and implementation of any follow-up programs.

II. General Principles

No two EAs are the same; therefore, a one-size-fits-all approach to considering ATK in EA is not possible. However, a number of general principles have been identified with respect to the use of ATK in EAs conducted under CEAA. These are presented below.

Note: EA practitioners should be aware that while the Crown's fiduciary duty may include the consideration of ATK, the consideration of ATK, in and of itself, will not discharge any fiduciary duties of consultation that may arise. Legal advice may be appropriate.

Work with the community

“ATK research should be planned and conducted with the ATK holders: work with communities”

The ATK held by each Aboriginal group is unique to that group, so consideration of ATK in a particular EA will need to be developed with the holders of the ATK. It is suggested that:

- communities be contacted early in the EA process and informed that their input is being sought;
- communities be provided with the opportunity to determine whether or not they wish to provide ATK to the EA;
- community members be provided with clear and accurate information about the project, the EA, the EA process, which kinds of ATK may be sought, and how any ATK provided may be incorporated into the EA process;
- practitioners be prepared for unforeseen delays and make extra efforts for ongoing and extensive communications with communities;
- practitioners place their ATK collection efforts in the context of broader long-term relationship-building. Thus, the establishment of a relationship of trust with the community, its leaders, and ATK holders is crucial; and
- where language may be an issue, translation may be necessary.

Note: EA practitioners should be aware that different Aboriginal groups have different laws and customs regarding such things as who holds different aspects of a community's ATK, with whom and how ATK might be shared, and who has authority to pass on the ATK.

Seek prior informed consent

“Only the community can decide if they are willing to provide access to their ATK”

In the context of ATK, prior informed consent refers to consent--usually written--that is given by a community to EA practitioners to access and use a community's ATK. In seeking consent, EA practitioners should work closely with the community to:

- clearly set out how the information will be collected and how it will be used;
- clearly set out who owns the knowledge;
- provide community members with clear and accurate information about any relevant access to information legislation;
- identify the proponent of the project and any other key contact persons;
- identify potential benefits and possible problems associated with the research; and

- ensure that the party or parties granting consent on behalf of the community truly represent the concerns and interests of the community.

Access Aboriginal traditional knowledge with the support of the community

“Access to ATK is a privilege and must be respected”

Some communities may request that an ATK access agreement (also referred to as a protocol agreement, or memorandum of understanding) be negotiated, setting out how their ATK will be accessed and used in a given EA process. "Access agreements" are entered into voluntarily, and may set out:

- how and by whom the information will be collected;
- how and if specific community members will be paid for the provision of ATK-related services;
- who owns the ATK (intellectual property right issues may need to be addressed);
- how the community will be acknowledged and credited with any ATK that is provided to the process;
- how and when the community will be provided with any reports that incorporate their ATK so that they can review it; and
- if and how the confidentiality of specific ATK can be respected (see note below).

Note: Many Aboriginal groups have developed consultation and research protocols. Where these exist, EA practitioners are encouraged to follow the protocols that have been established, as appropriate.

Respect intellectual property rights

“Intellectual property includes inventions, literary and artistic works, symbols, names, images, and designs”

Certain kinds of creative endeavours are considered intellectual property, and a country's intellectual property right (IPR) laws grant protection to the creators of these endeavors. The main types of IPRs are trade secrets, patents, and copyrights.

Generally speaking, conventional IPR laws offer very limited protection of ATK. In general, this is because conventional IPR instruments tend to grant protection to an individual. ATK tends to be held collectively by a community, rather than by an individual. However, communities are likely to seek some kind of protection for their ATK when it is provided during an EA. This is especially true for sensitive information, such as information about sacred or spiritual sites.

Note: If an Aboriginal group requests confidentiality, EA practitioners will have to determine if the information can be protected, given the provisions of Canada's *Access to Information Act*, and the relevant legal requirements of other involved jurisdictions (e.g., provincial access to information legislation).

Collect Aboriginal traditional knowledge in collaboration with the community

“All ATK research must respect the privacy, dignity, cultures, and traditions of Aboriginal people”

There are a number of methods and techniques in the literature for collecting and documenting ATK such as interviews, mapping, group discussions, and during consultation efforts. However, a number of procedures can be identified, including:

- work closely with the community when developing methodologies for collecting ATK that respect the cultural identity of the community;
- ATK research frameworks should be prepared in collaboration with the holders of the ATK;
- ensure that all research plans have met with the approval of the community;
- field data collection and analysis should be done by or with members of the Aboriginal community;
- be aware that different types of ATK are held by different segments of the population depending on age, gender, and lifestyle;
- the community should be given the opportunity to review and verify any ATK that is collected;
- the community should be given the opportunity to review how ATK has been used in the EA, such as in the determination of environmental effects and any proposed mitigation, follow-up and monitoring that is proposed; and
- any ATK collected must also stay in the community so that the community can also benefit from the ATK research.

Bring Aboriginal traditional knowledge and western knowledge together

“ATK and western knowledge can complement one another”

How ATK is integrated into an EA depends almost entirely on the type of knowledge that is collected. For instance, environmental information (such as ATK dealing with wildlife migration patterns), can be readily integrated with other environmental knowledge. Knowledge about, or based on, values and norms, is not as readily integrated with scientific data sets. Thus, the main role EA practitioners is to collect and organize any ATK that is provided, and bring to the attention of decision makers that ATK has been considered and how it has been considered.

Note: In many situations, western and traditional knowledge systems will be complimentary in the insights that they can provide to EA practitioners, and thus they can be reconciled with one another in the EA. Where they cannot be reconciled, EA practitioners should juxtapose what is suggested by each knowledge system in their EA report, demonstrate how they have considered each in their EA, and how each type of knowledge has been considered in the EA.

B3 BC Government Heritage Resource Protection in Land & Resource Management Plans (Fort Nelson LRMP, 1997)

First Nations Heritage and Culture

The cultural heritage resources reflect past and present uses by aboriginal and non aboriginal peoples. Three categories of resources are evident: archaeological sites containing physical remains of past human activity; historical sites often consisting of built structures or localities of events significant to living communities; and traditional use sites which often lack the physical evidence of humanmade artifacts or structures, but maintain cultural significance to living communities.

The majority of the currently identified archaeological sites within the Fort Nelson area consist of surface or thinly buried scatters of stone tools and/or flakes indicating where these tools were manufactured or repaired. More complex sites may include other types of features, such as the remains of cooking hearths and post molds where temporary shelters and food drying racks were erected.

Some known historical sites of interest date from 2000 to 5000 BC. Natural heritage resources included in the Fort Nelson LRMP consist of archaeological sites. Little historical and ethnographic material is available for this northeastern portion of BC; however Traditional Use Studies are in different stages of being done in this LRMP area. These are revealing significant archaeological, cultural and heritage sites and traditional use sites.

A Traditional Use Site is any geographically defined site (on land or water) used traditionally by one or more groups of people for some type of activity. These sites may lack the physical evidence of human-made artifacts or structures, yet maintain cultural significance to a living community of people.

Traditional use sites may include: sacred sites, resource gathering sites such as berry picking and hunting grounds and sites of a legendary or past event of cultural significance. An archaeological overview assessment for the Fort Nelson planning area was completed in March 1996 (Archaeological Overview of the Fort Nelson Land and Resource Management Plan Area, Heritage North et. al. 1996). The study was completed at the 1:250 000 scale and classified the planning area into zones with a low, moderate or high potential to contain archaeological sites. This information has been refined to the 1:50 000 or 1:20 000 scale to assist in operational decision making.

This LRMP Plan is consistent with the British Columbia Archaeological Impact Assessment Guidelines, the Forest Practices Code of BC, the Heritage Conservation Act and the Protocol Agreement on the Management of Cultural Heritage Resources between the Ministry of Small Business, Tourism and Culture and the Ministry of Forests.

The LRMP plan outlines objectives for the entire area, emphasizing recognition and respect of spiritual, cultural and traditional use values; heritage and archaeological sites and values; and Heritage Trails. The Province has a legal obligation to avoid infringement of Aboriginal and Treaty rights where resource management activities are proposed.

Appendix B4: First Nations, Heritage & Culture Objectives in Fort Nelson LRMP

Objective	Strategy
Avoid infringement of aboriginal and treaty rights.	<ul style="list-style-type: none"> • Complete Traditional Use Study (TUS) for each native band. • Encourage local band's participation in archaeological assessment. • Follow existing policies, guidelines or procedures to protect aboriginal or treaty rights. • Identify areas where Treaty or aboriginal rights are being practiced.
Recognize and maintain traditional uses and values.	<ul style="list-style-type: none"> • Conserve ecological integrity of areas to maintain opportunities for the pursuit of traditional uses.
Recognize and maintain cultural and heritage resources.	<ul style="list-style-type: none"> • Encourage mapping of areas containing cultural heritage. • Encourage Archaeological Impact Assessment (AIA)/Archaeological Impact Study (AIS) to supplement and refine Archaeological Overview Assessment (AOA) map. • Consider undertaking archaeological impact assessments in all areas of High and Medium potential.
Identify and manage significant Heritage Trails.	<ul style="list-style-type: none"> • Locate and map trail locations with historical significance. • Develop a management strategy for significant heritage trails. • Conserve heritage values through application of a buffer zone, where appropriate. The width of the buffer zone will be site specific and will be decided through lower level planning. All development in the buffer zone will respect and conserve the heritage values of these areas.
Identify and manage heritage and archaeological sites and values (priority sites in the river corridors).	<ul style="list-style-type: none"> • Record known archaeological sites with BC Archaeological Branch. • As part of archaeological impact assessments, consider selective impact assessments of Low Potential areas. • Encourage cultural heritage overview in areas of known significance. Conduct activities in a way that is sensitive to known archaeological and heritage values • Develop management strategies for specific sites at the operational planning process.

Appendix C Government Policies and Perspectives on TK Integration

3.1 BC Ministry of Energy, Mines and Petroleum Resources²⁷

The Ministry of Energy, Mines and petroleum Resources (MEMPR) manages the responsible development of BC's energy, mining and petroleum industrial sectors, retaining responsibility for the policy direction provided to the OGC. The Ministry administers twenty-five statutes related to the energy, mining, and petroleum resource sectors, and is responsible for the BC Hydro and Power Authority, BC Transmission Corporation, the Columbia Power Corporation, the Mediation and Arbitration Board, the Oil and Gas Commission, and the Assayers Certification Board of Examiners. The MEMPR vision is: *"...thriving, safe, environmentally responsible and competitive energy, mining and petroleum resource sectors, which contribute to the economic growth and development of communities throughout British Columbia."*

MEMPR has a stated commitment to working with communities, industry, First Nations, and environmental organizations to ensure that the continued economic growth and development of these sectors is socially and environmentally responsible. In line with the BC Government's "New Relationship with First Nations," MEMPR is encouraging First Nations to examine the opportunities open to them to engage in proactive energy planning, ranging from energy conservation programs to economic and resource development. The responsibility for supporting MEMPR's First Nations consultation processes and advancing the New Relationship resides with the Ministry's Marketing, Aboriginal and Community Relations Division.

Guided by principles of trust, and by recognition and respect of First Nations rights and title, MEMPR is attempting to build a stronger and healthier relationship between the provincial government and aboriginal peoples. MEMPR is working to support the New Relationship by:

- developing programs which include training for aboriginal peoples,
- facilitating First Nations employment in the energy, mineral and petroleum resource sectors,
- supporting treaty negotiations, and
- undertaking strategic initiatives in cooperation with other ministries.

In their new Service Plan, MEMPR's third goal is: *"The Ministry, First Nations, communities, and industry working cooperatively for the responsible development and use of BC's energy, mineral and petroleum resources."* Two of the relevant MEMPR objectives within this goal are:

- increased, appropriate and timely engagement of communities, First Nations and stakeholders in resource development and a strengthened commitment to environmental and social responsibility; and
- increased opportunity for First Nations to share in the benefits of responsible resource development and use.

²⁷ BC Ministry of Energy, Mines and Petroleum Resources. 2007/08-2009-2010 Service Plan. February 13, 2007. 31 p.

The MEMPR hopes to achieve these objectives by:

- supporting First Nations in developing and providing cross-cultural training to agencies and industry;
- engaging First Nations in identifying opportunities to participate in and benefit from energy, mineral and petroleum resource development;
- assisting industry to engage First Nations in development proposals at an early stage;
- developing partnerships among First Nations, industry and government to provide funds for skills training, employment and business development opportunities; and
- negotiating First Nations Agreements which involve First Nations from pre-tenure to reclamation.

Under new or re-negotiated working arrangements with First Nations in 2005/06, OGC contributed \$11.1 million to First Nations,, and MEMPR contributed \$2.6 million. These working arrangements included a wide range of initiatives, from on-reserve oil and gas revenue sharing to formalized consultation processes. The benefits to First Nations included: revenues; **formalized information sharing**; defined steps for the fulfillment of consultation obligations; ability for First Nations to prioritize the use of their limited lands and resource staff; opportunities to discuss and participate in policy development; and access to training in the processes and systems used by MEMPR related to mining and oil and gas development.

3.1.1 Regional Government Perspectives and Recommendations

Research & Inventory:

- recognize that TK data-collection has value but as coastal experience has shown, there may never be enough information; need to be adaptive and evolve with the information coming in because you can't let it hold up the process; need to evaluate and improve as you go
- one aspect of TK research would be to explore how First Nations monitored the land - what signals did they look for?; also try to capture hunting success and information from other resource use activities
- Engaging TK in resource assessments such as wildlife, fisheries & plants
- Linking spatial inventories with traditional activities
- Conduct community cultural surveys with M-K First Nations using spatial and non spatial information gathering as another type of inventory
- All First Nations need an inventory on their traditional territory
- First Nations can become involved in Archaeological Impact Assessments (AIA's) for example by participating in choosing the consultant who does those assessments, doing the verification, conducting additional interviews and surveys; this promotes buy-in
- Industry and government can't assess everything; Elders play an important part in filling in the gap; there is a need to accept stories; need to compromise on timeframes - industry wants a fast response but First Nations take it slower
- Wildlife habitat assessments, fish assessments can be done based on areas where First Nations hunt(ed) and fish(ed); professionals struggle with it but TK needs equal weighting

Working Relationships:

- it is important that TK research is done in partnership to build understanding and cooperation; “ground zero” integration is necessary and works best – build a partnership from the ground up by collectively bringing each group’s priorities to the table; the benefit of industry is that it can respond quicker than government
- A big issue is trust; need 3rd party independence; need to “park the egos by the door”; drop the agendas and have constructive dialogue
- Need to have transparency and a will to negotiate – don’t use it as a podium
- Put these things in agreements; include performance clauses committing them to only do certain types of work; work that is aligned with traditional activities tend to be best; but the community needs to articulate what these are;
- Need to accept oral history and exposure to the culture and respect for it

Implementation Capacity

- The people involved need to have a broad experience base; “generalists” are the key people; need an alternative personality type – level headed, compromising – order to negotiate and make progress; true commitment to understanding other’s issues – people who are engaging and have the social skills and sincerity;
- Need more work in educating First Nations regarding mineral development and the process of staking out areas of interest without foregoing rights to the area;
- OGC commissioned Feasibility Study on creation of a Central Land-Use Office at the T8TA, and this is likely to proceed

Opportunities:

- Involve First Nations in assessing and applying TK in reclamation of mine pits to reduce the risk to the land base

Risks in Doing TK Integration:

- Information accuracy: internal dialogue within the community is not necessarily unified;
- Availability of Elders; need to be aware of both traditional/elected leaders;
- Consensus among groups;
- Lack of trust creates road blocks
- There tends to be more success with younger people – tend to be more open minded

3.1.2 BC Oil and Gas Commission²⁸

The BC Oil and Gas Commission (OGC) was created as an independent single-window regulatory agency responsible for overseeing oil and gas operations, including exploration, development, pipeline transportation, and reclamation. OGC was created as a Crown Corporation through the enactment of the Oil and Gas Commission Act,

²⁸ BC Oil and Gas Commission. 2007/08-2009-2010 Service Plan. January 15, 2007. 18 p.

and has been delegated regulatory authority through the Petroleum and Natural Gas Act, Pipeline Act, Forest Act, Forests and Range Act, Heritage Conservation Act, Land Act, Environmental Management Act, and Water Act.

The OGC is charged with a wide range of environmental, economic, and social responsibilities. As a Crown Corporation, OGC's accountabilities extend to affected communities, First Nations, Client companies and their representative associations. The OGC vision is *"...to be the innovative regulatory leader, respected by stakeholders, First Nations and clients,"* and one of its core roles is *"...actively consulting with First Nations on applications and operations."*

It is the OGC's duty to consult with First Nations on a project by project basis. Through project consultation, the OGC seeks to obtain knowledge regarding traditional land use and potential impacts to Treaty or aboriginal rights. The OGC's goal is to enhance its knowledge and decision-making capabilities, while ensuring that aboriginal rights are not unduly impacted. The OGC uses agreements with the Treaty 8 First Nations as guidance in its consultation process.

One of the OGC's eight core values is to: *"... continually strive to strengthen relationships with our stakeholders, First Nations, Clients, and co-workers by being open and demonstrating integrity,"* and, indeed, one of the OGC goals for 2007/08-2009/10 is: *"Strengthened relationships with stakeholders, First Nations and clients." As part of this goal, and as enabled by the Oil and Gas Commission Act, one of the purposes of the OGC is to: "encourage the participation of First Nations and aboriginal peoples in processes affecting them."* The OGC expects to accomplish this by improving the extent and quality of engagement with First Nations, providing a meaningful dispute resolution model, and ensuring appropriate consultation.

One of the British Columbia Government Five Great Goals is, "To lead the world in sustainable environmental management." The OGC believes that there is a strong alignment between its activities and goals and this Great Goal. The OGC believes that *a key element of the First Nations consultation function is the application of traditional knowledge to environmental management strategies and practices.* (p16, 2007-2010 Service Plan)

Inter-Agency Protocol Agreement

OGC has a protocol agreement,²⁹ with the former Ministry of Sustainable Resource Management, now with the Archaeology Branch of the Ministry of Tourism, Sport and the Arts, which defines the roles of the various agency branches and the OGC is assessing and managing impacts on archaeological sites from oil and gas exploration and development and pipeline activities.

3.1.2.1 Regional Government Perspectives and Recommendations

Planning , Allocation, Management and Monitoring Processes

²⁹ Protocol Agreement. March 2004. Ministry of Sustainable Resource Management, Ministry of Forests, Oil & Gas Commission. 8 p. <http://www.tsa.gov.bc.ca/archaeology/policy/OilandGas.pdf>.

- Need for increased awareness amongst First Nations about the different management objectives for the M-KMA – that it includes *both* resource protection and sustainable resource development
- A few O/G industry leaders have established effective working relations and participation with First Nations that demonstrates meaningful work and response to community needs
- TK integration cannot be left as a ‘driver to stop development’ but rather an important to inform decision-making
- OGC recognizes that thorough reviews are needed by First Nations of Pre-tenure Plans (both pre- & post-M-KMA) as they’ve not yet been tested – e.g. Sekanni but can build on consultations started, as with Prophet River FN
- Recognize that site-specific archaeological assessments alone may not provide full picture of ‘cultural landscape’ but archaeological overviews could do so with First Nations guidance
- Overall goal is to increase certainty for industry - First Nations collaboration and adaptive management
- Due to complex geological formations, it is the better-resourced companies that will be operating in the MK, and therefore can afford the costs of higher resource management standards (including addressing First Nation objectives)

Working Relationships

- New MOU with designation of different consultation levels (i.e. including “complex consultation areas”, “special mgt zones”, “major river corridors”, and “protected areas” provides a graduated approach to enable TK integration;

3.2 BC Ministry of Forests and Range³⁰

The vision of the Ministry of Forests and Range (MFR) is: “diverse and sustainable forest and range values for BC.” Many of the forest and range social, economic and environmental values included in the MFR vision are those which are paramount to First Nations: land, space, and a sense of place; trees, plants, soils, water, fish, wildlife, and biodiversity; subsistence resources and activities; and cultural heritage resources and sacred areas.

MFR is working to promote the New Relationship by supporting the Ministry of Aboriginal Relations and Reconciliation in treaty negotiations. MFR also has a key role in assisting First Nations becoming active participants in the forest sector, through the negotiation of Forest and Range Opportunity Agreements which provide economic benefits, such as revenue sharing and opportunities for tenure, and which accommodate aspects of First Nations’ rights and title. As well, MFR negotiates agreements to streamline the consultation process, and agreements to enable additional economic opportunities for First Nations by providing access to volumes of beetle-attacked and fire-killed timber. A top priority for the MFR in 2007/08 is the on-going development of policies and programs which involve First Nations in mitigating the impacts of the mountain pine beetle on the forested environment and First Nations communities.

³⁰ BC Ministry of Forests and Range and Minister Responsible for Housing. 2007/08-2009-2010 Service Plan. February 12, 2007. 83 p.

The three goals of the MFR are:

- (1) sustainable forest and range resources,
- (2) sustainable socio-economic benefits from forest and range resources, and
- (3) highly effective, innovative and responsive organization.

Objective #7 under the MFR's goal #2 is: increased First Nations opportunities for participation in the forest sector; stability on the landbase; and forestry operations which respect First Nations interests on the landbase. MFR will employ the following strategies, in an open, transparent and collaborative approach with First Nations:

- consult with First Nations in accordance with the Crown's legal obligations while developing relationships;
- negotiate agreements with First Nations:
- the First Nations Forest Strategy offers First Nations access to economic forest and range benefits through Forest and Range Opportunity Agreements; this program will be carried forward and expiring agreements will be replaced;
- increase First Nations participation in the forest sector through direct award tenures;
- support for priority treaty tables; and
- support the Ministry of Aboriginal Relations and Reconciliation in the development of the New Relationship.

At no point, in any of the MFR's statement of goals and objectives is there any specific reference to the recognition or usage of traditional knowledge, or to information sharing.

Cultural Heritage Resource Management in Provincial Forests

In October 1996, the "Protocol Agreement on the Management of Cultural Heritage Resources"³¹ was signed by the Ministry of Forests and the Ministry of Small Business, Tourism and Culture (now Ministry of Tourism, Sport and the Arts). The agreement was implemented to assure the integration of cultural heritage resources in the MF's land and resource management planning and operations, and the protection of such resources during forest management operations.

The stated mandate is: *"To recognize that cultural heritage resources (archaeological and traditional uses sites) are an integral component of Provincial forest lands, and to ensure that these resources are managed in accordance with the provisions of the protocol agreement."*³² This agreement applies to the sub-regional plan level (i.e., Land and Resource Management Plans, forest management plans), operations plan level (i.e., forest stewardship plans), and operations level (e.g., forestry cutting permits and road permits). Currently, the MFR's responsibilities include archaeological impact assessment and management; emergency impact management; protection of culturally modified trees; and setting standards for and administering Traditional Use Studies

³¹ Protocol Agreement on the Management of Cultural Heritage Resources. October 1996.
<http://www.tsa.gov.bc.ca/archaeology/policy/chr.htm>.

³² Cultural Heritage Resource Management in Provincial Forests. May 1997.
<http://tsa.gov.bc.ca/archaeology/policy/forests.htm>.

(defined as the identification, assessment and protection of traditional, ceremonial and sustenance activities of aboriginal groups (emphasis added)).

The Management of Heritage Trails in Provincial Forests

The purpose of the Memorandum of Agreement on Trails³³ is to recognize that heritage trails performed an important role in the development of the Province and have a significant place in its history; to make provision, by this joint agreement, that the most significant of these trails, or selected portions thereof, can receive the protection afforded by the conditions of the Heritage Conservation Act; and to provide for appropriate management so that the heritage and recreation values are maintained for the enjoyment of the people of the province. The Heritage Conservation Act provides for designation of land as a Provincial heritage site. Designation under this Act will provide a means of recognizing and protecting those heritage trails of highest significance. Heritage trail designation prohibits all forestry or other development activity that may alter the designated area without a permit from the Minister responsible for the Act, or a person delegated in writing by the Minister.

A subsequent directive, “The Management of Heritage Trails in Provincial Forests,”¹² has as its purpose the provision of guidance to Archaeology Branch and MFR staff regarding the branch's responsibilities in ensuring protection and management of heritage trails on Crown lands administered by MFR, and to ensure that these trails are considered in MFR's forest planning and operations.

3.2.1 Regional Government Perspectives and Recommendations

While Ministry representatives were interested in contributing to this research, one senior official noted that there is not likely to be significant demand for timber from the northern M-KMA area over the next 10-20 years due to the large available supply elsewhere in the Fort Nelson Forest District. In the Peace Forest District, some previously permitted logging in the southern M-KMA (e.g. Halfway-Chowade) has been ‘grand-fathered’. In the Mackenzie District, there is considerably more logging activity. Other MoF responsibilities in forest recreation have been transferred to MTSA, but the Ministry does maintain a role in assessing and managing forest range tenures for both horses and other livestock in the M-KMA .

TK Collection or Related Inventory

- It is critical to pass on knowledge; need to stop putting increased importance on inventory; have already lost a lot of opportunities to collect TK
- The Forest Service initiated traditional use studies; TUS also provided documentation for the treaty process
- There is a lack of transmission for non-native TK; capturing the information from the “story tellers”
- Ron Rutledge has done some work on this (documenting knowledge); Ross Peck has worked on capturing the history in the MK; Gary Vince too.

³³ Memorandum of Agreement on Trails. 1995. Ministry of Forests and Ministry of Small Business, Tourism and Culture. <http://www.tsa.gov.bc.ca/archaeology/policy/trailmemo.htm>.

¹² The Management of Heritage Trails in Provincial Forests. 1996. Ministry of Forests and Ministry of Small Business, Tourism and Culture. <http://www.tsa.gov.bc.ca/archaeology/policy/trail.htm>.

- First Nations work on mapping out camps and trail networks; work was done in **Fort Ware**, including Elder's stories on what the land was used for; getting out on field trips; develop an understanding of First Nations influence over the landscape e.g. use of fire
- TK provides information about the landbase; very important to get First Nations young people involved to absorb the knowledge
- The risk is that it might already be too late – Elders are passing away
- Develop the research methodology; develop standards and practices for TK integration; ensure there is monitoring and follow-up for the long term
- Conduct research into knowledge gathering e.g. Tuchodie River research and inventory – human use-focused build on the current inventory methods but for First Nations
- Role of First Nations in Disturbance History of the areas
- Examine the east west movements and trails; see how it is complementary to wildlife and other information
- Role of livestock by First nations in the area – when did they start using horses
- Understanding the history and interactions between native groups For First Nations, MoF conducted the traditional land use studies (both for Mackenzie and Forest St John/Fort Nelson Districts)
- The TUS info from the east isn't available and is held by the T8 council
- The T8 TUS was paid for by the government; withholding the information could be seen as a bargaining chip or a lever; there is a concern over information security and is currently not available for decision-making
- Challenge is building up the data; developing the capacity to collect information
- Loss of knowledge from the Elders, non-native trappers, and Guide-Outfitters – their ownership is changing eg Ross Peck is doing some work in documenting; gathering the knowledge is imminent and will otherwise be lost

Planning , Allocation, Management and Monitoring Processes

- Need better understanding of what First Nations think good stewardship means
- There has been a large focus on Traditional Use Studies (maps), and not enough on how TK relates to understanding ecosystem function
- How do you use TK with concepts like risk and mitigation thresholds; there is a perception of activities that are low risk but can actually upset the balance;
- Context is different for different purposes/land uses; development vs subsistence use grew out of it;
- The challenge is to take TK and use it with a very different approach and mould it into a WS-based process
- Climate change is a challenge for managing risk; climate change forces the need to look forward because we are heading into something that is unknown; First Nations need to think about how their knowledge fits into the new world of climate change; is it an adaptive or proactive approach that is needed?
- Identify key pieces of Traditional Knowledge and develop the process that is appropriate and implement them on the ground – this will help First Nations see that information sharing can result in good outcomes
- TOOLS: need a common effort on both parts e.g. Jane Lloyd Smith Cranberry TSA has a tool they use with the Gitanyow they used a zoning approach when there was very little development pressure on the TSA and had time to work through it – time pressure is a big problem and the more proactive the better

- The lack of interface between Traditional Knowledge and science because TK is based on experience and is not backed up by science
- There is a need to use the TK and Science together to interpret each to the two knowledge systems, whether they converge or diverge, if one can be used to explain anomalies in nature that the other can't
- Capture and account for their need and right to take food off the land; could develop a "sustenance tenure" and manage for that resource use through, for example, burning; setting objectives for sustenance
- Stakeholders need to take on more in terms of long-term responsibility and involvement in monitoring the process
- There is a need for long-term commitment to do monitoring
- Determine how TK is considered in planning (retroactive) such as in LRMPs and Forest Stewardship Plans (such as cultural heritage resources – MOFR has pilot projects going on now to do a qualitative evaluation of past planning and work out ways of to make improvements based on this assessment)

TK Information Storage, Retrieval and Presentation

- TK Information is housed with the Forest Service, some with consultants and so the information is everywhere and now the mandate has changed
- There is a lack of coordination; there is a need to get together and commit to managing, collecting information and to skill development
- (Fort Weir/Kwadacha) developed a map layer of historical use and activity
- There is a need for "data keepers" (e.g. Darryl Rob at ILMB); there needs to be a coordinated effort to get the technical data management together; could use the Fox-Obo unit as an example – where logging is allowed or where there is integrated use of the land; where pre-tenure planning is happening
- Stop showing people maps – use better visuals such as "fly-throughs" like with Google Earth imagery/software
- Need one standard for the information = GIS
- What will help Information security: With trappers and Guide-Outfitters in Fort Nelson, the knowledge was taken into account in the LRMP; information such as trail locations and campsites were kept confidential and the knowledge holders trusted the government to do so; and that information still is confidential despite high turnover
- First Nations have trust and how to make TK known so that it can be used
- Need to have a data custodian or an aboriginal affairs custodian Example: the Nadina/Lakes have an archeological potential model (LARP) and there is another for the Morice (MARP) which is essentially an Access database with TUS layers and includes AIA's (tracks areas already surveyed even if nothing was found) and includes a GIS database; the government uses the tool to check for First Nations values and then informs the licensees if they found anything; if there is a value to be addressed the licensees need to work with the First Nation directly; used for Forest Stewardship Plans and cutting permits; a very good system for government and First Nations offices with a high turnover
- Mutually-satisfactory Information sharing agreements are a challenge to achieve
- Develop a common data warehouse with access by both first nations and government; for example the government now has an interagency website that has a

database that can tell you who has information which agency they work for; AECIS= Aboriginal Engagement Corporate Information Site

- Having information summaries housed in a common location with joint access
- Risks is how the information is used and what it is going to be used for and getting access

Implementation Capacity

- Capacity development is weak on both sides: government (i.e. regional level) don't have the capacity to fund the "New Relationship";
- Another obstacle with capacity, that is, there are no good mechanisms for non-First Nations professional to have the time/patience to slow down and listen to the knowledge;
- There is a need for more money and training to overcome the capacity issues; more resource management training and more Aboriginal professionals; this is a long term investment as these people can bridge the gap between TK and WS;
- There is a need to develop more partnerships, for example, with organizations like the Sustainable Forest Management Network, MacGregor Model Forest; UNBC; the MK Board to help with government capacity
- MK Board should work out the implementation, and continuous improvement
- MK can be used as a pilot to show implementation
- First Nations capacity to bring knowledge forward has a lot to do with lack of funding; First Nations can have other priorities; lack of training and skills generation; there is a possibility that the knowledge may never be recovered
- Government agencies could use TK for consultation; a proactive way of communicating values
- The First Nations right now are not engaged – need to get an institution like UNBC to work on coordinating and networking to facilitate capacity-building, and to work on knowledge management
- M-KMA Board could work in partnerships and explore models and develop standards
- Develop demonstrations, examples a pilot project; there are so many initiatives and a lack of coordination: avoid duplicating effort when a process is already developed – adopt it!
- There are issues with varying levels of focus and varying priorities amongst and within First Nations communities
- Many First Nations have funding from oil and gas activities that can support TK projects
- Address present needs as soon as possible
- Give the communities the capacity and work out a deal right away to minimize the risk of loss
- Trust and capacity building – including government, you need the right people with the right social skills for the job

Working Relationships

- First Nations need to understand how sharing their knowledge is going to benefit them;
- Trust is the key: the First Nations have to get to know you and build that relationship

- How do you best achieve integration while staying clear of rights and political issues?
- Managing expectations will be a key challenge in taking on this task of TK integration
- There is a need to start building trust and getting all groups to communicate their values
- There is a need to challenge them to show and reveal the values and validate their interests on the ground
- Requires natives and non-natives making the commitment and keeping it simple
- TK integration is part of the New Relationship – but where is the capacity going to come from
- Improve on the information sharing process, develop an ongoing relationship, and build on capacity gradually over time.
- It's really not fair to throw so much at First Nations communities – give them a chance to work up to it
- The MoF would like to see where they (the traditional uses) are and how to share the info – need to start having conversations
- Coordinate with other areas (outside MK) to integrate land management.
- There is a trust issues to overcome with the First Nations; there is a history behind their relationship with government where they had a lack of control
- There is a need for relationship building; written data sharing agreements where First Nations can benefit (eg data warehouse)
- Working on trust and a good relationship
- There needs to be a change in the perception of professionals by First Nations communities
- There needs to be consistency in government personnel who interact with First Nations

Research Topics and Opportunities

- Explore the traditional ecological knowledge as well as spatial land uses over long time period
- What implications does climate change have for Traditional Knowledge?
- The MK is a very good area for long term involvement – where communities have the opportunity to understand the outcomes of their involvement and to develop an understanding of the inherent ability of the land to grow trees – the forest is very resilient
- Identify significant values and interest
- Learn more about First Nations knowledge about plant communities; which are more important to them? Same with wildlife and habitats
- Explore ways of storing the information to address security issues

3.3.5 Forest Industry Perspective and Recommendations

The following is a series of comments offered about various aspects of TK Integration including issues/challenges, present needs and opportunities.

TK Collection or Related Inventory

- There is little capacity within the First Nations – there is no funding to learn the methodologies for collecting the information; there are no templates to work from
- How to prioritize the information; what is most important to deal with first: historical or current use?
- Industry needs capacity to collect inventories such as archeological surveys; there is a lot of area to cover
- A pilot project to develop a template for best practices when working with TK
- Canfor is interested in methodologies that can be used elsewhere
- Finding the capacity to collect the information is a major issue
- Deciding who develops the best practices; do it in partnership
- M-K funding may not carry projects through to completion; projects need to have a realistic scope so that they don't take forever; they must be useable and realistic
- Develop a good working plan with affected communities involved
- Maybe target an area – one landscape unit in the M-K; evaluate and adjust the process before applying it to other areas in the M-K
- Define the scope, deliverables, and timelines of the project.

TK Information Storage, Retrieval and Presentation

- Relating things that occur on the ground and putting them on a map alienates people; too abstract from reality
- Taking spiritual values and translating them for non-natives; how to transfer them into management
- Take the progress made within the M-K and apply it elsewhere; develop a methodology and get it so that all stakeholders accept it
- Start communicating about the values on the M-K and develop confidentiality guidelines
- Questions around how the information will be shared and used and under what conditions; need to determine this before it has been collected; otherwise there is no value for it

Planning , Allocation, Management and Monitoring Processes

- TK makes the site plan better when you include it with all the other values collected from inventories
- At the landscape unit level, you can address seasonal constraints, archeological needs, wildlife corridors and calving grounds
- How do the value systems between communities differ? Does every community treat a feature like a burial site the same or differently

Working Relationships

- There is a lack of trust which is a result of theft of artifacts from cultural sites so this information is protected

- Elders don't see why they should share the information when their values could be put at risk
- The Elected chief and council are often disengaged from the Elders and families; elected representatives may not be communicating to internal groups
- There is a lot of senior level support in the company; but at the ground level people need to learn to leave their baggage at the door; they need the will to make the relationship with First Nations work
- Field trips work very well; used an example of how he took Elders on a tour of logging operations to show progress in addressing values; like taking shareholders on a company tour
- Example: held a community day at Lovell Cove; flew families to their traditional territories; had biologists and consultant present to show plans and other work that has been done so that the review was done in person; not necessarily satisfied them but did increase comfort levels that an effort was being made
- Not realistic to come up with something that meets everybody's needs; deal with things on a case by case basis to work through to the "middle ground"
- Hired community people to do recon surveys and layout; to work with consultants and archeologists; encourage company employees to drop in on the community and get to know people; keep an ear to the ground on what is going on in the community; become involved in community events
- Following through on promises Inviting community to send members to training sessions/courses that the company is running anyway
- Be proactive and don't wait for a crisis to come to the table together
- The willingness of First Nations to participate by sharing information is a challenge; he chooses to develop a relationship document rather than a legal document drafted by lawyers; you do what needs to be done at the ground level to make it work and to stay accountable
- Lack of a bridge between Chief and council and the families; C&C are responsible for the reserve, but the families are responsible outside of the reserves; need to know who is in charge and everyone that you need to speak with on issues; it is the both the community's and licensee's shared responsibility to communicate and learn who needs to be involved
- Building trust in non-First Nations to ensure they will respect the knowledge
- The meanings of things like respect means different things to the different cultures
- Canfor is interested in increased participation on the board or to becoming involved in some capacity; although they have left the M-K area out of their timber supply
- First Nations may not participate at all; or some may participate and others may not; need to accept it if some choose not to
- Research cannot hold up management decisions or working relationships.

3.3 BC Ministry of Environment (including Environmental Assessment Office)³⁴

BC enjoys an exceptional, world-renowned wealth and diversity of ecosystems, landscapes, waterscapes and natural resources. The Ministry of Environment (ME) plays an essential role in encouraging and supporting the efforts of BC's residents, industries and communities to maintain a healthy environment and the important benefits which accompany it – enhanced human health, sustainable economic development, and a high quality of life. The vision of the ME is: "a clean, healthy and

³⁴ BC Ministry of Environment including Environmental Assessment Office. 2007/08-2009-2010 Service Plan. February 16, 2007. 81 p.

naturally diverse environment.” The key core business area is lead by the Environmental Stewardship Division (ESD), which focuses on the effective management and stewardship of fish and wildlife species, ecosystems, parks and protected areas. ESD is responsible for the collaborative development of standards for the use and protection of species and habitats for allocation of natural resources for hunting, angling, trapping, and wildlife viewing.

MoE is working to support the New Relationship through the development of effective partnerships and engagement processes with First Nations. The ME recognizes that partnerships are an important mechanism for a shared-stewardship approach to protecting the environment and supporting healthy communities. Collaborative management agreements with First Nations, including a number of Parks Collaboration Management Agreements (PCMA) and Regional Fish and Wildlife Processes, (RFP) combine **aboriginal knowledge, local knowledge**, and scientific information to facilitate improved management decisions.

The PCMAs are generally linked to the creation of new protected areas in land use plans, but in a number of cases are being discussed in the context of treaty negotiations or other provincial initiatives. PCMAs define how the province and First Nations will work together on the management of protected areas. The RFPs are designed to provide a region-wide perspective and actively engage First Nations and key stakeholders with a direct interest in fish and wildlife in a forum to discuss management and allocation issues. Another good example of effective partnering is the Conservation Officer Service partnership with the Tsay Keh Dene First Nation to protect and manage wildlife in northern BC’s remote communities.

ME intends to continue to foster positive relationships with First Nations through the development of effective consultation and strategic engagement processes on important program and policy development (e.g., Interim First Nations Consultation Guidelines under the Integrated Pest Management Act, and the development of Water Use Plans for BC Hydro hydroelectric facilities). On-going dialogue between First Nations and ME is intended to continue to identify and confirm mutual objectives and a common understanding of long-term interests. ME is also working on new, innovative initiatives and engaging other provincial agencies and external partners on projects, such as training First Nations communities to increase their capability to respond to and recover from environmental emergencies, such as oil spills.

3.3.1 Regional Government Perspectives and Recommendations

TK Collection or Related Inventory

- Some Ministry staff have considerable base of “local” knowledge with observations of change in vegetation, animal behaviours and a lot can be gained in combining this with First Nations TK
- Key species of interest to determine habitat/range include Caribou, Bison
- Could benefit from TK insights about vegetation changes, fire history especially in considering climate change/global warming impacts on grassland ecosystems, Pine forest impacts from Mountain Pine Beetle
- Saw problems with a traditional knowledge gathering project that was contracted out by one First Nation tribal council, the outcomes weren’t as good as it could

have been; from this experience saw the need for strong community involvement in collect TK information, outsiders have problems keeping biases out of the interpreting the information – methodology could have been better

- There has been no formal effort on the part of the fish and wildlife habitat side to gather and incorporate TK
- There are variety of existing Parks Collaborative management Agreements, and some are still under negotiation; Ukutche has one, negotiating with Nakazdli and McCloud Lake bands, North Thompson and Treaty 8;
- There is a need for better understanding of the TK; WS isn't supporting some of the observations
- To effectively manage fish and wildlife resources we need to get information from the First Nations;
- There is a need to determine what is traditional knowledge based on experience and traditional practices vs people saying what they think they want others to hear – need to validate the knowledge – much of it matches scientific knowledge when it comes to wildlife and fish.
- Identifying what TK information would be useful and valuable – focus resources on what is helpful to know rather than a broad, blanket information gathering
- Clearly define the range of information to be gathered – what does it encompass? Wildlife? Fish? Plants?; there are unique habitats like Pink Mountain where we're told there are important medicines – how best to protect?
- Potential Risk: Investing money in getting information that isn't useful/or useable and reflecting what is going on out on the land base
- through years of work in Parks management, staff acquire considerable amount of First Nations TK/TUS data but do not make it accessible; information on sites, artifacts kept confidential in "Archaeological File" for each Park at MoE office; information-sharing protocol through Heritage Branch is required and ideally, could apply to the whole M-KMA ; has to also respect the Archaeological Impact Assessment Act

Planning , Allocation, Management and Monitoring Processes

- Important to get First Nations involved in Plan Development (e.g. MK Parks, Wildlife) through effective processes including use of interpreters, on-site field tours
- Government needs to be at the table earlier and get at the heart of the values, and put effort into the discussions
- Eg; Moose management in the Ingenika – information exchange local people can tell biologists where the moose calving ground are so the government can make informed decisions about population management
- Help people understand how it can be used and how it can help
- May be an issue with increasing participation of First Nations in resource industry that may conflict with their conservation goals/shifting values of new generation – needs to be reconciled by FN's through their community planning
- Historical problem of understanding First Nations wildlife harvest needs for key ungulates (e.g. moose) so have to use rough estimate of 15% of known population; information is protected but trust relationship is critical
- Key MK areas with O/G development pressure include Besa-Halfway, Chowade, 8 Mile/Sulpher, Muskwa River Corridor, Prophet Hot Springs; other demands are for Mining, Wind Development, Recreation Access

- MoE (FSJ) implemented a Conservation Patrol project with hiring of an Auxiliary Conservation Officer dedicated to the M-KMA – program should be continued, and has benefit of increasing First Nations participation and community liaison for TK exchange; provides ongoing monitoring of access, wildlife conflict, harvesting, waste discharge and other issues;

TK Information Storage, Retrieval and Presentation

- Research into the exchange of information will make it a lot easier for government resource managers to make decisions
- Development of Tribal Council GIS capacity can facilitate information-sharing and decision-making

Implementation Capacity

- Can build upon positive initiatives like the T8TA-MoE Wildlife Biologist program where critical habitat mapping done, new highway signage, diversionary salting near Prophet River; also can draw lessons from work with Sauleau/West Moberly First Nations Wildlife Counts, Lake Trout Recovery, Meat Contamination Study
- Figuring out the best way to gather the information – getting people who are trained and knowledgeable in gathering, interpreting and writing up the information
- New Relationship and the increased attention to First Nations requires more time and resources and they are taking a corporate approach by asking First Nations how they want to consult, so there are opportunities to develop tailored approaches to consultation with each community according to their priorities and capacities, and there is funding to help them deal with the capacity issues
- There are opportunities to perhaps have First Nations take over some of governments business eg., managing and collecting information around trapping and monitoring, similar with the Trappers Association; First Nations could manage their own trapline holders by registering a bunch of traplines to the band
- Put resources toward this over the long-term so that initiatives can be seen through to the end or so that it is self-perpetuating; there needs to be some consistency in effort and funding
- Research into the feasibility for more communities to get guide outfitting licenses there are very few in the province right now
- Get it done and implement; don't collect information to sit on the shelf MK Board shouldn't try to re-invent the wheel use the information from other places that they can; get the right people involved; involve First Nations in the design, planning and implementation of projects; partition the work out; do what people are saying is important to them (“if it's berries, then work on berries”)
- opportunity for training of First Nation Park Rangers should be considered; First Nations could assist with site protection planning, collecting TK, locating cabins in appropriate locations; eco-cultural interpretation for Park visitors could also assist with annual spring training for Park Rangers with cross-cultural awareness

Working Relationships

- MoE Managers had long-standing, direct working relationship with Elders but internal politics disrupted that communication and needs to be restored because information received is passed on 2nd hand
- Long-standing relationship between MoE biologist and Guide/Outfitters includes annual meetings, visits to Guiding territories where valuable information exchange occurs
- Stone Sheep research project has First Nations participation that provided valuable knowledge and input to the study
- Drivers for TK integration should be need for better research, shared stewardship goals not Court/legal directives
- Potential for good collaboration through proposed Peace Wildlife Committee where First Nations discuss & resolve issues with government and other resource stakeholders (Guide/Outfitters, Trappers, etc.)
- Mt Robson is a good example of how things can be done; seeking input from North Thompson Band to better manage the cultural resources in the park and make decisions on how to respond to traditional activities; additional complication because pipeline through the park is being twinned; band is requesting money to even come to the table; they need more information about their own traditional use to even respond to the government's questions; approaching them with discussions around the collaborative agreements – relationship is touch and go; In contrast there is a very good relationship with Ukutche
- Need to develop the relationship to move ahead with dealing with some important issues; poor relations prevent action
- The level of trust varies and is affected by the First Nation's perception of why government is there asking for information
- There is a need to get buy-in; overcoming a history of distrust; figuring out how to get the First Nations to open up
- The government's "New Relationship" is completely directed toward this and has created a whole different environment; they are expected to negotiate 2 new agreements every year in each region; improvements to consultation that is beyond just a letter
- Setting expectations to a point where they can't be met; avoid this by being really clear on how the information is used
- Not being able to overcome long standing distrust; some groups may never buy-into the process on both the First Nations and government sides

Research Topics and Opportunities

- For wildlife, focusing on hunting or trapping species and species at risk
- Research into grizzly bear management – the First Nations use component is missing from the equation – would be helpful to be able to account for their use of grizzlies
- Information on community needs in order to manage populations in certain areas – how many moose do they expect to get and where? Are there interests in eco-tourism, wildlife viewing etc?
- Would be good to evaluate effects of prescribed-burning in areas like the Prophet-Sikanni, Kechika-Turnagain

3.4 BC Ministry of Agriculture and Lands (Integrated Land Mgt Bureau)

The Integrated Land Management Bureau (ILMB) is nested within the Ministry of Agriculture and Lands, and provides a range of service to the public and to other government agencies involved in utilizing and managing Crown land and natural resources. The ILMB helps provide access to natural resources for six important sectors of the BC economy: forestry; tourism; mining; oil, gas and energy extraction; agriculture; and aquaculture. Over 40% of communities outside Greater Vancouver are dependent upon natural resources for more than 30% of their income.³⁵

The ILMB's vision is: *"World-leading natural resource service delivery that exceeds expectations and provides business certainty for our clients."* This vision comes with certain opportunities and challenges. Some of the opportunities centre around the land and resource management planning processes in BC:

- the completion and implementation of strategic land and resource management plans, pending government-to-government negotiations with First Nations;
- within the strategic land-use planning processes, more efficient target-planning efforts with available resources, and meaningful engagement of First Nations so that their interests and values can be better incorporated; and
- continued review and amendment (if required) of existing, approved strategic land and resource management plans where there is a demonstrated need (e.g., to address issues related to the mountain pine beetle).

A significant challenge for the ILMB is the possible delay on decisions about desired land-use plans to consult with First Nations and/or continue to work with First Nations in the spirit of the New Relationship.

The ILMB is working to support the New Relationship in a number of ways; those relevant to traditional knowledge include:

- collaborate directly with First Nations to lead the development and implementation of new strategies for strategic land-use planning, revisions to existing plans and/or new planning exercises which support the New Relationship;
- serve as a key partner to the Ministry of Aboriginal Relations and Reconciliation in providing geographic information and analytical support services (land and resource information) at all stages of the treaty negotiation process;
- develop a consolidated process and virtual warehouse for all natural resource management agency government-First Nations memoranda or letters of understanding, agreements and/or protocols;
- work closely with First Nations to build reciprocal expertise and infrastructure for the successful FrontCounter BC initiative whereby First Nations have the means to better coordinate their input into government natural resource decision processes.

The ILMB has committed to seeking greater engagement of First Nations in land and resource-use planning, with particular emphasis on the strategic level. They will endeavour to engage First Nations in land and resource management planning by undertaking a number of exploratory initiatives which build on existing relationships in

³⁵ Source: BC Stats.

government-to-government forums and, where appropriate, at regional planning tables and committees. Nowhere, in any of the ILMB's statement of goals and objectives, is there any specific reference to recognition or usage of traditional knowledge, or to information sharing.

3.4.1 Regional Government Perspective and Recommendations

TK Collection or Related Inventory

- Use of hand drawn maps to express general use, or show no harvest areas; use spatial representation to look at overlaps
- TK is not readily available
- Aspatial planning (e.g., setting objectives) is primarily driven by policy
- First Nations want more old growth than is currently provided; scenario planning of impact on the region; explore what impact different retention levels have
- There is a need to package TK information together and get links to a First Nation database
- The information needs to be readily available – needs to be shared
- There are risks around information sharing; this is the biggest concern for First Nations; there is a trust issue and how do First Nations make sure that government doesn't use the information against them?
- There are risks around misinterpretation and access by the general public and professionally educated non-natives
- Development of the GVS with Halfway – this tool can be used with other First Nations to store and maintain TK information; not sure at this point if there are any negatives with the exception of a lack of an information sharing protocol; this needs evaluation; the information can at least get documented and the First Nations can handle that aspect of it
- Conservation area design (CAD) – First Nations weren't willing to share their information; haven't figured out how to integrate TK into the management tool to develop it
- Need to incorporate TK in planning tools, and need to figure out how to do this
- Land use planning and development of management tools are needed; you either need access to the information, or having willing participation; different levels of access and policies around information use are necessary; varies depending upon different information systems being used
- Having the information readily available could make decisions timely

Planning , Allocation and Monitoring Processes

- The challenges are with capacity and timing for input; government timelines don't fit because the time it takes for First Nations to reply; can be lengthy at all phases
- Participation is variable because First Nations are dealing with mining development
- Some cultural/heritage sites have been identified and values that need to be protected – but LRMP processes on the most part have been missing that information e.g.: the Peace Moberly Tract; West Moberly area is of critical interest and inventory is limited
- TK integration allows for transparency
- Protected areas are important to focus on
- There are possibilities for re-defining the planning process to better include TK – we haven't found a process yet to better integrate TK with WS

- Guide land use decisions by bringing the knowledge forth
- Response to specific land use decisions need to be compatible
- The jury is still out if there has been a return on the investment regarding TUS that is already collected (initial MOF projects); this could happen through the M-K
- At least identify the potential for TK use on an issue but need the willingness to negotiate an information sharing agreement; for example the Doig agreement
- Areas with higher development need to be focused upon
- Territorial issues; questions around shared areas within territories; need to be reconciled between the First Nations themselves
- The Police Trail is an example of a positive shared history between natives and non-natives; nice to focus on something positive and come together on it; demonstrates a history of cooperation that could be built upon
- Bring TK values forth through the M-KMA Board

TK Information Storage, Retrieval and Presentation

- There is an IAMC project in the coming year GVS (Geographic Valuation System) where the FN documents their values in a platform that is compatible with government; this was developed with Halfway River and UNBC (Nancy Elliot) – the Police Trail Pilot Project; uses multimedia including video, sounds, text and still photos and links them to a location on a map; they have had interest from Kwadacha, and Lake Babine is another possible pilot project
- Risks with data sharing is having sensitive sites known; can be exploited – but can be mitigated with permission restrictions on access through passwords – needs to be dealt with through agreements – need to decide whose infrastructure to use to store this data
- Would be valuable to see where it (TK integration) has worked well, what are the overall benefits to society (e.g. does it increase certainty); what does industry get out of having that information (e.g. investor confidence?)

Implementation Capacity

- Training funds to improve skills capacity in communities
- There is an acceptance to TK by non-natives, but a lack of understanding; people involved with technical understanding stay close to the science they know
- Capacity for First nations and ability to get funding \$; need for technology, hardware/software; remote communities need internet (GVS is web-based)
- Need help with implementation capacity, for example the John Prince Research Forest and Mule Deer Winter Range project - First Nations are conducting the ground-truthing to determine if the predictive mapping is accurate; can use First Nations knowledge to test the Western knowledge on the ground
- M-KA Board has the opportunity to facilitate the relationship between government in a similar way but the difference it that JPRF has tenure over their area – but more toward fostering the relationship with government and industry.
- When First Nations are a part of the implementation it ensures participation
- There is an expectation from the Courts that the TK information is out there to use
- It is not clear whose responsibility it is to help with capacity

- 3 of 8 First Nations communities actively participate because they either won't or can't participate due to differences in their ability to manage information
- M-K is huge and the most expensive area in the province for doing field work
- Using the information inappropriately is always a risk; it's hard to train people how to use it; need to get them "on the ground" for example visiting cultural sites; need more than a layman to work with the information; needs to be more than just a map exercise

Environmental Impact Assessment Processes

- For EIA's companies try to mitigate issues; it's a "go-or-no-go" if the First Nations have a strong concern and the government has to make tough decisions based on limited knowledge; the best they can do is to follow environmentally sound practices – but First Nations may have other issues to express that no body knows about.

Working Relationships

- There has been a change and a recognition that First Nations are a government
- The land ownership question is an issue; there is fear and uncertainty around rights; clouds government efforts because ownership and authority are in question
- The science on natural disturbance is generally accepted by First Nations
- There is a need to share information and agree on how it will be used; need agreements on data sharing and **this needs** to fit into how government does planning
- Trust is a major issue
- Information sharing helps with understanding each other's values
- On the professional side involves building good relations with all groups
- Lack of data exchange and agreements
- It's important to build relationships through participation first, and then consult
- The government has a vested interest in developing relations with both groups (both native and non-native knowledge holders)
- There is a need to take the time to build the relationship and to be proactive
- Ongoing communication is critical
- There are trust issues related to information sharing
- The MK Board already has credibility with the Kaska and Tsay Keh Dene; still need to get Treaty 8 involved
- We need participation not consultation; this helps build trust
- There are good information sharing relationships with Dene 'tah and Blueberry
- Conflicts between First Nations governments need to be overcome
- Explore who are the best persons to talk to? Elders council? Elected council?

Research Topics and Opportunities

- How traditional and scientific knowledge are overlapping and complementary – this is intuitively known but not really understood or demonstrated – need locally relevant research
- Engaging Elders to capture the holistic aspect of the knowledge – put the knowledge in context with the site specific information and take it further
- Will the TK be recognized on par with WS?

- There is a need for increased tourism and forestry involvement/development; Northern Nations Alliance

3.5 Ministry of Tourism, Sport and the Arts

The Ministry of Tourism, Sport and the Arts (MTSA) partners with local governments, community groups, First nations, and industry associations to deliver arts, culture, recreation and sports initiatives, as well as achieve goals and objectives related to heritage conservation, protection of archaeological sites, and enhancement and stewardship of forest recreation sites and trails.

The MTSA vision is: *“A province where citizens embrace participation and healthy lifestyles, and celebrate and maximize the social and economic benefits from tourism, sport and the arts. Within this vision, there are New Relationship initiatives aimed at increasing economic activity and social and health benefits for First Nations”*.. Some of those relating to traditional knowledge are:

- support for the delivery of arts and cultural programs and policies focused on **First Nations retention and regaining of traditional knowledge, arts and culture**; and
- support for the 2008 North American Aboriginal Games in the Cowichan Valley, to showcase Aboriginal excellence in sport and culture.

Tourism is one of the largest resource industries in the province, ahead of forestry, mining, agriculture and fishing. First Nations culture has, for many decades, been an attraction to tourists. First Nations, with their culture and their land and resource holdings, have to potential to become a substantial player in the provincial tourism economy.

Heritage Branch, Archaeology Branch, and Cultural Services Branch

The protection and conservation of the province’s heritage resources is facilitated by the Archaeology Branch, Heritage Branch, and the Royal British Columbia Museum. The Archaeology Branch has responsibility for BC’s archaeology resources; the Heritage Branch is responsible for historic buildings and sites; and the Royal BC Museum is responsible for researching and interpreting BC’s human history to the public. The prime protection for BC’s archaeological and heritage cultural resources is through the Heritage Conservation Act (RSBC 1996 Chap 187).³⁶ The **Act** affords protection of archaeology sites pre-dating 1846 whether they are located on public or private land. Under the **Act**, the Province may enter into formal agreements with First Nations with respect to conservation and protection of heritage sites and heritage objects which represent their cultural heritage.³⁷ These agreements may cover several items, two of which are:

- (1) a schedule of heritage sites and heritage objects which are of particular spiritual, ceremonial or other cultural value to the First Nation; and
- (2) a schedule of heritage sites and heritage objects of cultural value to First Nations and not included in the first item.

³⁶ http://www.qp.gov.bc.ca/strateg/stat/H96187_01.htm.

³⁷ Heritage Conservation Act (S. 4). http://www.qp.gov.bc.ca/strateg/stat/H96187_01.htm.

The Cultural Services Branch³⁸ was one of the sponsors of the Arts and Culture Summit held in April 2006. The report, “Building From Strength,”³⁹ provided a wide range of discussion and recommendations for arts and culture in BC. A conclusion of the summit was that more attention should be given to First Nations historical and contemporary art. One of the recommendations of the summit was to “*make a commitment to collaborate with the First Peoples, recognizing that First Nations have a unique historical and spiritual relationship with the land and can contribute to the building of BC’s cultural identity in unique ways*” (p. 25). A second recommendation was to establish a program of information-sharing to circulate cultural statistics and other information – cultural mapping, cultural inventories – on a regular basis to municipal and regional administrations and elected officials (p. 33).

Archaeological Impact Assessment Process

The purpose of the Archaeological Impact Assessment (AIA) Process⁴⁰ (in accordance with the provisions of the *Heritage Conservation Act (1996, RSBC, Chap. 187)*, through participation in project reviews under *British Columbia’s Environmental Assessment Act (1996, RSBC, Chap. 119)* as well as smaller scale developments referred to the branch by agencies and individuals in both the public and private sectors) is to provide guidance to Archaeology Branch staff, other government agencies and the public on the process for assessment and management of adverse impacts to archaeological sites. Archaeological impact assessment studies are initiated in response to development proposals that will potentially disturb or alter archaeological sites. The role of the branch is not to prohibit or impede land use and development, but rather to assist the Provincial Government and private sector in making decisions that will ensure effective management of archaeological resources as well as optimal land use.

First peoples’ Heritage, Language and Culture Council (FPHLCC)⁴¹

The FPHLCC was established in 1990 to support BC First Nations communities and organizations in revitalizing local cultures and languages, and to provide leadership, support, and advice to the provincial government on how best to ensure the preservation of BC’s unique and rich First Nations cultures and languages. The Council’s vision is: “*BC First Nations languages, cultures and arts are thriving, accessible and available to the First Nations of BC, and the cultural knowledge expressed through First Nations languages, cultures and arts is recognized, valued and embraced by all citizens in BC.*” To highlight the importance of their work, the Council has identified 40 distinct languages in BC (compared to 60 languages in all of the other provinces and territories). Eight of the 40 languages are already extinct, and the other 32 are endangered. There are thousands of endangered cultural practices and traditional art forms unique to BC and found nowhere else in the world.

Two of the key opportunities identified in the most recent FPHLCC Service Plan are:

³⁸ Cultural Services Branch, Ministry of Tourism, Sport and the Arts. <http://www.tsa.gov.bc.ca/csb>.

³⁹ Building from strength. Report and recommendations from the Arts and Culture Summit, “Arts and Culture: Building BC’s Creative Agenda. Culture Services Branch, Ministry of Tourism, Sport and the Arts, Victoria, BC. <http://www.tsa.gov.bc.ca/csb/summit.htm>.

⁴⁰ Archaeological Assessment Process. 1995. <http://tsa.gov.bc.ca/archaeology/policy/impact.htm>.

⁴¹ First Peoples’ Heritage, Language and Culture Council. Service Plan 2006/07 -2008/09. 18 p. <http://www.fphlcc.ca/>.

- (1) increased usability and availability of technology (especially computers, software, and the Internet) has made recording and archiving of cultural knowledge accessible and efficient for even the smallest of communities. The Internet makes it possible to share cultural knowledge with community members, even if they are geographically distant.
- (2) Increasing numbers of First Nations individuals and organizations with skills and experience in First Nations arts, language and culture revitalization who can provide role models, leadership and technical expertise.

3.5.1 Regional Government Perspective and Recommendations

Planning , Allocation and Monitoring Processes

- to date, there have been relatively few Commercial Backcountry Recreation (CBR) applications but many Guide/Outfitter operations expanded to include trail-riding, hiking, fishing, jet-boating and other eco-tourism ventures using Temporary Permits with varying expiry dates; some operations have 10 year Licenses issued that are subject to review - may have to address compensation issues
- large area management can be a challenge with access control e.g. ATV routes, potential conflict with other agency mandates e.g. OGC
- in Parks, CBR management is done in conjunction with MoE (Parks) with Parks Use Permits
- another challenge is in defining industry compliance, working within policy - particularly for fledgling operations
- may see further interest in heli-skiing operations in M-KMA like in Graham-Laurier Park, need to consider avalanche risks, conflicts with wildlife like caribou, goats; other potential is for guided River trips (rafting, kayak, canoeing), mountain biking , fly-in fishing

TK Information Collection, Storage, Retrieval and Presentation

- commercial First Nation backcountry recreation/tourism has significant demand with activities like Trapline tours, Moose Camp and other eco/cultural activities; can work with First Nations to protect traditional uses once key sites are identified like cabins, trails; may involve road decommissioning, specifying designated routes for public access as per Access Mgt policy of MoE
- need to focus on archaeological research in key areas like Redfearn Lake, Northern Rockies, Muskwa West

Working Relationships

- at present, policy is being done through collaborative process with industry partners at the provincial level (eventually could have Regional process when sector

matures) – this may be best venue for First Nations to influence, including integration of TK, with participation of Tourism associations, etc.

Research Topics and Opportunities

- an important opportunity for First Nations in applying TK is in the area of Carrying Capacity thresholds for given landscape units – what is sustainable to protect cultural/heritage, environmentally-sensitive areas? some good work being done on Vancouver Island, Golden on “limits to acceptable change”; some concerned CBR could evolve into a Banff park situation but not likely

3.6 BC Ministry of Aboriginal Relations and Reconciliation

The BC Ministry of Aboriginal Relations and Reconciliation (MARR) is tasked to be the centre of excellence on innovative approaches on aboriginal policy across government. MARR leads government’s efforts to build the social and economic capacity within First Nations communities and with Aboriginal People, and to reconcile First Nations and provincial interests. The MARR vision is: “Guided by principles of trust, recognition, respect and reconciliation of Aboriginal rights and title, we will build a healthy and prosperous future for the benefit of Aboriginal people and all British Columbians.”⁴² MARR values are based on recognition, respect and reconciliation of the important historical, cultural and political contributions of Aboriginal people in BC.

The core MARR business areas are: (a) negotiations, (2) aboriginal relations, and (3) executive and support services. The core business area, aboriginal relations, supports the First Peoples’ Heritage, Language and Culture Council (see section 3.7). It also administers the First Citizens Fund, a perpetual fund established by the BC government to enhance cultural, educational and economic development opportunities for aboriginal people in BC.

The MARR goals are threefold:

- conclude treaties and other lasting agreements on Crown lands and natural resources with First Nations;
- improve social and economic outcomes for aboriginal people; and
- build strong and respectful relationships between government and aboriginal organizations.

Goal 3 appears to be the main ministry goal dealing with matters related to traditional knowledge. Key to the success of achieving this goal is the development of formal mechanisms for meaningful dialogue between government, aboriginal leaders and communities. Objective 1 under this goal is: to build trust with aboriginal people through a reconciliation and recognition framework. Two of the strategies to address this goal are to:

⁴² BC Ministry of Aboriginal Relations and Reconciliation. 2007/08-2009-2010 Service Plan. February 15, 2007. 38 pp.

engage with aboriginal organizations and communities on a range of provincial policy topics including amendments to the Wildlife Act, and the Oil and Gas Consultation Process Agreements with Treaty 8 First Nations; and engage with aboriginal organizations and communities to develop protocols and agreements which foster recognition and reconciliation.

MARR works with the Ministry of Education on increasing aboriginal graduation rates and literacy programs (including aboriginal languages), through coordination of the First Citizens Fund which supports the preservation and teaching of aboriginal languages.

The emphasis in the MARR 2007/0802009/10 Service Plan is on narrowing the social and economic gaps between aboriginal and non-aboriginal British Columbians, and building relationships between governments. At no point is there explicit mention of traditional knowledge and the role it is playing in the re-establishment of First Nations identity, the cultural re-growth within the Nations, the importance of oral traditions among aboriginal peoples, and how language and culture inform aboriginal decision-making processes.

3.7 Federal Policies & Legislation

Since some industrial developments are subject to federal regulations, we also look to environmental legislation from Environment Canada to see what provisions are in place to facilitate integration of TK. These are summarized as follows:

Canadian Environmental Assessment Act (CEAA): Section 16.1 of the recently amended *Canadian Environmental Assessment Act* (CEAA), gives responsible authorities conducting an EA the discretion to consider Aboriginal traditional knowledge in any EA: "*Community knowledge and **Aboriginal traditional knowledge** may be considered in conducting an environmental assessment.*"

Canadian Environmental Protection Act, 1999: Declaration & Preamble "*Whereas the Government of Canada recognizes the integral role of science, as well as the role of traditional aboriginal knowledge, in the process of making decisions relating to the protection of the environment and human health and that environmental or health risks and social, economic and technical matters are to be considered in that process*"; ... Duties of the Government of Canada

2. (1) In the administration of this Act, the Government of Canada shall, having regard to the Constitution and laws of Canada and subject to subsection (1.1),...

((i) apply knowledge, including traditional aboriginal knowledge, science and technology, to identify and resolve environmental problems;

Species-At-Risk Act, 2002, c.29: Preamble: "*the traditional knowledge of the aboriginal peoples of Canada should be considered in the assessment of which species may be at risk and in developing and implementing recovery measures*" and including incorporation in Stewardship Action Plans.

SARA also provides for the establishment of these two committees by Environment Canada:

-National Aboriginal Council on Species at Risk (NACOSAR)
NACOSAR will advise the Minister of the Environment on the administration of SARA and provide advice and recommendations to the Canadian Endangered Species Conservation Council.

- The Aboriginal Traditional Knowledge Subcommittee on Species at Risk, of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC)
This subcommittee will provide access to the best available Aboriginal Traditional Knowledge and facilitate the use of this knowledge by COSEWIC when assessing and classifying species at risk.

Appendix D Sample Agreements and Protocols for Information Sharing

D1 Traditional Knowledge Protocol Template (http://www.fntc.info/tools_and_resources)

THIS AGREEMENT dated ·, 2005 is AMONG:

THE · FIRST NATION, as represented by the
· -----("the -----") and
TRADITIONAL KNOWLEDGE APPLICANT PARTY, as
represented by
· -----, (the "Applicant")

being collectively referred to as "the Parties" to this protocol (the "Protocol").

- A. The First Nation represents the Aboriginal rights, titles and interests of the First Nation Members of the Yukon, Northwest Territories and British Columbia.
- B. The First Nation has Aboriginal rights, titles and interests within the Traditional Territory are constitutionally protected under section 35(1) of the *Constitution Act*, 1982.
- C. The First Nation's Aboriginal rights include rights to ownership, protection and custody of their Traditional Knowledge and that every such right includes the incidental right to teach such practices, customs and traditions to a younger generation to ensure their continuity.
- D. The Applicant is...

Note: We advise introducing the nature of the party that has requested access to your Traditional Knowledge. That is, if the Applicant is a researcher, regulatory authority, commercial entity (corporation, partnership or other business) or an individual, it is recommended that you set out some introductory details. This will be background to the purpose and objectives of the request to access and/use your Traditional Knowledge.

- E. The Applicant acknowledge that Aboriginal peoples are entitled to the recognition of the full ownership, control and protection of their intellectual property. The Parties further acknowledge that Aboriginal peoples have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literature, designs, and visual and performing arts.

- F. The Applicant acknowledges that the First Nation has Aboriginal rights, titles and interests within the Traditional Territory, including their rights to ownership, protection and custody of their Traditional Knowledge, and is entering into this Protocol as an act of good faith recognition of such rights.
- G. Pursuant to the First Nation's laws, including Aboriginal customary law, the First Nation has reviewed and recommended this Protocol to their duly authorized representatives and agents.
- H. The Applicant has reviewed and recommended this Protocol to its duly authorized representatives and agents.

In consideration of the exchange of promises set out in this Protocol, and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the Parties, the Parties covenant and agree as follows:

1.0 DEFINITIONS

Note: Definitions appropriate to a First Nation's society, culture, language and overall governance should be considered for this section. For example, if there is a particular clan system, council of elders or name for specific heads of families, these might be included. This is of vital importance, as it is an affirmation of Aboriginal right to self-governance.

1.1 "Inventory" means an inventory that may be held at the First Nation community, regional or national level containing Traditional Knowledge in written, audio, video or other electronic form, including maps designating specific traditional land use and occupation within the Traditional Territory.

1.2 "First Nation member" means an individual person that is a member of the Aboriginal Peoples within the Traditional Territory.

Note: Please note that this definition should reflect your Aboriginal word for member of your community. For instance, for the Kaska Nation they would substitute the word "Kaska Members".

1.3 "Traditional Knowledge Oversight Committee" or the "Committee" means the committee of Elders established by the First Nation for the purposes of preservation, maintenance and protection of Traditional Knowledge within the Traditional Territory.

Note: This Traditional Knowledge Protocol uses a particular governance structure. It proposes an Elders Committee that would review all applications for access and use of traditional knowledge. As set out below, the Committee has the powers to review, set terms and conditions for access and request the Applicant to resubmit their proposal if unsatisfactory. The Authority for approval remains at the First Nation level (i.e., Chief and Council), the Committee is an advisory body with expertise in the preservation, maintenance and protection of traditional knowledge.

- 1.4 “Parties” means the Applicant and the First Nation and “Party” means one of them.
- 1.5 “Report” means a written narrative that includes the nature and scope of the Traditional Knowledge Project including objectives, methods and findings.
- 1.6 “Sacred Site” means a site used and/or identified by the First Nation for sacred purposes since time immemorial, including but not limited to, burial sites and sites of ceremonial, social and/or cultural significance.

Note: It is our experience that access and use of sacred sites is of the highest importance for First Nations. The majority of First Nations would consider it contrary to Aboriginal law to allow commercialization, destruction or desecration of sacred sites. Understandably, Traditional Knowledge that relates to the protection and confidentiality of sacred sites must be strictly protected. As set out below, this definition is closely tied to the specific provision that speak to protection of sacred sites.

- 1.7 “Traditional Knowledge” includes tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields. “Tradition-based” refers to knowledge systems, creations, innovations and cultural expressions which have generally been transmitted from generation to generation; are generally regarded as pertaining to the First Nation or its Traditional Territory; and, are constantly evolving in response to a changing environment. Categories of Traditional Knowledge could include: agricultural knowledge; scientific knowledge; technical knowledge; ecological knowledge; medicinal knowledge, including related medicines and remedies; biodiversity-related knowledge; “expressions of folklore” in the form of music, dance, song, handicrafts, designs, stories and artwork; elements of languages, such as names, geographical indications and symbols; and, movable cultural properties.⁴³

Note: The above Traditional Knowledge definition is from the World Intellectual Property Organization’s fact-finding mission on traditional knowledge. We recommend that you closely review this definition to ensure that it is consistent with your First Nation and traditional knowledge-holders’ understanding of the scope, nature and content of traditional knowledge.

- 1.8 “Traditional Knowledge Documentation” for the purpose of this Protocol, means the Inventory, Maps and Report including all versions, editions and drafts thereof.
- 1.9 “Traditional Knowledge Project” means the gathering, documentation and preservation of Traditional Knowledge that results in Traditional Knowledge Documentation.

⁴³ World Intellectual Property Organization, “Intellectual Property Needs and Expectations of Traditional Knowledge Holders: WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge” 2001 at 25.

Note: *The particular Traditional Knowledge Project set out in this Protocol contemplates that the First Nation members will collect and gather traditional knowledge from traditional knowledge-holders under the direction and workplan developed by the Applicant. The Applicant is in essence contracting with the First Nation for the development of particular products (i.e., the Traditional Knowledge Documentation – an inventory, maps and report). The First Nation members work in collaboration with the Applicant in the preparation of the Traditional Knowledge Documentation.*

1.10 “Traditional Land Stewards” means First Nation members with a long family tradition of occupancy and use of an area within the Traditional Territory.

Note: *This Protocol contemplates that much of the traditional knowledge collection and gathering will be under the control of traditional land stewards that will interface directly with traditional knowledge-holders. The Applicant would not necessarily have person-to-person contact with the traditional knowledge-holders unless expressly authorized by the First Nation.*

This would likely have to be modified in circumstances where a Researcher desired direct interviewing with traditional knowledge-holders. In such case, a Traditional Land Steward might have a more supervisory role to ensure that inappropriate behaviour and questions were avoided.

1.11 “Traditional Territory” means that portion of the traditional territory of the First Nation located within ., as set out in the map entitled “First Nation’s Traditional Territory”, a copy of which is attached as Schedule “A” to this Protocol.

Note: *It is very important to set the geographic parameters of the traditional knowledge being accessed. It may be counter intuitive, but it may be in the best interests of the First Nation to define its Traditional Territory narrowly to ensure that the Applicant accesses traditional knowledge in a restricted area. Also, if the Applicant gathers traditional knowledge outside the defined area, it may be contrary to this Protocol. An alternative to a narrow definition would be to have a specific distinction between the traditional territory as a whole and “project-specific traditional territory.”*

1.12 “Traditional Knowledge Project” means the gathering, collection and storage of Traditional Knowledge by the Applicant for the purposes of...

Note: *It is important to define the specific project that the Applicant proposes. This may be key to the enforceability of this Protocol. In depth discussions with the Applicant on the specific details of their intended use of the traditional knowledge is necessary to get an appropriate understanding of the project. Also, as is set out below, there are specific uses that the Applicant is strictly prohibited, so it is important to cross check this definition with this section.*

- 1.13 “Traditional Knowledge-holders” means a First Nation descent that has been given the responsibility by his or her First Nation to act as custodian of particular Traditional Knowledge to ensure the preservation of such Traditional Knowledge for future generations.

Note: We strongly advise that you review this definition to ensure that it is consistent with your First Nation’s custodial relationship with traditional knowledge.

- 1.14 “Workplan” means the plan in effect from time to time for gathering, documenting and preserving First Nation Traditional Knowledge and appended as Appendix “B” to this Protocol.

Note: Determining the timeline, plan and scope of the project is essential information, particularly as it applies to community consultation purposes. Much of the on-the-ground details will likely be set out in a Workplan.

2.0 PRINCIPLES

The Parties agree to the following principles set out hereunder:

Note: The following principles are intended to set a best practice standard for engagement with First Nation’s and their Traditional Knowledge. They represent the basic understanding between the Parties and context that the Traditional Knowledge Protocol will be negotiated. These particular principles may have to be revised over time and reflect positive language supporting Aboriginal rights, titles and interests recognition.

- 2.1 **Prior Rights.** The Applicant acknowledges that the First Nation has prior, proprietary rights, titles and interests over the air, land, waterways and the natural resources within the Traditional Territory, together with all knowledge and intellectual property and traditional resource rights associated with such resources and their use.
- 2.2 **Self-Determination.** The Applicant acknowledges that the First Nation has the Aboriginal right to self-determination within their Traditional Territory.
- 2.3 **Inalienability.** The Applicant acknowledges that the First Nation has inalienable rights to the Traditional Territory, including the natural resources within them and associated Traditional Knowledge. These rights are collective by nature but can include individual rights. The Applicant shall defer to the First Nation to internally determine for themselves the nature and scope of respective communal resource rights regimes.
- 2.4 **Traditional Guardianship.** The Applicant acknowledges that the First Nation has a holistic interconnectedness with the ecosystems within their Traditional Territory and the First Nation’s obligation and responsibility to preserve and maintain their role as traditional guardians of these ecosystems through the maintenance of their culture, spiritual beliefs, and customary law.

- 2.5 Active Participation.** The Applicant acknowledges the crucial importance of the First Nation to actively participate in all phases of the Traditional Knowledge Project and documentation, and in the integration, use and application of such Traditional Knowledge.
- 2.6 Full Disclosure.** The Applicant acknowledges that the First Nation is entitled to be fully informed about the nature, scope and ultimate integration of the Traditional Knowledge (including methodology, data collection, and the dissemination and application of results). This information is to be given in a form and style that has meaning to the First Nation communities, including translated information where possible.
- 2.7 Prior Informed Consent.** The Applicant acknowledges that the prior informed consent of the First Nation must be obtained before the Traditional Knowledge or any work associated with the Traditional Knowledge Project is transmitted from Traditional Land Stewards to the Applicant. Ongoing consultation is necessary to maintain the prior informed consent throughout the Term of the Traditional Knowledge Project. This principle will be satisfied by meeting the obligations set out in Clause 8 herein.
- 2.8 Confidentiality.** The Applicant acknowledges that the First Nation has information concerning their Traditional Knowledge, including particular aspects of their culture, traditions, spiritual beliefs and customary laws that must be maintained and treated as confidential by the Applicant, its members, alternates and/or agents thereof. This principle will be satisfied by meeting the obligations set out in Clause 10 herein.
- 2.9 Support of First Nation Traditional Knowledge Research.** The Applicant acknowledges the First Nation's need to develop capacity to undertake their own Traditional Knowledge research and publications and in utilizing their own collections and databases.
- 2.10 Implementation of this Protocol.** The Applicant and the First Nation acknowledge that a serious ongoing commitment by both Parties and the dedication of necessary resources to implement this Protocol will be required to meet its objectives in a timely and complete way.
- 2.11 Non-Derogation.** Nothing in this Protocol does or will abrogate, derogate and/or prejudice any of the First Nation's Aboriginal rights, titles and interests in the Traditional Territory.
- 2.12 Third Party Consultation.** Nothing in this Protocol does or will limit the Parties ability to participate in consultations, discussions and agreements with any third party.

3.0 PURPOSE OF THIS PROTOCOL

Note: Please consider whether the purposes should be broadened (i.e., preservation of First Nation cultural practices, customs and traditions).

- 3.1** The purposes of this Protocol include, but are not limited to, the following:

- (a) documentation of Traditional Knowledge to ensure the continuity of First Nation's customs, practices and traditions from one generation to the next;
- (b) provide a process to gather, preserve and integrate the Traditional Knowledge with respect to the Traditional Knowledge Project;
- (c) set out the mutual understanding of the Parties about ownership, protection and use of such Traditional Knowledge;
- (d) set out a Workplan for the purpose of carrying out the Traditional Knowledge Project; and
- (e) commence a process of further integrating the Traditional Knowledge into broader educational endeavours of the First Nation, including curriculum development, youth camps, language preservation and other activities that ensure the continuation of the First Nation social, cultural and spiritual customs, practices and traditions.

4.0 PROCESS BY WHICH THE PROTOCOL WAS REACHED

Note: It is valuable to review in writing the process by which the Protocol is reached, to ensure transparency in the short term, and greater understanding of the considerations that contributed to development of the Protocol in both the present and into the future. The process by which your First Nation participates in coming to the Protocol, and the methods by which informed "consent" are acquired can be complex.

- 4.1 The Applicant submitted a written proposal to the First Nation for the Traditional Knowledge Project.
- 4.2 On or about . , 200· , the Chair of the Traditional Knowledge Oversight Committee:
 - (a) presented the proposal before the Committee members,
 - (b) chaired a co-operative discussion of the proposal exploring relevant issues and suggesting solutions, and
 - (c) incorporated, to the extent necessary, recommendations accommodating participant interests.

Note: As set out under the definitions section, this Protocol contemplates the role of an Elders-comprised Committee that will review all applications for access and use of Traditional Knowledge. The premise behind this model is that traditional knowledge-holders will apply Aboriginal law and other customary practices, in their review process, which will reflect the custodial relationship between the First Nation and the traditional knowledge.

4.3 The First Nation provided the initial draft of this Protocol.

4.4 The Parties reviewed, negotiated and amended this Protocol.

4.5 The First Nation and the Applicant reviewed the aforementioned documents and designed the Workplan.

4.6 On or about ., 200., the Chair of the Traditional Knowledge Oversight Committee:

- (a) presented the Protocol and Workplan before the Committee members,
- (b) with the assistance of legal counsel and other consultants, chaired a co-operative discussion of the Protocol and Workplan exploring relevant issues and suggesting solutions, and
- (c) incorporated, to the extent necessary, recommendations accommodating participant interests.

Note: If the First Nation does decide to establish such a Committee, it is important to draft Terms of Reference that set out their practices and procedures, particularly as it applies to amending or setting conditions to a proposal, protocol and/or workplan.

4.7 On or about ., 2005, the Chair of the Traditional Knowledge Oversight Committee:

- (a) presented the amended Protocol and Workplan before the Applicant; and
- (b) the members of the Committee recommended the Protocol and Workplan for approval by First Nation.
- (c) Each member, or their alternates, of the Applicant reported and recommended this Protocol to its nominating party.

4.8 The Applicant ratified this Protocol and Workplan.

4.9 Pursuant to the First Nation's internal protocols, the First Nation ratified this Protocol and Workplan.

5.0 PHASES OF THE TRADITIONAL KNOWLEDGE PROJECT

5.1 The Traditional Knowledge Project will consist of five phases:

- (a) **Phase 1:** Community consultation meetings informing members of the First Nation of the Traditional Knowledge Project, introducing the Applicant to Traditional Knowledge-holders, etc.
- (b) **Phase 2:** Gather and document Traditional Knowledge with the assistance of a Traditional Knowledge Assistant from the First Nation.
- (c) **Phase 3:** Applicant's preparation of Traditional Knowledge Documentation.

- (d) **Phase 4:** Review by the Traditional Knowledge Oversight Committee of the Traditional Knowledge Documentation.
- (e) **Phase 5:** Integrate Traditional Knowledge into...

Note: This Protocol contemplates that the traditional knowledge collected and gathered will be integrated in a more substantial project. The Phases will have to be amended in relation to the particular project. That is, if the traditional knowledge is being collected for an environmental assessment process, there are issues related to public disclosure, confidentiality, anonymity of Traditional Knowledge-holders, etc. If the traditional knowledge is being published by a Researcher as part of a thesis, there may be University policies that will have to be taken into consideration.

If it is foreseeable that the traditional knowledge will be made public in any form, it is advisable to consider entering into further arrangements with third parties. For instance, if the Traditional Knowledge Documentation will be used by a regulatory authority (i.e., National Energy Board), then you may have to enter into an arrangement with that regulator to ensure that the traditional knowledge disclosure is minimal.

5.2 The particulars of the work to be performed, services to be provided and payment with respect thereto will be as established in the Workplan.

6.0 RESPONSIBILITIES OF THE APPLICANT

6.1 For the purposes set out in Clause 3 of this Protocol, the Applicant will do the following:

- (a) respect the privacy, dignity, cultures, practices, traditions and rights of the First Nation;
- (b) recognize that the First Nation's rights to ownership, protection and custody of their Traditional Knowledge, including their rights to heritage resources;
- (c) ensure that the Traditional Knowledge Project occurs in an orderly, legal and respectful manner with due regard to the peaceable enjoyment of the First Nation to the Traditional Territory;
- (d) offer to, and if accepted, respect the anonymity of the Traditional Knowledge-holders;

Note: Please consider whether this anonymity requirement is sufficient. It is our experience that anonymity of Traditional Knowledge-holders can be a particularly sensitive issues in Aboriginal communities, you may want to consider stronger language or a separate section that elaborates upon the interface between the Applicant and traditional knowledge-holder(s).

- (e) in the manner set out in the Workplan, assist the First Nation to develop the capacity to carry out the Workplan; and
- (f) take any reasonable action required to ensure compliance with this subsection as requested by the First Nation.

6.2 The Applicant will not, without the prior informed consent of the First Nation:

- (a) use or permit the Traditional Knowledge to be used by any other person or body other than for the purposes of or incidental to the Traditional Knowledge Project;
- (b) knowingly undertake any collection of heritage or cultural materials;

Note: Many statutes, regulations and policies have definitions for the terms "heritage materials" and "cultural materials". To ensure these terms are not applied to this Protocol, it is advisable to clarify these terms in the definitions section. There may be specific sites and names in your Aboriginal language that are appropriately defined in this Protocol or as an appendix.

- (c) disclose any aspect of the Traditional Knowledge which is not publicly available and which was communicated to or observed by the Applicant pursuant to the Traditional Knowledge Project, except as set out in Clause 10;
- (d) seek to obtain any Traditional Knowledge of the medicinal and cosmetic properties of plants from a Traditional Knowledge holder which is not publicly available; and
- (e) sell or claim rights to sell plants as herbal medicines or cosmetic products that were obtained as a result of the Traditional Knowledge Project.

Note: Following community consultations, particularly traditional knowledge-holders, it is advisable to consider whether there are any other specific prohibitory issues that should be added to this list.

6.3 Sacred Sites. In the event of and upon becoming aware of any Sacred Site within the Traditional Territory, the Applicant will adhere to the following procedure:

- (a) undertake any activities within the Traditional Territory which could reasonably be expected to damage or interfere with an identified Sacred Site;
- (b) disclose the location of the Sacred Site to the First Nation or a designated representative thereof,
- (c) treat all information with respect to the Sacred Site as confidential to the benefit of the interests of the First Nation, and
- (d) seek the advice of the First Nation regarding the Sacred Site.

Note: Many heritage conservation statutes include requirements for third parties to report sacred site information to a public authority (i.e., archaeology branch). This section is intended to contract out of those requirements and have all sacred site information reported to the First Nation first.

We advise First Nations to closely consider these provisions to ensure that they are consistent with their Aboriginal laws and modify them accordingly.

6.4 The Applicant will not, without the prior informed consent of the First Nation, knowingly enter upon any Sacred Site.

7.0 RESPONSIBILITIES OF FIRST NATION

7.1 For the purposes set out in Clause 3 of this Protocol, the First Nation will do the following:

- (a) instruct and supervise the Traditional Land Stewards in their gathering, analyzing and documentation of Traditional Knowledge;
- (b) provide the Traditional Knowledge as described by the Workplan;
- (c) use reasonable efforts to secure the cooperation and participation of the Traditional Knowledge-holders;
- (d) in a timely manner, bring information, matters or issues of concern forward for discussion and resolution in order to assist the Applicant in the planning and development of the Traditional Knowledge Project;
- (e) provide advice and assistance to the Applicant, as necessary, to enable it to fulfill its responsibilities under this Protocol;
- (f) on a regular basis or when requested by the Applicant, provide an update of progress on the Traditional Knowledge Project to the Applicant; and
- (g) take any reasonable action to ensure compliance with this subsection as agreed to by the Applicant.

Note: This section is particularly important to customize to the specific Traditional Knowledge Project following consultations with your community, particularly Traditional Knowledge-holders.

8.0 PRIOR INFORMED CONSENT

8.1 First Nation's Responsibilities and Obligations to the First Nation Members. Pursuant to internal First Nation protocols and for the purposes of the Traditional Knowledge Project, the First Nation must seek, obtain and maintain the prior informed consent of the First Nation members with respect to the protection, preservation and maintenance of Traditional Knowledge, which may include following the recommendations of the Traditional Knowledge Oversight Committee.

Note: This Protocol contemplates the traditional knowledge collection and gathering being solely controlled and managed by the First Nation. In this circumstance, much of the obligation on ensuring compliance with Aboriginal law is on the First Nation itself.

If the Applicant was first-hand involved in the collection, the prior informed consent requirement is the responsibility of the Applicant and more specific provisions would be suitable.

8.2 The First Nation responsibilities and obligations to the First Nation member with respect to the gathering, collection, integration and use of Traditional Knowledge are further elaborated in the Workplan.

8.3 **The Applicant Responsibilities and Obligations to the First Nation.** The Applicant recognizes and respects that the First Nation's Traditional Knowledge is collectively owned, managed and controlled by the First Nation.

8.4 Unless authorized by the First Nation, the Applicant will not approach individual Traditional Knowledge-holders in an effort to obtain Traditional Knowledge.

Note: This subsection speaks to common worst practice, whereby persons directly approach traditional knowledge-holders, compensate them poorly for traditional knowledge without any respect for the collective ownership issues surrounding traditional knowledge.

8.5 When requested by the First Nation, the Applicant will explain the potential benefits and outcomes associated with the Traditional Knowledge Project to First Nation members.

8.6 For clarity, the Parties acknowledge that ongoing consultation and provision of information will be required throughout the duration of the Traditional Knowledge Project to maintain prior informed consent.

Note: This subsection speaks to the often misunderstanding that consent occurs with a simple approval regardless of changes to use, scope or nature of a Traditional Knowledge Project. Consent is something that requires ongoing communication between the First Nation and Applicant.

8.7 For further clarity, the Applicant acknowledges that the First Nation may withdraw their prior informed consent in writing or by termination of this Protocol.

Note: This is an important subsection that allows the First Nation to end a Traditional Knowledge Project if the Applicant acts contrary to this Protocol. It is a protective mechanism that ensures that the First Nation will remain in control of the Project at all times and circumstances.

9.0 BENEFIT-SHARING

9.1 Benefits to the First Nation. As agreed to by the Parties and for the purposes of the Traditional Knowledge Project, benefits relating to the Traditional Knowledge Project may include, but are not limited to, the following:

- (a) training of community members;
- (b) equipment;
- (c) production of procedure manuals;
- (d) video recordings;
- (e) contribution to the First Nation for cultural, commercial or community-based undertakings related to the Traditional Knowledge Project;
- (f) remuneration, including honoraria, as set out in the Workplan and
- (g) any other matters set out in the budget of the Workplan.

Note: Please consider whether this enumerate list provides a broad enough range of benefits. These benefits will have to be closely customized for the scope of each project.

9.2 Benefits to the Applicant. The benefit to the Applicant includes, but is not limited to, the following:

- (a) First Nation assistance and advice to the Applicant;
- (b) opportunities to establish positive engagement of the First Nation; and
- (c) the authenticity and evidentiary value of the Traditional Knowledge contributions will be enhanced through First Nation participation in the development of the Traditional Knowledge Project.

9.3 Mutual Benefits to the Parties. Mutual benefits to the Parties include, but are not limited to, the following:

- (a) protection and enhancement of the First Nation's cultural pursuits and traditional activities;
- (b) protection of areas of traditional use and sites of cultural importance to the First Nation;
- (c) preservation of Traditional Knowledge; and
- (d) furthering the development of positive, beneficial and harmonious relationships between the Parties.

10.0 CONFIDENTIALITY

- 10.1** In this Protocol, “Confidential Information” means information identified and considered to be confidential by the Party providing the information. The Party providing the information shall notify the other Party in writing of its confidential nature.
- 10.2** Unless otherwise agreed by the Parties, neither Party will disclose, divulge, or otherwise communicate to a third party any Confidential Information received from the other party as a result of this Traditional Knowledge Project nor use such Confidential Information for any purpose.
- 10.3** Where Traditional Knowledge that is confidential is required or requested by a third party, the Parties will make reasonable efforts to engage, negotiate and conclude an agreement with the third party that will safeguard that Traditional Knowledge from public disclosure.

Note: This subsection considers the possibility of third party obtaining access to the Traditional Knowledge within the Traditional Knowledge Documentation. This may be the case where the Traditional Knowledge may be published or subject to a regulatory process (i.e., traditional land use information in an environmental assessment).

We advise that this provision be tailored to the circumstances to ensure that this Protocol is not undermined if a third party obtains the traditional knowledge. It may be necessary to have a Protocol with a third party or have that third party agree to the terms of this Protocol prior to obtain access.

11.0 OWNERSHIP

- 11.1 First Nation Exclusive Ownership of the Traditional Knowledge.** The First Nation shall remain the exclusive owner of the Traditional Knowledge. The Applicant acknowledges and agrees that it has no interest whatsoever in the ownership of the Traditional Knowledge, including any intellectual property rights thereunder. The Applicant hereby waives any intellectual property and/or any other rights that the Applicant may have with respect to the Traditional Knowledge. If, notwithstanding the foregoing, rights to Traditional Knowledge are recognized by a third party as residing in the Applicant, the Applicant will take all reasonable efforts to waive or transfer all or any such rights to the benefit of the First Nation.

Note: We strongly advise that this subsection be included in all traditional knowledge protocols. It spells out in clear terms the First Nation shall remain the owner of its traditional knowledge at all times and provide mechanisms to correct operations of the law to the contrary. That is, traditional knowledge that is included in a publication may be considered to be the copyright ownership of the author.

- 11.2 The Applicant Use of Traditional Knowledge.** For the consideration provided under this Protocol, the Applicant will be able to use the Traditional

Knowledge for the purposes set out in the Traditional Knowledge Project and Workplan, subject to terms and conditions set out by the Traditional Knowledge Oversight Committee. For clarity, the Parties do not intend that this use of the Traditional Knowledge includes any grant of ownership to the Applicant.

12.0 PROCESS MATTERS

Note: Again, this Protocol sets out a traditional knowledge collection process that will be under the control and management of the First Nation by its Traditional Land Stewards. The First Nation will be responsible for the drafting and inclusion of traditional knowledge in the Traditional Knowledge Documentation, thereby having censorship abilities on the specific disclosure or confidentiality of certain Traditional Knowledge.

If the Applicant is directly gathering the Traditional Knowledge, this section will have to be amended to reflect this difference. We would suggest that an Oversight Committee remain integrally involved in approval of the Traditional Knowledge Documentation.

12.1 Review of the Traditional Knowledge Documentation by the Oversight Committee. Prior to the release of the Traditional Knowledge Documentation to the Applicant, a draft report of the Traditional Knowledge Documentation will be distributed by the First Nation to the Traditional Knowledge Oversight Committee for its review and approval.

12.2 The Applicant Comments on the Traditional Knowledge Documentation. The Applicant shall have the opportunity to review and provide comment on the Traditional Knowledge Documentation before it is finalized by the First Nation.

12.3 Communications. All external communications with respect to this Protocol or initiatives pursuant to this Protocol will be undertaken by joint communiqué, as authorized by the Parties.

12.4 Communities Information Strategy. The Parties, by their designated representatives, will collaborate in the development and implementation of a First Nation community information strategy with respect to the Traditional Knowledge Project and any and all agreements, including the preparation of a summary thereof.

13.0 DISPUTE RESOLUTION

13.1 Notice. In the event that the First Nation or the Applicant finds a conflict with the fulfillment of the terms, conditions or responsibilities set forth in this Protocol, that Party shall give written notice to the . .

Note: An appropriate body for appeal of disputes under this Protocol must be considered in this circumstance. Some First Nations create an independent Advisory Committee with equal representation for the Applicant and First Nation for dispute resolution.

- 13.2 Meeting.** The · shall convene a meeting with the parties within 15 days of receiving the notice and shall attempt to reach a mutually acceptable resolution within 7 days.
- 13.3 Appointment of a Third Party.** If the · cannot resolve the dispute between the parties within 7 days they shall agree to designate a third party to mediate the dispute.
- 13.4 Resolution by Third Party.** The parties shall attempt to reach a resolution with the assistance of the third party. If a resolution cannot be reached within 30 calendar days of the designation of the third party, the third party shall resolve the dispute.

14.0 TERM, EXPIRY, AMENDMENT AND ASSIGNMENT

- 14.1** The Parties agree that this Protocol is a document of a “living nature” and may be amended from time to time to continue to achieve the purposes of this Protocol or such other objectives as may be agreed upon by the Parties from time to time.
- 14.2** This Protocol and the Workplan may be amended by agreement of the Parties in writing.
- 14.3** Unless the Parties agree otherwise in writing, the term of this Protocol is indefinite. If the Parties do agree to terminate this Protocol, the specific conditions and covenants that survive termination must be specifically agreed. For clarity, section 10 – Confidentiality and section 11– Ownership, will survive termination of this Protocol.

Note: The Term of this Protocol must be closely considered and is dependent on the nature of the Traditional Knowledge Project. It may be advantageous in a continuing First Nation-to-Crown relationship to have the term indefinite. Whereas, a short limited term may be more appropriate between a First Nation and researcher to restrict use of the traditional knowledge.

- 14.4** This Protocol may not be assigned without the express written consent of the other Party.

15.0 MISCELLANEOUS

- 15.1** The Parties deem this Protocol to be approved when it is executed.
- 15.2** The Parties agree that this Protocol may be executed in separate counterparts, each of which so executed shall be deemed to be an original. Such counterparts together shall constitute one and the same instrument and, notwithstanding the date of execution, shall be deemed to bear the effective date set forth above.

TO EVIDENCE THEIR AGREEMENT each of the Parties has executed this Protocol on the date appearing above.

**D2 University of BC Law School and Treaty 8 First Nations &
Treaty Aboriginal Rights Research**

Information Sharing Agreement

Between

**Treaty 8 Governance Initiative, under the auspice of the Centre for International
Indigenous Legal Studies (CIILS - UBC Faculty of Law)**

and

**Participating Treaty 8 Communities
and the**

Treaty 8 Tribal Association Treaty and Aboriginal Rights Research Office

January 23, 2007

Whereas it has always been the intention of the Research, Advisory and Leadership Teams of the Treaty 8 Governance Initiative (T8GI) to conduct themselves with integrity respecting the value that the Treaty 8 Tribal Association (T8TA) and the Doig River, Halfway River, Saulteau, West Moberly Lake, Fort Nelson and Prophet River First Nations (T8Cs) have placed on their existing collection of historical materials, land use data, personal and community records, and;

Whereas it is understood by all parties that one of the goals of the research undertaken by the T8GI is to use existing materials collected by, and stored at the Treaty and Aboriginal Rights Office (TARR) at the T8TA, Ft. St. John (including historical, genealogical, anthropological, traditional use study and other relevant material) and in the T8Cs (including Archives, Community Museums or Libraries of the T8Cs) and to augment this material via interviews (and transcriptions) as well as occasional papers (including student papers, theses or dissertations) and;

Whereas the T8GI researchers are desirous of using information that is pertinent to the terms outlined in the Memorandum of Understanding, signed August 2005, and;

Whereas the participating T8C and the T8TA are in agreement that the Advisory Committee, Researchers and Leadership Committee of the T8GI are able to access their material related to the research project outlined in the Memorandum of Understanding, signed August 2005.

Purpose:

- 1) To establish a formal information sharing relationship between all parties involved in the Treaty 8 Governance Initiative (T8GI): the Centre for International Indigenous Legal Studies (CIILS), the Treaty 8 Communities of northeastern British Columbia (including Doig River, Halfway River, Saulteau, West Moberly Lake, Fort Nelson and Prophet River First Nations (the T8C)), and the Treaty 8 Tribal Association (T8TA) Treaty and Aboriginal Rights (TARR) office.
- 2) To ensure appropriate access to the T8Cs traditional use study (TUS) information, the TARR archives, and the archives, libraries and Museums of the



- T8C by the T8GI Research Team.
- 3) To ensure that the Aboriginal, Treaty and inherent rights of the participating T8Cs are not prejudiced through inappropriate information storage, acquisition or use.
 - 4) To ensure that, prior to completion of the T8GI that all accessed data is returned to the T8Cs and/or T8TA and/or TARR in the condition in which it was obtained.

Application:

- 1) This agreement applies to the information gathered during the T8GI undertaken pursuant to the Memorandum of Understanding of August 2005.
- 2) CIILS will house all materials borrowed or obtained data relating to the T8GI at the CIILS office.
- 3) Any information provided by TARR or the T8Cs will be used for the purpose of this project only, unless otherwise indicated by the Treaty 8 leadership.
- 4) Any information deemed confidential by Doig River, Halfway River, Prophet River, West Moberly Lake, Sauletau and Fort Nelson First Nations shall not be released without further written permission by that First Nation(s).

Use of Email, Web Technology and Surface Mail to Facilitate Information Sharing:

- 1) Participants of the T8GI, T8Cs and T8TA whenever possible aspire to use available electronic technology to share information: that is, the use of CD-ROM's, File Transfer Posts (FTP) Email, or Web Folders to transfer PDFs, Data Bases (relevant to the project) or materials that have been copied to Laser Fiche to send and share information.
- 2) That is understood that all materials transferred in this manner are subject to the same conditions as if it were either photocopied or originals signed out of TARR or the Libraries, Archives, Museums or Planning Offices of T8Cs, and upon the completion of the project it is expected that all electronic files will be destroyed, or copied from the T8GI's computer and given to the TARR office or T8Cs' Libraries, Archives, Museums or Planning Offices.
- 3) Any materials sent by surface will be sent either by registered mail or by Courier.

Related Information Sharing Projects:

- 1) It is hoped that over the life of the project other related Information sharing endeavours may be undertaken by the T8GI, TARR, T8TA and T8Cs.

Treaty 8 Tribal Association (T8TA)
Treaty and Aboriginal Rights Research Office (TARR):

Deborah Smithson (Director)

(Archivist)

Treaty Eight Governance Initiative (T8GI),
Which represents the UBC Law School and the
Centre for International Indigenous Studies:

Karen Aird

The Treaty 8 communities (T8Cs) of Doig River,
Halfway River, Sauteau, West Moberly Lake,
Fort Nelson and Prophet River First Nations
as represented by:

Doig River First Nation:

Chief Kelvin Davis

Halfway River First Nation

Chief Gerry Hunter

Prophet River First Nation

Chief Liza Wolf

Sauteau First Nations

Chief Allan Apsassin

West Moberly First Nations

Chief Roland Willson

Fort Nelson First Nation

Chief Liz Logan
*also signed a separate
Information Sharing Agreement

D3 Association of Canadian Universities for Northern Studies (ACUNS) Ethical Principles for the Conduct of Research in the North

Applies primarily to activities involving human subjects, but also applicable principles should be followed for any technical activity including exploration and surveys. Researchers should always abide by any local laws, regulations or protocols that may be in place in the region(s) in which they work

- There should be appropriate community consultation at all stages of research, including its design and practice. In determining the extent of appropriate consultation, researchers and communities should consider the relevant cross-cultural contexts, if any, and the type of research involved. However, incorporation of local research needs into research projects is encouraged.
- Mutual respect is important for successful partnerships. In the case of northern research, there should be respect for the language, traditions and standards of the community and respect for the highest standards of scholarly research
- The research must respect the privacy and dignity of the people. Researchers are encouraged to familiarize themselves with the cultures and traditions of local communities
- The researcher should take into account the knowledge and experience of the people, and respect that knowledge and experience in the research process. The incorporation of relevant traditional knowledge into all stages of research is encouraged
- For all parties to benefit fully from research, efforts should be made, where practical, to enhance local benefits that could result from research
- The person in charge of research is accountable for all decisions on the project, including the decisions of subordinates
- No research involving living people or extant environments should begin without informed consent of those who might be unreasonably affected or of the legal guardian
- In seeking informed consent, researcher should clearly identify sponsors, purposes of the research, sources of financial support, and investigators responsible for the research
- In seeking informed consent, researchers should explain the potential beneficial and harmful effects of the research on individuals, on the community and/or the environment
- The informed consent of the participants in research involving human subjects should be obtained of any information-gathering techniques to be used for the uses of information gathered from the participants, and for the format in which that information will be displayed or made accessible
- The informed consent of participants should be obtained if they are going to be identified; if confidentiality cannot be guaranteed, the subject must be informed of the possible consequences of this before becoming involved in the research
- No undue pressure should be applied to obtain consent for participation in a research project
- A community or an individual has the right to withdraw from the research at any point

- On-going explanations of research objectives, methods, findings and their interpretation should be made available to the community
- Subject to the requirements of confidentiality, descriptions of the data should be left on file in the communities from which it was gathered, along with descriptions of the methods used and the place of data storage. Local data storage is encouraged.
- Research summaries in the local language and research reports should be made available to the communities involved. Consideration also should be given to providing reports in the language of the community and to otherwise enhance access
- All research publications should refer to informed consent and community participation where applicable
- Subject to requirements for confidentiality, publications should give appropriate credit to everyone who contributes to the research
- Greater consideration should be placed on the risks to physical, psychological, humane, proprietary, and cultural values than to potential contribution of the research to knowledge

D4 UNBC Consent Form for First Nations Community-Based Research with First Nations

Part 1: General Information

Title of Project:

Name of participant:_____

Name of Researchers:

Researcher contact information (address, phone #, email):

Date:_____

Part 2: Project Summary

The project that you are about to participate in is a University of Northern BC faculty research project entitled (*Project title*). It is funded by (*funding source*) and administered by Dr. XXXX (*Project Leader*), (*researcher names, and job titles*).

(Brief summary of project)

The main objectives of this project are to...

There are no anticipated risks involved with this research. You may benefit from this participation from learning others' perspectives on the research topic. You were chosen to participate in this project as a reviewer based on your expertise and interest in Aboriginal participation in forest management and decision-making. You will be asked to provide your own opinions/knowledge on issues related to....

Part 3: Informed Consent

The recordings resulting from my participation in this research project, whether they are written, audio, video, or photographic, and the resulting translations and/or transcriptions and/or images (e.g. maps, calendars, timelines) will be used for the following purposes:

1. Final Project Reports;
2. Progress reports;
3. Brochures, posters, websites and/or displays;
4. Publications and presentations about the project.

I understand that recordings, be they written, audio, video or photographic, and the translations and/or transcriptions and/or images will not be used for any other purposes without my express permission or that of the designated representative of _____
(name of community)

I give permission to deposit copies of my recordings with the principal researchers until **October 31, 20XX** at which time they will be given to, and will become the property of _____
(name of community)

I understand that _____ will store my copies of my recordings
(name of community)
for safekeeping and will control outside access to my information.

Any further use of this material will require permission from myself or from a
designated representative from _____
(name of community)

My participation in this research is voluntary. I may end my participation in the project at any time and withdraw my information from the project at any time. The information I provide the project will be confidential. This means that my name will not appear on any research products, unless I indicate otherwise. My participation in this research may be acknowledged but not directly linked with specific information. I understand that every effort will be made by the researchers to ensure anonymity, but anonymity cannot be guaranteed.

The researchers will adhere to the *University of Northern British Columbia Policies and Procedures for General Research Ethics, the Social Sciences and Humanities Research Council Guidelines on Research Ethics*, and the *Tl'azt'en Nation Guidelines for Research on Tl'azt'en Territory* (attached).

I understand the purpose and goals of the research and that I will personally receive reports on the results of my participation. I understand that I may request copies of my signed consent form. If I have any complaints regarding this project and the use of my information I can contact the *Vice President, Research* at the *University of Northern British Columbia, (250) XXX-XXXX*.

I agree to take part in this study and to the use of the information according to the conditions stated above:

----- Signature of Participant	----- Date	----- Witness
<i>Print Name</i>		<i>Print Name</i>

I believe that the participant signing this form understands what is involved in the study and voluntarily agrees to participate. I agree to use the information according to the conditions stated above:

----- Signature of Researcher	----- Date
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If you have any questions about this project, or to obtain additional copies of project results contact:

(contact name) (250) XXX-XXXX, (contact name) (250) XXX-XXXX, or
Your community researcher (name, phone #): _____
The project supervisor, Dr. XXXX, can be contacted by phone at (250)960-XXXX.