

BMC Minerals (No. 1) Ltd.

PREFACE:

KASKA ETHNOGRAPHIC OVERVIEW OF THE KUDZ ZE KAYAH PROJECT

BMC Minerals (No.1) Ltd (BMC) is proposing to develop the Kudz Ze Kayah (KZK) mine Project in southeast Yukon. Baseline environmental and socio-economic studies for the Project were originally completed by the property's previous owner, Cominco in 1994-1995 to support the Initial Environmental Evaluation (IEE) under the Canadian Environmental Assessment Act. To support that assessment, a heritage study was conducted in collaboration with the Ross River Dena Council (RRDC). The heritage study included Traditional Knowledge (TK) interviews with local Kaska elders. The interviewees identified camps, cabins, and trails; and, none of the sites identified overlapped with the proposed Project infrastructure. Although the heritage study included interviews, it did not include any desk based research of the existing information related to Kaska TK. BMC understands that between 1995 and 2015 additional Kaska TK studies have been completed.

Given that additional studies have been completed since 1995 and that no desk based research was conducted as part of the original Project-specific study, BMC commissioned this desk based research study to compile the existing TK knowledge for the KZK Project. BMC will use this compilation to avoid culturally important sites, if present, during planning and development of the Project.

It is noted that through the encouragement and support of BMC, RRDC is currently conducting additional Project-specific TK work. Any additional or new information provided by RRDC from this work will also be reviewed and any pertinent information will be integrated into final project design, and operational activities.

TK provisions contained in the bilateral Socioeconomic Participation Agreement between BMC and Kaska commit the parties to a cooperative approach to including TK in project design and operations. Kaska have committed to giving early and clear information to BMC on any environmental concerns they have, and BMC has committed to integrating traditional knowledge with contemporary scientific knowledge in the gathering of information, the conduct of environmental baseline studies and the preparation of its reports related to the project.

In support of its commitment with respect to TK information and to ensure BMC were respecting the wishes of the Kaska people, BMC retained Dialectic Research Ltd of Vancouver, who specialize in the integration of TK information in the environmental assessment of mining projects, including the determination of Valued Components. Dialectic's report is presented in the following pages. The title of this report is intended to reflect the desk-based nature of the publicly available information contained in this report and to differentiate it from the pending RRDC TK/TU report. This report was provided to RRDC on December 7th 2016, as of February 15, 2017 no comments and/or feedback have been received.

31 OCTOBER 2016



KASKA ETHNOGRAPHIC OVERVIEW OF THE KUDZ ZE KAYAH PROJECT

Prepared for:



Prepared by:



Executive Summary

The purpose of this report is to inventory and describe Kaska Dena Traditional Knowledge (TK) available from desk-based research in and around the Kudz Ze Kayah Project study area. The key findings of the report indicate that the Project site was and, to a certain extent, continues to be well travelled and frequently used by Kaska citizens, especially for purposes of hunting. Table 1 provides a summary of the key TK findings arising from desk-based research.

The Kaska people have lived in a semi-nomadic pattern following the movements of important wildlife species for use in sustenance, travel, supplies, and cultural practices. The history of Kaska people related to the proposed Project is one of substantial change over short time, with the first introduction of European explorers, Robert Campbell in 1840, followed by George Dawson in 1887, and the building of trading posts at Frances Lake and Pelly Banks. The two gold rushes did not appear to have drastic effect on Kaska way of life; however, the decline of the fur trade and introduction of and pressure to conform to western educational system shifted Kaska lives and land uses closer to permanent villages, including Ross River.

The secondary sources indicate two key Kaska use areas (the upper Pelly River-Pelly Lakes-Campbell Creek area and the Mye Mountain-Blind Creek-Swim Lakes region). The former has experienced substantial historic changes and pressures arising primarily from the Faro Mine, which produced an easterly shift in Kaska land uses to the latter, including the proposed Project. That is, given past experiences with mining, the area in and around the Project area (as well as other areas around Ross River) has grown in importance. This is important context when considering the potential effects of the proposed Project on Kaska people and their land uses. This is supported by the documentation on Kaska experiences, insights, and challenges with resource development projects throughout their Traditional Territory, which are summarized in Chapter 4 of this report.

The desk-based research indicates broadly the types of land and resource uses that have been and are undertaken by Kaska citizens across their Traditional Territory. Based on the secondary sources reviewed and summarized in this report, the area in and around proposed Project area is an important Kaska hunting area, especially for caribou, moose, and sheep. There are few documents speaking to site-specific fishing areas (mostly Wolverine Lake and North Lake), and no sources indicating plant gathering specific to this area. There is an extensive network of Kaska trails with two main access directions to support Kaska hunting and fishing around the proposed Project site, including from the north along the Big Campbell and Finlayson Creeks as well as from Frances Lake along Money Creek and Finlayson River. There may be additional sites and information relevant to the proposed Project that are revealed in the TK report pending from the RRDC that may supplement and complement the information by provided in the findings of this report.

Table 1: Summary of Key Kaska TK Findings

TK Theme	Description
Culturally Important Species	<ul style="list-style-type: none"> • <u>Wildlife</u>: Caribou, moose, sheep, bear, and wolves, muskrat, beaver, marten, mink, porcupine, squirrel, fox, lynx, and gopher • <u>Fish</u>: Grayling, lake trout, jackfish, whitefish, and sucker • <u>Plants</u>: Blueberries, raspberries, strawberries, currants, salmonberries, cranberries, and soapberries, wild rhubarb, rose petals, spruce, birch, and willow
Hunting and Trapping	<ul style="list-style-type: none"> • <u>Sites</u>: Focus on North Lakes, Money Peak, and Wolverine Lake, near salt licks • <u>Intensity</u>: 101 to 300 person days spent by Kaska hunters in Zone 6 overlapping with the proposed Project. Total Ross River harvest in 1987 included 54 caribou and 37 moose • <u>Timing</u>: Mostly in fall months (lesser extent in May) • <u>Methods</u>: Snares and surrounds along migration routes and salt licks. Laying certain areas fallow for sustainability purposes • <u>Uses</u>: Meat for food, hides for clothes, bones for utensils, furs for sale, and general cultural fulfillment and wellbeing • <u>Population</u>: Wildlife abundance remaining steady or increasing
Fishing	<ul style="list-style-type: none"> • <u>Important Regional Sites</u>: Frances Lake, Frances River, and Hoole Canyon along the Pelly River • <u>Project-specific Sites</u>: Finlayson Creek, Money Creek, and Wolverine Lake
Habitation	<ul style="list-style-type: none"> • <u>Project-specific Sites</u>: North Lakes, Money Peak, Wolverine Lake, Frances Lake, Pelly Banks, and Money Creek • <u>Timing</u>: Summer in valleys along water bodies and fall in higher elevations
Travel and Trails	<ul style="list-style-type: none"> • Trails from <u>west</u> starting at Frances Lake via Finlayson River and Money Creek • Trails from <u>north</u> starting at Pelly Banks via Big Campbell Creek and Finlayson Creek
Potential Effects	<ul style="list-style-type: none"> • Reduced water quality • Overhunting of wildlife species due to increased access • Disturbance of wildlife habitat • Changes to wildlife behaviour and movements • Changes to wildlife and aquatic abundance • Changes in the quality of wildlife and fish resources • Restricted access to Kaska harvest sites • Avoidance of land use in areas of development • Shift from harvesting to monitoring • Shift of land uses to other areas of Kaska territory • Decline in revenues from fur sales • Disturbance of Kaska cultural and spiritual life • Remaining close ties to land with sense of longing

Kaska Ethnographic Overview

TABLE OF CONTENTS

Kaska Ethnographic Overview of the Kudz Ze Kayah Project	i
Executive Summary	ii
Acronyms and Abbreviations.....	vi
1. Introduction	1-1
1.1 Overview.....	1-1
1.2 Kaska Nation	1-1
1.3 Regulations and Definitions	1-1
1.4 Purpose	1-4
1.5 Report Outline	1-4
2. Methodology	2-1
2.1 Overview.....	2-1
2.2 Study Area	2-1
2.3 Sources.....	2-1
2.4 Traditional Knowledge Report	2-2
2.5 Data Limitations	2-3
3. Research Results and Outcomes	3-1
3.1 Kaska Territory	3-1
3.2 Cultural Context.....	3-3
3.2.1 Family and Kinship	3-3
3.2.2 Ceremonies and Celebrations.....	3-4
3.2.3 Language	3-4
3.3 Euro-Canadian Contact.....	3-5
3.4 Harvest.....	3-9
3.4.1 Overview	3-9
3.4.2 Hunting and Trapping	3-10
3.4.3 Harvest Intensity.....	3-14
3.4.4 Fishing	3-23
3.4.5 Plant Gathering.....	3-24
3.5 Habitation	3-24
3.6 Travel and Trails.....	3-29
3.7 Water.....	3-34
3.8 Customs and Ethics.....	3-35
4. Potential Effects.....	4-1

References6

LIST OF FIGURES

Figure	Page
Figure 1.1: Study Area Overview	1–3
Figure 3.1: Percentage of Interviewees Harvesting in Territory	3–10
Figure 3.2: Percentage of Kaska Interviewees Hunting	3–13
Figure 3.3: Percentage of Kaska Interviewees Trapping	3–13
Figure 3.4: Level of Hunting Effort.....	3–14
Figure 3.5: Level of Trapping Effort.....	3–15
Figure 3.6: Harvest, Consumption, and Demand for Moose and Caribou	3–16
Figure 3.7: Caribou Harvest by Month across Yukon Bands (1987).....	3–19
Figure 3.8: Moose Harvest by Month across Yukon Bands (1987).....	3–20
Figure 3.9: Changes in Ross River Income, Housing, and Transportation	3–28
Figure 3.10: Kaska Trail West of Frances Lake along Money Creek	3–30
Figure 3.11: Kaska Trail West of Frances Lake along Finlayson River.....	3–31
Figure 3.12: Pikes’s Notes of Kaska Trails from Frances Lake to Pelly Banks.....	3–32

LIST OF TABLES

Table	Page
Table 1: Summary of Key Kaska TK Findings.....	iii
Table 3.1: Summary of Key Kaska Place Names in and around Proposed Project.....	3–1
Table 3.1: Culturally Significant Wildlife, Fish, and Plant Species	3–9
Table 3.2: Ross River Caribou, and Moose Hunters by Gender (1987).....	3–15
Table 3.3: Reported Ross River Harvest by Species (1987).....	3–16

Acronyms and Abbreviations

ATK	Aboriginal Traditional Knowledge
CEAA	Canadian Environmental Assessment Agency
CPAWS	Canadian Parks and Wildlife Society
DKI	Dena Kayeh Institute
EMR	Energy, Mines and Resources
HBC	Hudson's Bay Company
KDC	Kaska Dena Council
LFN	Liard First Nation
LSA	Local Study Area
RRDC	Ross River Dena Council
RSA	Regional Study Area
TEK	Traditional Ecological Knowledge
TK	Traditional Knowledge
The Project	Kudz Ze Kayah Project
TU	Traditional Use
YESAB	Yukon Environmental and Socio-economic Assessment Board
YDLI	Yinki Dene Language Institute
YZC	Yukon Zinc Corporation

1. Introduction

1.1 Overview

The purpose of this report is to document the collection and summarise the findings of Kaska Traditional Knowledge (TK) data pertaining to Kudz Ze Kayah Project (the Project) study area. BMC Minerals (No 1.) Ltd (BMC) proposes to develop a copper, lead, and zinc mine located approximately 115 km southwest of Ross River in southeastern Yukon. The Project is expected to employ a permanent workforce of approximately 300 people during operations, with a nominal mine life of ten years, extracting approximately 185,000 t zinc, 60,000 t copper, and 35,000 t lead annually. There will be 250,000 tonnes of Cu/Zn concentrate and 36,500 tonnes of lead concentrate per year. Plans for the Project include a combined open pit and underground mine, various mining and processing facilities, ancillary buildings, and upgrades to an existing Tote Road extending from the Robert Campbell Highway to the Project site.

This report contains a summary of general ethnographic sources pertaining to the areas in and around the Project site, while maintaining the confidentiality of Kaska TK and abiding by the agreements and protocols signed with the Ross River Dena Council. The Project study area is located within an area overlapping with Kaska Traditional Territory. Figure 1-1 illustrates the location of the Project with respect to the Kaska Traditional Territory and surrounding communities.

1.2 Kaska Nation

The Project is located in the Traditional Territory of the “Kaska” or “Kaska Nation” as meaning collectively, Ross River Dena Council (RRDC), Liard First Nation (LFN), Daylu Dena Council, Dease River First Nation, and Kwadacha First Nation people. Under the Kaska Collaboration Agreement (KCA) of October 2011, for each negotiation on a project carried out pursuant to the KCA, a Lead Community will be identified by the Kaska Nation from the jurisdiction (Yukon or British Columbia) in which the project is located. For the KZK Project the two primary Kaska communities are LFN and RRDC, with RRDC acknowledged as the lead agency under the KCA.

1.3 Regulations and Definitions

The Yukon Environmental and Socio-economic Assessment Board (YESAB) and Canadian Environmental Assessment Agency (CEAA) provide guidance on which Aboriginal groups require consultation for proposed resource development projects. To date, BMC has been consulting primarily with the RRDC (along with LFN) whose Traditional Territory overlaps with the Project. The RRDC is part of the trans-boundary Kaska Dena Council. Kaska TK information for purposes of integration into the Project Proposal will be extracted from the information provided in this report (which includes information from Rutherford, 1995), secondary sources available through the Yukon Archives, Energy, Mines and Resources (EMR) library, and academic institutions, such as Yukon College and University of British Columbia. RRDC is currently conducting an additional TK study for the Project; therefore, further consideration and integration as the Project planning progresses will occur if more Kaska TK becomes available in partnership and collaboration with the RRDC.

In Section 33(a, b) of the *Yukon Socio-economic and Environmental Assessment Act* indicates:

The Board shall make rules with respect to (a) the integration of scientific information, traditional knowledge and other information by designated offices, the executive committee and panels of the Board; (b) the determination of whether traditional knowledge is confidential for the purposes of paragraph 121(a)... (Government of Yukon, 2003).

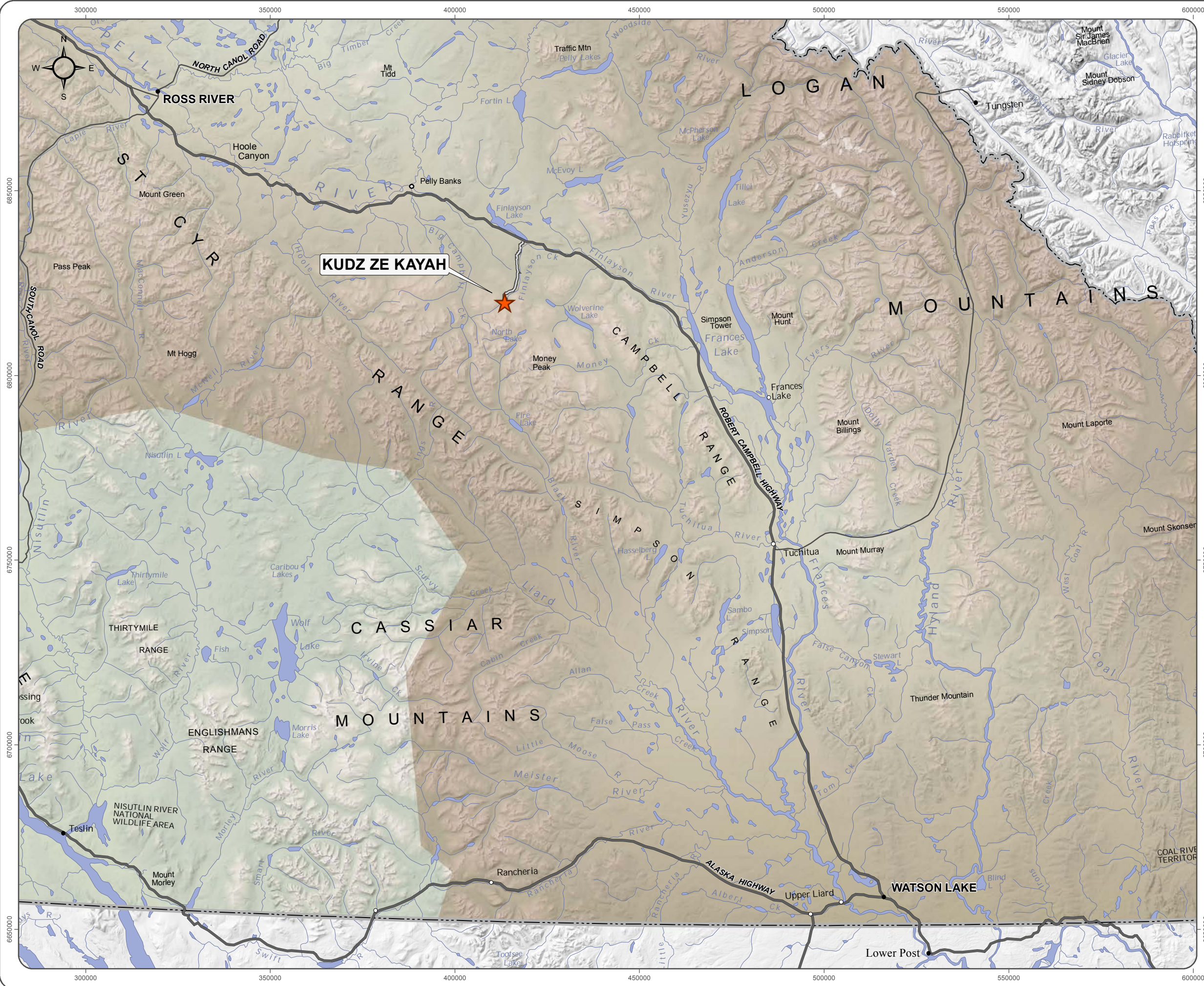
Considering Aboriginal Traditional Knowledge in Environmental Assessments Conducted under the Canadian Environmental Assessment Act (CEAA, 2015) provides the following definition of TK and delineates the opportunities for TK integration into the EA process:

Section 16.1 of the 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." ... [Aboriginal Traditional Knowledge (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 (CEAA, 2015).

Traditional knowledge is dynamic and evolving. It is held by individuals, but also in common through the transfer of knowledge between community members and from one generation to another. It is a term that covers several types of knowing about all facets of life, including the environment, culture, society, spirit, kinship, politics and economics. For the purposes of environmental impact assessments, specific aspects of Traditional Knowledge are collected, considered and incorporated. TK holders have years of experience and expertise, resulting in an intimate knowledge of the land, its wildlife, its features and climate and weather patterns. Traditional Use is a term that captures both past and current Aboriginal land use, including but not limited to hunting, trapping, plant harvesting, travelling and occupancy.

The Kaska First Nation has identified TK as an important source of information for decision-making around resource development:

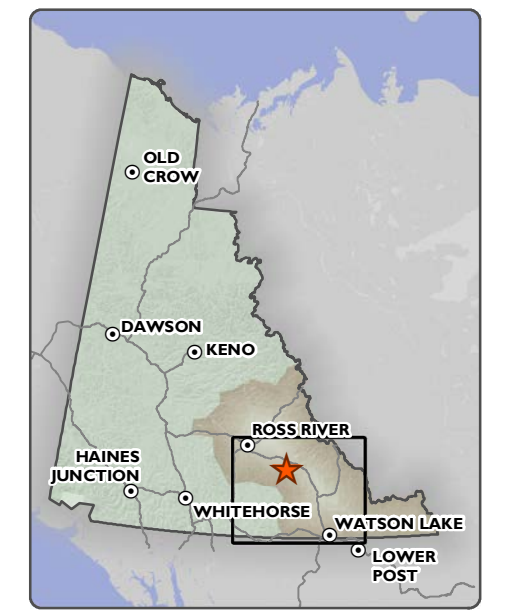
The integration of traditional knowledge and modern scientific knowledge is the key to ensuring sustainable development within Kaska territories and therefore the preservation of traditional knowledge is an important aspect of the [Kaska Traditional Knowledge Network] KTKN. By bridging the old and the new, the portal encourages wider participation from Kaska members in decision-making regarding environmental issues: elders are able to pass on knowledge about traditional methods while the current generation brings new skill sets back to the community (KN, n.d.).



KUDZ ZE KAYAH PROJECT

**FIGURE 1-1
PROJECT LOCATION**

NOVEMBER 2016

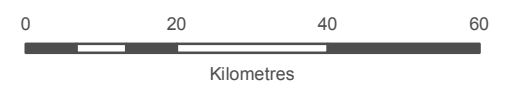


- Kudz Ze Kayah Project
- Kaska Dena First Nation (Ross River and Liard) Traditional Territory



Digital elevation model created by the Yukon Department of the Environment interpolated from the digital 1:50,000 Canadian National Topographic Database (NTDB Edition 2) contour and watercourse layers. Obtained from Geomatics Yukon.
 Canvec compiled by Natural Resources Canada at a scale of 1:10,000 - 1:50,000. Reproduced under license from Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources Canada. All rights reserved.
 Drainage areas obtained from National Hydrology Network 2011
 Datum: NAD 83; Projection UTM Zone 9N
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1.4 Purpose

The consideration and integration of Kaska TK in the Project environmental assessment process is valuable for several reasons, including:

- Contributing to the building and enhanced long-term relationships between BMC, Kaska, and/or responsible authorities;
- Providing relevant biophysical information, including historical information that may otherwise have been unavailable;
- Helping identify potential environmental and socio-economic effects;
- Leading to improved Project design;
- Strengthening mitigation measures;
- Leading to better decisions; and
- Contributing to the building of EA and TK capacity within Kaska communities and building an awareness of, and appreciation for, Kaska TK in non-Aboriginal communities.

As such, Kaska TK is documented as a stand-alone report, and is incorporated into the various stages of the environmental assessment process, including scoping, baseline data collection, effects assessments, and mitigation and monitoring plans. Through the process of including TK into scientific analysis and reporting, considerations for Project design, management and monitoring emerge.

1.5 Report Outline

The report begins with an overview of the methods used to collect ethnographic information, followed by results of the desk-based research in Chapter 3. Chapter 4 presents a summary of potential effects of the proposed Project in light of the desk-based research that identified Kaska experiences with past development and operations within their Traditional Territory, including Faro and Ketzá Mines.

2. Methodology

2.1 Overview

This section describes the methods of collecting information on Kaska land uses through means of desk-based ethnographic research, including study area, sources, and data limitations.

2.2 Study Area

Two study areas were selected to conduct the desk-based research. The Local Study Area (LSA) includes the parts of the Kaska Traditional Territory that directly overlap with or are within 1 km of the proposed Project. The Regional Study Area (RSA) covers the areas from Frances Lake to Ross River within 100 km of the Project site. The rationale for a large area is based on considerations of human and wildlife movements, species with the largest habitat range, unique ecosystems and natural landform barriers. Furthermore, while Kaska land uses may occur in different parts of their territory, they are inextricably linked by travel and seasonal rotation. For example, one area of the territory may be overhunted or become developed, shifting the Kaska use to another part of their territory. While past human activity was heavily influenced by terrain, including constraints of naturally occurring barriers (e.g., major mountain ranges, watersheds, ecosystems), modern-day equipment and technology (such as motorized vehicles) allows Kaska citizens to transcend these natural barriers.

2.3 Sources

This report contains the results of desk-based research, including compiling and summarizing publicly-available secondary sources. Secondary sources were reviewed for information on site-specific and general land use and cultural values and practices for Kaska people, including:

- Ethnographic literature, journal articles, Kaska websites;
- Provincial and territorial government websites;
- Publically available environmental assessment documents produced for other projects in the vicinity of the proposed Project; and
- GIS analysis to identify sites of anticipated land use change and disruption.

Maps and/or descriptions of existing and past land and resources uses by RRDC and LFN in relation to the proposed Project will be included. Table 2.1 provides a summary of the types of data searched for during the desk-based research.

Table 2.1: Summary of Types of Data from Ethnographic Sources

Category	Sub- Component	Type of Data
Context	Background, history, and culture	Background information, including description identifying the reserves and Kaska communities and the general location of traditional territories in relation to the Project Recent history, culture (including customs and practices), traditional, contemporary and potential future land use, planning and resource management, and economy
	Past and Current Kaska Land Use	
	Fishing Opportunities and Practices	Nature, methods, frequency, timing, and extent of Kaska land and resource uses including, hunting, trapping, fishing, and plant gathering
	Hunting/Trapping Opportunities and Practices	
	Plant Gathering Opportunities and Practices	
	Habitations, Trails, Burials and Other Cultural Modifications of the Landscape	Location and use of cabins and other habitations to support harvesting activities Trails and travel methods used to access harvesting areas Nature and extent of non-subsistence land uses, including ceremonial or spiritual purposes, or cultural modifications

2.4 Traditional Knowledge Report

BMC is currently working with RRDC to fund a TK study with Kaska Elders and Land Stewards specifically about the proposed Project. Based on the TK Agreement, it is anticipated that the RRDC will submit a report documenting additional TK findings and recommendations for the Kudz Ze Kayah Project. The TK data collection process will be managed by RRDC TK Coordinators. Review and approval for public distribution of Kaska TK will be provided by the Kaska TK Oversight Committee. Interviews and mapping will be conducted as part of Kaska land use planning endeavours.

When the TK report is completed, the Kaska TK data within the Kudze Kayah Project study areas will be reviewed with particular focus on Kaska culturally important wildlife, fish,

medicinal and sacred plants, sacred sites, culturally and environmentally sensitive areas and traditional sites, trails, practices and uses. The frequency and concentration of overlap between these sites and the Project components will be determined the focus of the findings and recommendations section of the pending Kaska TK report.

2.5 Data Limitations

There are several key limitations in the collection of the information provided in this report. Ethnography is a form of study that presents degrees of qualitative and quantitative descriptions of human social phenomena, which are gathered during fieldwork and observations of human groups. The Kaska people have key ethnographers who lived with and observed them, including John Honnigman. Ethnographic sources are an important source of cultural and historical context and allow the comparison of different information over time.

However, ethnographic data and observations also have limitations and should not be considered conclusive or representative. Ethnographic accounts are criticized as they were overwhelmingly recorded by Euro-Canadians in the late 1880s through to the early 1900s, who were largely informed by a western worldview. In some instances, ethnographers have specific agendas and preconceived notions of the people and communities they encounter, which skew the information and call into question some, if not many, of their observations and interpretations. However, their accounts often provide an important snapshot of daily life, social and political structures and subsistence methods employed by Kaska people, especially at the turn of the twentieth century.

3. Research Results and Outcomes

3.1 Kaska Territory

Ethnographic accounts have struggled to group the Kaska people (Dawson, 1887; Teit, 1956; Honigmann, 1954; Lamers, 1975). Thus, the names and descriptions ascribed by outsiders to Kaska groups have changed over time. For example, Honigmann (1954) notes that Teit used the term Nahani over Kaska and grouped members of the Kaska, Tahltan, and other northern Athabaskan First Nations together. In Honigmann (1954), the term “Kaska” is described to originate from the indigenous term for McDame Creek noted as *Na-ane KasHa*. The Kaska First Nation known today were grouped based on “long-standing relations, intermarriage, mutual intelligibility, and absence of serious geographical barriers” (Honigmann, 1954). The Kaska today are described as a transboundary group with traditional territories located in the southern Yukon and north central British Columbia. The Kaska Dena Council (KDC), which represents current members of the Kaska First Nation, indicates that the Kaska people have lived in their territory for thousands of years before contact with Euro-Canadian people.

The Traditional Territory of the Kaska First Nation covers about 25% of the Yukon and 10% of B.C with over 240,000 km² (KDC, 2016). Figure 1.1 depicts the key place names within the RSA. The territory is situated in between the Coast Range in the west and across the Rocky Mountains to the east, and then extends northwest of the Stikine River to the divide north of Frances Lake in Yukon (Honigman, 1949). The main rivers traversing this region are the Liard, Frances, and Dease (Honigman, 1949). The mountainous terrain of the Kaska Traditional Territory provides diverse microclimates, fast flowing water, and formidable barriers that have influenced Kaska culture. Table 3.1 summarizes the key Kaska areas that overlap or are proximate to the proposed Project and will be frequently referenced throughout this report with their approximate distance from the Project.

Table 3.1: Summary of Key Kaska Place Names in and around Proposed Project

English Name	Kaska Name (Source)	Approx. Distance from Project Site
North Lakes	<i>Ihts’I Ba Mene’</i> – meaning north Wind lake	5 km south
Finlayson Creek	<i>Luge Destie Tue</i> – meaning Fish creek	10 km north
Wolverine Lake	<i>Negha Mene</i> – meaning Wolverine lake (Rutherford, 1995)	19 km east
Money Peak	Possibly <i>Tse Nehtsat</i> [Pelly dialect] and <i>Gucha Dedie Hes</i> [Liard dialectic] – meaning sheep mountain (Mary Charlie in Rutherford, 1995)	17 km south

Research Results and Outcomes

Big Campbell Creek	<i>Tanidzi</i> – meaning in the middle (Mary Charlie in Rutherford, 1995)	10 km west
Finlayson River	N/A	17 km north
Finlayson Lake	<i>Tetl'ane Joje</i> (Gotthardt, 1993)	17 km north
Money Creek	<i>El'es Tue</i> (Mary Charlie in Rutherford, 1995) <i>Il-es-too-a</i> (Hunter, 1924)	20 km southeast
Pelly River	N/A	25 km northwest
Fire Lake	N/A	30 km south
Frances Lake	<i>Tu Cho</i> – meaning big water (Gotthardt, 1993)	50 km east
Frances River	N/A	75 km southeast
Pelly Banks	N/A	40 km northwest
Ross River	<i>Tu Desdes Tue</i> (Weinstein, 1992)	115 km northwest
Lower Post	N/A	210 km southeast

N/A = not available

In Weinstein's (1992) retrospective assessment of the effects of Faro Mine on Kaska land uses, he identifies two key use areas of Kaska Territory, one of which includes the proposed Project site:

Two core regions, however, stand out as family geographic centres: the upper Pelly River-Pelly Lakes-Campbell Creek area, in the east, and the Mye Mountain-Blind Creek-Swim Lakes region, on the west. ... One of these areas has been affected by a major mining development; the other has not. Both are areas with prime resource habitats (Weinstein, 1992:135,137).

Gotthardt describes the connection between Kaska citizens that lived at Frances Lake and those who lived along the Pelly River:

Traditionally, Frances Lake people had very close ties with the Pelly River people and often traveled to their country for salmon fishing. In the literature, the Pelly people are called the *Espa'totena* or *Abbato-tena* – Knife Indians. Their territories included the upper Pelly and Macmillian Rivers" (Gotthardt, 1993:1).

Of particular importance in the RSA is Frances Lake, which has been the focus of protection attempts:

Liard First Nation elders endorsed Frances Lake as one of the most important areas to protect for both cultural and natural values in the Kaska territory. In the late 1990s, ... Frances Lake emerged as one of the most important protected area candidates in the Southeast Yukon region (CPAWS, 1990: i).

Alfred Caesar told the story entitled the "First White People" during Patrick Moore's thesis research. Alfred described generally how Kaska lived at the time and the connection between Frances Lake and the proposed Project site in terms of their use and travel:

Old-timers used to live down the lake [Frances Lake] that way; they used to live on this side of the lake. That's where *Tudie Dedehya*, "The Scattered Islands" are located, past Big Island. That's where the old-timers used to live. They wore moosehide pants that were dyed with ochre. Where there was crumbly rock eroding out they collected ochre, and used it to paint things. That's where they were living [by *Tudie Dedehya*']. They didn't have any shoes at that time, the children went around without shoes. When they went up in the mountains [westward towards the Project site], they cut bark off the spruce trees and tied that onto their feet. Then they went into the mountains (Moore, 2002:610).

Robert Campbell was one of the first explorers to encounter Frances Lake, which he described as follows:

[O]n this date [July 19,1840] we reached a beautiful sheet of water which in honour of Lady Simpson, I called Frances Lake. About 4 mls. further on, the lake divides into 2 branches round "Simpson Tower" (which I named after Sir George). It is considerable altitude, over 2,000 ft. The west wing extends about 30 to 40 mls., the East about 20 or

30, each being on the average about a mile broad, & the water clear and deep (Campbell, 1958:58).

He also described the centrality of Frances Lake in accessing northwesterly parts of Kaska Territory, including Finlayson Lake:

On a small Island – the only one there is – in the West branch, which is situated on the N. extremity of this branch I left 3 of the men with a canoe & nets & guns to fish & hunt round there & wait our return, while I went off on foot with Hoole & 3 Indians, carrying our blankets on our backs & our guns in our hands, to cross the mountains in quest of any river we might find flowing from the West side. Traversing a rough wooded country along the base of hills, we ascended the valley of a river, which enters Frances Lake nearly opposite of the little island; for the last 10 miles of its course, it cuts its tortuous way, a foaming torrent through a rocky chasm. We traced it to its source in a lake 10 miles long & about 1 mile in breadth, which with the river I named Finlayson's Lake and river (Campbell, 1958:58-59).

Wolverine Lake is one of the most proximate lakes to the proposed Project. In the Kaska Dena Council land claim submission (KDC, 1982), there are repeated references throughout interviews with Kaska citizens to Wolverine Lake, especially for hunting and fishing. Several Kaska Elders spoke to the importance of Wolverine Lake in their interviews for the Kudz Ze Kayah Archaeological Reconnaissance report (Rutherford, 1995).

The Wolverine Project Heritage Project Plan explains the importance of Wolverine Lake:

Wolverine Lake, known as *Nougha Mene*, is significant to the Kaska. It is a place one goes to rejuvenate the spirit, renew connections with the land, and practice long-standing traditions (YZC, 2007:1).

In addition, the Wolverine Project Heritage Project Plan indicates the spiritual importance of this area to Kaska citizens:

The traditional knowledge (TK) revealed that the Wolverine Lake area contains a complex of traditional trails, camps and spiritual areas interwoven with the life cycles of wildlife and fisheries resources the Kaska Dena have long relied on for food and spiritual sustenance (YZC, 2007:4).

Hunter described his journey past Wolverine Lake with Caesar, the Kaska guide:

Passed around the east end of a lake that is 3 miles long this afternoon, that Caesar calls Wolverine Lake. It drains north to Finlayson River. This lake is not shown on Dawson's map. About that time Caesar pointed west to "Pelly Banks Mountain," and also where the Ross River enters the Pelly River (Hunter, 1924:66).

Further west is the community of Ross River at the confluence of Pelly River and Ross River:

According to the Ross River Dena Kaska tradition, the junction of the two rivers [Pelly and Ross rivers] was a place of peace. It was a place that people from other areas came to avoid conflicts within their groups of origin. It had a kind of reputation as a place that people could find a more peaceful existence (Weinstein, 1992:62).

Pike shared a story he heard about conflicts between neighbouring Kaska groups about wildlife resources:

Just above the first canyon on the Frances [River], ... was once a sure find for big-horn, but a few years ago, during a season of deep snow, they were nearly all killed by a band of Pelly River Indians, who made themselves very unpopular with the Liard tribes in consequence of this breach of the hunting laws, which require each hunter to keep within his own territory. Any sheep that survived the raid have since avoided [this area] and sought security in the higher ranges to the north [near the Project site] (Pike, 1896:120).

In KDC's submission to support their comprehensive land claim, they establish the importance of Kaska Territory in Yukon for Kaska citizens in British Columbia:

Lands and resources in the Yukon are used most intensively for game and fishing available in the summer, and there is a greater emphasis upon the harvest of big game animals. Indeed, the five big games species – moose, caribou, sheep, goat, and bear – account for about one quarter of all species hunted in the Yukon. On the other hand, British Columbia lands occupied and used by the Kaska Dena are harvested on a more year-round basis and with lesser emphasis on big game animals. These differences are supportive of the idea that the Yukon is important, even vital adjunct to the total seasonal economy of the Kaska Dena (KDC 1982:51 in Exhibit 3).

3.2 Cultural Context

3.2.1 Family and Kinship

Traditionally, the Kaska Dena were matrilineal and all belonged to either one of two clans: Mésǵâ (wolf) or Chíyōné (raven) (Moore, 2000). In English, the raven clan is commonly referred to as “crow” (Moore, 2000). Exogamy was practiced where Kaska Dena married a person from another clan, and marrying asymmetrical cross-cousins was preferred (Ives and Sinopoli, 1980). When a Kaska Dena married a non-Kaska Dena, including Europeans, they were assigned opposite clan lineage. Lamers (1975) also notes that Kaska Dena kinship relationships are more fluid than the ‘text-book’ model originally described by Honigmann (1949).

Among the Kaska Dena the nuclear or conjugal family lived with a larger matrilocal extended family (Honigmann, 1981). Typically, this extended family included a married couple, perhaps the sisters of the wife and their husbands, married daughters and their husbands, and all unmarried children of these couples. This would often constitute the local band, even though not all conformed to matrilocal type extended families (Honigmann, 1981).

Peoples' behaviour was structured by kin and clan relationship. For example, traditionally it was considered *ái* or taboo for a man to directly speak to his mother-in-law, and for a daughter to directly speak to her older brother or father-in-law (Moore, 2000). For this reason, a strong reserve was practiced between these relatives (Honigmann, 1981). As well, siblings of the opposite sex, including a mother's sister's children, enacted circumspect behaviour toward each other (Honigmann, 1981; Moore, 2000). A warm camaraderie existed between brothers-in-law, who would be from different clan designations, and who often were hunting and trapping partners. Grandparents and grandchildren had warm symmetric relationships (Honigmann, 1981; Moore, 2000). And older people were generally seen as Elders and were considered to be knowledgeable and spiritually powerful.

Kaska people traveled widely and frequently married people from outside of the region, and for this reason families were related throughout the Kaska Territory and beyond (Moore, 2000). Typically, marriageable age was 16 for a woman and 18 for a man, and signified entering full adulthood (Honigmann, 1981). To qualify a woman would have to have started her menarche, and a boy would have to be responsible enough to support a family by demonstrating his hunting ability. Siblings and parallel cousins, considered siblings among Kaska people, came under the incest taboo, whereas cross-cousin marriages were favoured. To initiate marriage a young man would perform bride service and live for up to two years with his bride's parents. And only after two or three children were born could the man ask his father-in-law if he could create a camp of his own. After the death of a spouse sororate or levirate were practiced where a widow may marry her husband's brother, or wife's sister. Polygyny and polyandry were reported to be rare practices (Honigmann, 1981).

3.2.2 Ceremonies and Celebrations

Ethnographic sources describe several ceremonies and celebrations that mark the significant stages of life, such as birth, coming of age, marriage, and death. For example, feasts were held for special occasions such as the births, marriage, or to celebrate a young man's first hunting success (Honigmann, 1981). On a greater scale, when a family member died it was custom to give a potlatch feast to commemorate the person's death (Honigmann, 1981). Deceased people were either buried on ridges, or when the ground was too hard for burial, cremated and the ashes buried at the site of cremation away from camp (Honigmann, 1981). Another traditional practice was for women to live away from camp during puberty, and a special camp was made for the first menstruation when the young woman was isolated within one kilometre of camp and followed special protocol (Honigmann, 1981; Moore, 2000). This practice is said to have stopped in the 1940s (Moore, 2000).

3.2.3 Language

The indigenous name for the Kaska language is *dene dzage*, which means "the people's language." The Kaska language is within the Na Dene and is closely related to other Athabaskan languages, including Beaver, Slave, Tutchone, Tagish, and Tahltan (Honigmann, 1954; Moore, 2000; FDI, 2005; YDLI, 2007). There are three or four described dialects of the Kaska language (Honigmann, 1954).

Pre-1940s Kaska was the primary first language for most Kaska Dena (Moore, 2000). From 1942 to 1958 legislated mandatory residential school of Kaska children led to English displacing Kaska as the first language. This was in large part due to native languages being forbidden to be spoken and fluency levels of the Kaska languages quickly disappeared among younger generations. Most of the current Kaska language speakers are middle aged or older (Moore, 2000). The impact of residential schools on language is also evident in the language skills of those Kaska people aged 40 to 50 year, who understand Kaska well, but do not speak it. Since the 1970s there have been efforts made to revitalize native languages in the north, including Kaska (Moore, 2000). Now Kaska is heard in schools, on radio stations, and public meetings (Moore, 2000). A recent estimate of people who speak Kaska and learned it as their first language are 200 in B.C., and 400 in total (YDLI, 2007).

3.3 Euro-Canadian Contact

Contact with non-native people has been quoted to be around 1820s (Honigmann, 1981). The earliest European arrivals were fur traders. The Hudson's Bay Company (HBC) was operating a trading post in the eastern part of the territory at Fort Halkett on the Liard River (Honigmann, 1949). Later the HBC also operated a post at Dease Lake from 1838 to 1841, as well as a post further north at Frances Lake from 1843 to 1851 (Honigmann, 1954).

Liza Magun, who was born at Frances Lake, described the story of the first encounter between Kaska and Euro-Canadian travelers in and around Wolverine Lake:

They went further up towards Frances Lake, up by where Wolverine Lake is. ... They [the Kaska] came to the white people and were astonished to see them. They didn't understand them. Then those white people put tea in a pot on the fire for them. ... Then, after a while, they brought out that gun, a muzzle-loading rifle. They shot like that in front of them and told them to try it. ... They were really surprised "Gee, we'll live good this winter," they said ... The Kaska learned quickly, and they were able to do it themselves right away (Moore, 2002:855-57).

Pike described George Dawson's journey and establishment of various posts throughout Kaska Traditional Territory:

He established a post at the entrance to the east arm of the [Frances] lake, and then continued his voyage of discovery to the banks of the Pelly, where, two years later, the trading post known as Pelly Banks was built. These forts were maintained for about ten years, but the expense and risk of supplying them by the dangerous Liard route was found to be too great, and they were finally abandoned, Fort Frances being occupied until 1851. Since that time the lake has been seldom visited ... (Pike, 1896:132).

The HBC post, located at the narrows on Frances Lake, began in 1842; however, given the challenges in transporting supplies from Fort Hackett to the post, it was not able to keep its doors open for more than 10 years (FLWL, 2016). The post at Frances Lake was connected to the one in Pelly Banks. The purpose of the posts was to establish trading relationships with Kaska west of Frances Lake in the area of the Project site:

Leaving Mr. Hardisty in charge, I crossed over the Mountains to Pelly Banks, taking the young clerk & 3 men with me, my object being to put up the necessary buildings for a trading post there. I still retained with me the party of Indians, including Fitz & Lapie, ... for the double purpose of acquiring a knowledge of that section of country & of having us made known to the Indians down that way. This paved the way for opening up trade relations with these Indians ... [In 1846] [w]e got our buildings up in the course of the summer & had occasional visits from Indians for supplies & trade” (Campbell,1958:77).

Gotthardt indicates the challenges in maintaining the post at Frances Lake:

Supplies and trade goods had to be brought in a great distance, from Fort Simpson by boat up the Liard and Frances River. The many rapids and portages along the route made the journey a long and difficult one, requiring as many as 49 – 50 days to complete (Frances Lake Journal, 1842-1844). As a consequence, trade goods at Fort Frances were often in short supply and trade with Frances Lake people was slow to become established (Gotthard, 1993:10).

Gotthardt also describes the lack of resources in and around Fort Frances:

Between 1843 and 1845, entries in the Frances Lake post journals frequently refer to the lack of fish in the country, and the difficulty in locating moose and caribou. The lack of trade at the Frances Lake post in this period may be attributed to Frances Lake people temporarily shifting their hunting territories away from the lake (possibly to the Pelly River?), until the animals and fish returned once more to the lake (Gotthard, 1993:10).

Another post on Frances Lake was constructed during World World II to provide weather and radio support for air traffic as well as supplies for the fur trade. The construction of the Alaska Highway in 1942 made the post obsolete: “After the Hudson’s Bay store closed about 1947 many Frances Lake people moved either to Watson Lake and Upper Liard, or to Ross River” (Gotthard, 1993:13).

Two consecutive gold rushes were responsible for sudden, major influxes of non-natives into Kaska Traditional Territory. This included the Cassiar Gold Rush of 1873, which brought several thousand miners into Kaska lands. As well the Klondike Gold Rush of 1898 that may have prompted hopeful miners into the area. However, there are two opinions on this. Honigmann (1981) describes a major route toward the Klondike gold rush through Kaska territory, whereas Moore (2000) claims no “major” route led through Kaska territory to the Klondike gold rush - particularly as no gold was found in the Kaska region at this time, and, thus, the Kaska people were rather unaffected (Moore, 2000). Weinstein confirms that even with the gold rushes, there was minimal resulting development in and around Ross River:

At the time of the early prospecting, the only commercial facilities in the region were trading posts catering primarily to Indian families. The Taylor and Drury trading post at Ross River was established in 1905 and remained open until the early 1950s (Weinstein, 1992:32).

However, the decline in furs resulting many post closures had a greater influence on Kaska citizens and encouraged the formation of a village at Ross River:

Ross River became a band village with the closing of the posts at Pelly Lakes in 1952. Families from the Pelly Lakes country and Pelly Banks moved their trading focus to Ross River, where Tom Connelly, a local settler, had taken over the old Taylor and Drury post. Ross River and the lands that comprised its immediate hinterland became the focus of harvesting activities for a greater proportion of the band's family groups. People from more distant areas which were no longer serviced by trading posts were invited and encouraged, according to Indian tradition, to switch their primary harvesting to closer areas known for their abundant fish and game... (Weinstein, 1992:65).

As such, some Kaska members were forced to move away from Ross River in search of opportunities as explained by Weinstein:

As parents of young dependants during the fur trade and employment crisis of the 1950s and 1960s they could not make an adequate living at Ross River after the Taylor and Drury trading post closed. A number of families, including those of the oldest living members of the families from the affected area, moved to other Yukon centres and only became re-established as Ross River residents in the late 1960s (Weinstein, 1992:22).

While the gold rushes may not have had a direct effect on Kaska citizens, they did have an indirect effect on the availability of resources due to the traversing of prospectors through Kaska Territory:

Competition undoubtedly resulted from the increased demand on fish and wildlife, but the Ross River people were distant enough from the main activity to be largely sheltered, except for contact with the Klondikers who had taken the overland route up the Liard and down the Pelly to the Yukon River and with prospectors who sampled the Pelly and its tributaries for possible gold riches (Weinstein, 1992:51).

There were also more Kaska citizens involved in wage labour with the influx commerce surrounding the gold rushes: "The demand for labour increased [with the Klondike gold rush]. Seasonal employment came available, doing such things as cutting wood for the steamboats. This was a valuable addition to the Indian economy, since it was not disruptive to the seasonal harvesting round" (Weinstein, 1992:51).

In the mid-twentieth century, the Kaska citizens living at Ross River experienced a dramatic shift in their socio-cultural livelihood when the fur industry plummeted and supporting posts closed:

One after the other the fur trade posts were closed [during the fur depression]. And with the closure of the posts went the available services for Indian communities and a critical focus of Indian social life. The posts had functioned as stores, post offices, government centres (often through the post office services), and commodity markets. They had also become the social pivot in the seasonal round of harvest and travel. After the trapping season people traveled to one or more posts for trade and purchase of supplies. But the

Research Results and Outcomes

posts were more than that. They represented summer villages where families and friends gathered annually for social exchanges which ranged from good times and prolonged visiting to making decisions about marriage mates (Weinstein, 1992:54).

This change was further compounded by the construction of the Alaska Highway from 1942 to 1968. This introduced major influences from thousands of men working in construction camps in a short period of time. Settlements close to the highways, such as Lower Post, were opened to frequent visits by construction workers, military and police. Many activities started to be focused on the highways where major economic activities occurred. Kaska citizens also started using the highways for travel. Closer to the community of Ross River, the construction of the nearby Canol Road in 1943 and relatedly the Robert Campbell Highway in 1968 reinforced these overall regional patterns. Weinstein describes the resulting consequences on the Ross River Band and its members:

The band was thrown into immediate upheaval by the arrival of 3000 men into the area for the construction of the Canol Pipeline between 1942-44. Ross River Indians experienced epidemics and deaths from new diseases, declines in game and fish, and exposure to alcoholism and sexual abuse (Weinstein, 1992:64).

Besides highway development and post closures, the influence of western educational systems fundamentally changed Kaska land use patterns. Weinstein explains that:

[T]he development of a day school in Ross River in 1966 was a key influence in changing the land use patterns: 'Prior to 1966, Indian people were highly mobile within the Ross River region. Their mobility reflected a pattern of living which was primarily dependent upon hunting and trapping. The arrival of a day school compelled these people to remain in the settlement so that their children could attend the school while staying at home' (Weinstein, 1992: 104).

In his interview for the Kudz Ze Kayah Archaeological Reconnaissance, Amos Dick confirmed the influence of school in Ross River changing his family's harvest practices:

Since the Pelly Lakes store close I never go up there [North Lakes and Money Peak]. That time I had to go to school eh? First time go to school. We lived up there in the summer time (Amos Dick in Rutherford, 1995: Appendix C, p 40).

As such, with the increase in Kaska children attending school, family trips during the summer months to support harvesting efforts became of central importance:

Summer holidays became an important focus of family life in the bush (Miller 1972). With kids out of school, families could move to bush camps for an extended period. The results was a shift in the timing of harvests as people struggled to make changes that would accommodate both village and bush life (Weinstein, 1992: 104).

3.4 Harvest

3.4.1 Overview

Traditionally, the annual seasonal round was comprised of hunting and trapping in the spring and fall, and fishing and plant gathering in the summer and winter. This observation is confirmed by ethnographic sources that repeatedly mention the importance and prevalence of fish bearing waters as gathering places for Kaska families, particularly in winter and summer (Ives and Sinopoli, 1980; Honigmann, 1981; Moore, 2000; Weinstein, 1992).

In late summer, Kaska families moved from larger camps on fish bearing lakes into alpine areas to hunt goat, sheep, caribou, and marmots – drying and storing the meat in alpine caches (Honigmann, 1964; Ives and Sinopoli, 1980; Weinstein, 1992). With the onset of winter, families moved down into the lowlands again to live in larger camps around fish lakes (Ives and Sinopoli, 1980). Fish were the mainstay at this time, supplemented by hunting moose and caribou, and snaring small game, such as porcupine, hare, and grouse (Ives and Sinopoli, 1980). In January, young men would travel to alpine caches to collect meat from the fall. Spring meant increased snow crusting and icing which facilitated big game hunting. This was also the time families travelled to family-owned beaver creeks to kill beaver. In early summer with the snow and ice break up families reassembled at a fish lake to make summer camp which served as a hunting base (Ives and Sinopoli, 1980).

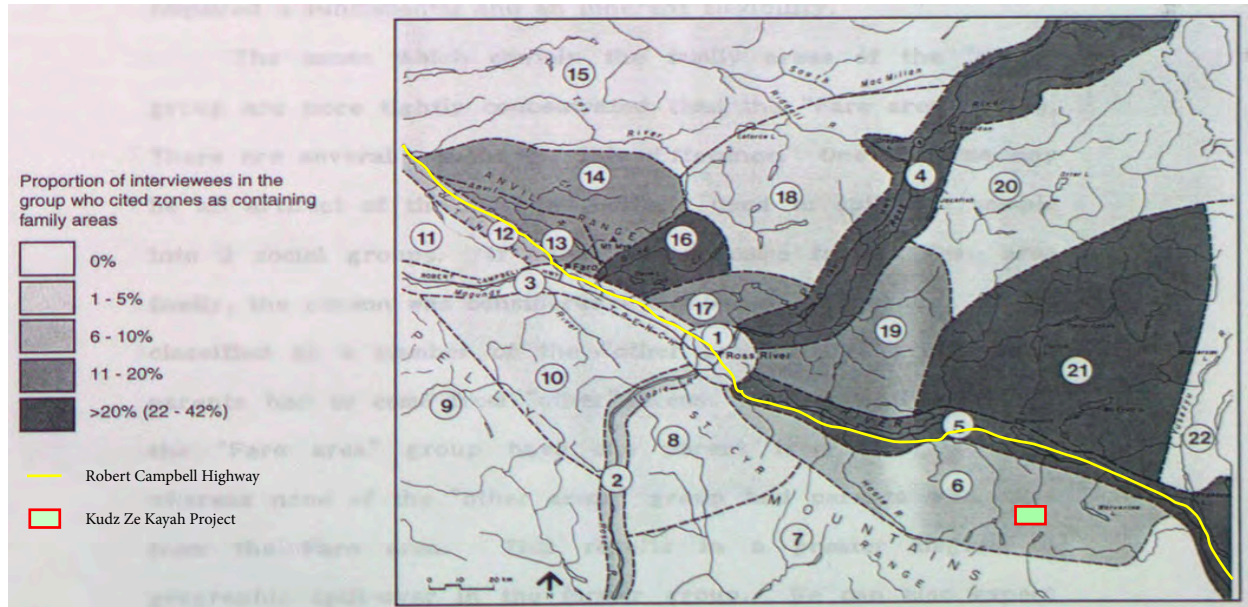
Table 3.1 summarizes the wildlife, fish, and plant species that are identified in secondary sources as culturally important to Kaska citizens living in Ross River. There may be additional species identified in the pending Kaska TK Report.

Table 3.1: Culturally Significant Wildlife, Fish, and Plant Species

Type	Description
<i>Wildlife</i>	Caribou, moose, sheep, bear, and wolf, muskrat, beaver, marten, mink, porcupine, squirrel, fox, lynx, and gopher
<i>Fish</i>	Grayling, lake trout, jackfish, whitefish, and sucker
<i>Plants</i>	Blueberries, raspberries, strawberries, currants, salmonberries, cranberries, and soapberries, wild rhubarb, rose petals, spruce, birch, and willow

In terms of recent Kaska harvesting activities, Weinstein conducted a land use survey in the early 1990s as part of a retrospective assessment of the socio-cultural effects of the Faro Mine on Ross River members. Survey responses were from 82 members, which represented 45% of the band membership at the time (Weinstein, 1992:25). According to the results, Zone 6 (inclusive of the Kudz Ze Kaya Project site) had 6 to 10% of interviewees citing it as part of their family area (Weinstein, 1992:135). More Kaska members harvest from the areas along and north of the Robert Campbell Highway. According to these 1990s survey results, the Kaska harvesting activities in Zone 6 are primarily focused on hunting with fewer Kaska citizens participating in trapping, fishing, and gathering in this zone. Figure 3.1 depicts the areas of concentration of overall Kaska harvesting activities in relation to the KZK Project.

Figure 3.1: Percentage of Interviewees Harvesting in Territory



Source: Weinstein, 1992:135

3.4.2 Hunting and Trapping

3.4.2.1 Overview

Ethnographic sources mention culturally important wildlife species to the Kaska citizens, including big game such as caribou, moose, sheep, bear, and wolves, as well as small furbearers such as muskrat, beaver, marten, mink, porcupine, squirrel, fox, lynx, and gopher (Honigmann, 1954; RRDC, 1992:36; Gotthardt, 1993:1). Birds were also reported to be part of the traditional Kaska diet including geese, ducks, swans, loons, ptarmigans, and grouse (Honigmann, 1954; Weinstein, 1992).

Trapping was especially practiced in winter to harvest furbearers for sale at trading posts (Honigmann, 1954). Traditional methods of trapping include using a four- or five-stranded braided babiche line. Also, corridors were created to drive animals such as moose, caribou and sheep into set traps. Deadfalls were used to take bear, marten, beaver, and smaller animals. Beavers were also caught with big nets 15 to 20 feet long constructed of babiche lines (Honigmann, 1954). Weinstein confirms the species of focus for trapping, including “fox, lynx, marten, mink and others...” (Weinstein, 1992: 59).

Fall was an important hunting time, because many animals were in optimal condition after summer grazing in terms of health, nutrition, and density. This was the time of the year Kaska citizens traditionally dispersed from larger summer camps around fish-bearing lakes to travel into alpine locations in pursuit of meat (Ives and Sinopoli, 1980). The timing was influenced by the seasonal patterns of specific animals.

In general, despite substantial outside pressures and influences to shift away from subsistence hunting, this is still an integral part of Kaska way of being and connecting to the land. They have done so more than other Aboriginal groups across Yukon (Morrell, 1992). This speaks to Kaska resilience and determination to maintain their traditions and way of life, which is confirmed in an assessment of effects of the Ketz Mine, a neighbouring mining development approximately 100 km west of Kudze Ze Kayah Project:

[H]unting for moose, caribou, and thinhorn sheep is the principal economic use of the Ketz River drainage basin by members of the RRDC. Respondents in this study considered that half or more of their food comes from land-based subsistence activities like hunting. This is consistent with the findings of Dimitrov and Weinstein (1984) that the subsistence economy of the Indians at Ross River contributes in a very substantial way to the mixed cash and subsistence economy of the community (Morrell, 1992:19).

Of particular note pertaining to the proposed Kudze Ze Kayah Project site is that it plays an important part in the Kaska harvesting system, especially when other places are depleted of wildlife, feeding other parts of the nation and its members. Furthermore, based on Kaska management practices, the area in and around the Project site may lay fallow for several seasons in an attempt to rejuvenate the wildlife resources. This flexible and dynamic approach to resource use underpins a sophisticated use of the area proposed for development.

3.4.2.2 Harvest Sites

In general, the Project site is a key Kaska hunting area with many reported past and present meat drying poles and equipment. Of particular, repeated note is the hunting site south of the Project site at Money Peak. According to Rutherford (1995), there are an additional five hunting areas at a distance greater than 5 km from the Project at North Lakes, Grass Lakes, and Wolverine Lake. Also, further south is the headwaters of the Liard River, which is an important Kaska sheep hunting area (Gotthardt, 1993:6).

In Weinstein's retrospective assessment of the effects of the Faro Mine, he reported survey results of greater than 20% of interviewees (i.e., >17 members) hunt in Zone 6 compared to 1 to 5% who trap (Weinstein, 1992:137). These differences are depicted in Figures 3.2 and 3.3.

Mary Charlie notes the importance of licks which are located by smell:

He [Mary's father] walk around on the side you know. Deep [steep] that mountain [Money Peak], but daddy go around on the side, come with us that time. Lots of our grandma, daddy, daddy's dad, his grandma, too. I guess people go to that moose lick all the time he said, you know long time ago. They set snare for moose, caribou, sheep. That's what people live [on] he said. ... They know all the time moose lick together. ... You come up there, you could smell moose and sheep, caribou (Mary Charlie in Rutherford, 1995: Appendix C, p 31).

Tilly Smith also noted the smell of caribou that Mary mentioned:

They used to dry meat. There were lots of caribou. It just smelled of caribou there were so many (Tilly Smith in Rutherford, 1995: Appendix C, p 31).

Another Kaska Elder, Sid Atkinson, noted the locations and species he and his relatives would hunt in and around the Project area:

We shot sheep on the side of North Lake right there. Groundhog, oh lots, oodles. This mountain on this side (Sid Atkinson in Rutherford, 1995: Appendix C, p 46).

According to the Wolverine Project Heritage Protection Plan, the Wolverine Lake area is of particular importance to Kaska citizens for its relative wildlife abundance playing a critical function during periods of wildlife depletion in other areas:

The Kaska Dena know *Nougha Mene* [Wolverine Lake] as an area of bountiful wildlife, fish and plants. While the Wolverine area is commonly used for harvesting, gathering, and trapping, it is particularly important in lean years when wildlife is hard to find in other areas of the territory. At these times, community members came to Wolverine to harvest at special locations known to harbour wildlife (YZC, 2007:1).

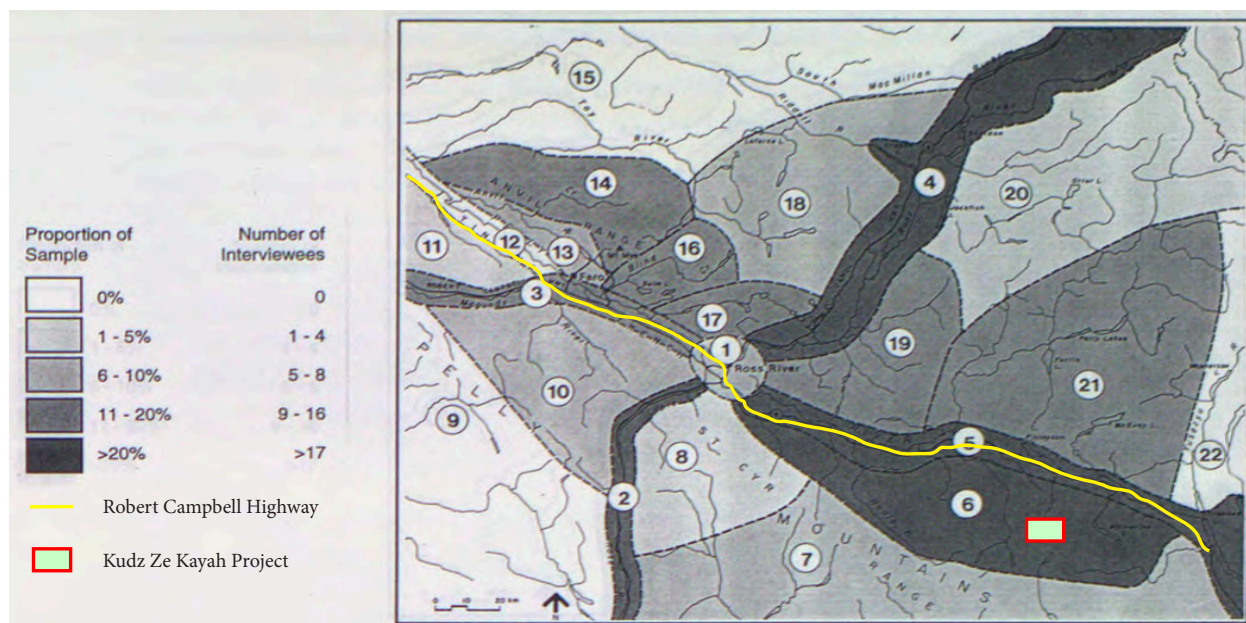
During his interview, Arthur John discussed the importance of hunting in the mountainous regions of the Kaska Territory, especially for caribou and sheep:

That's when [August] they start to go back to the bush. That's when those animal get fat eh. ...Then you find caribou same time in the mountain too eh. People to that way all the time, he go right up that hill there. That high hill. Sheep, they all stay in the mountain. You have to go to, you want a sheep, you got to up Lapie, up that way people get 'em. They know where's all the sheep lick is. They go there, then they wait. And sheep come down the lick, then they get 'em eh (RRDC,1992:34).

Gotthardt describes the Kaska moose hunting off the west arm of Frances Lake:

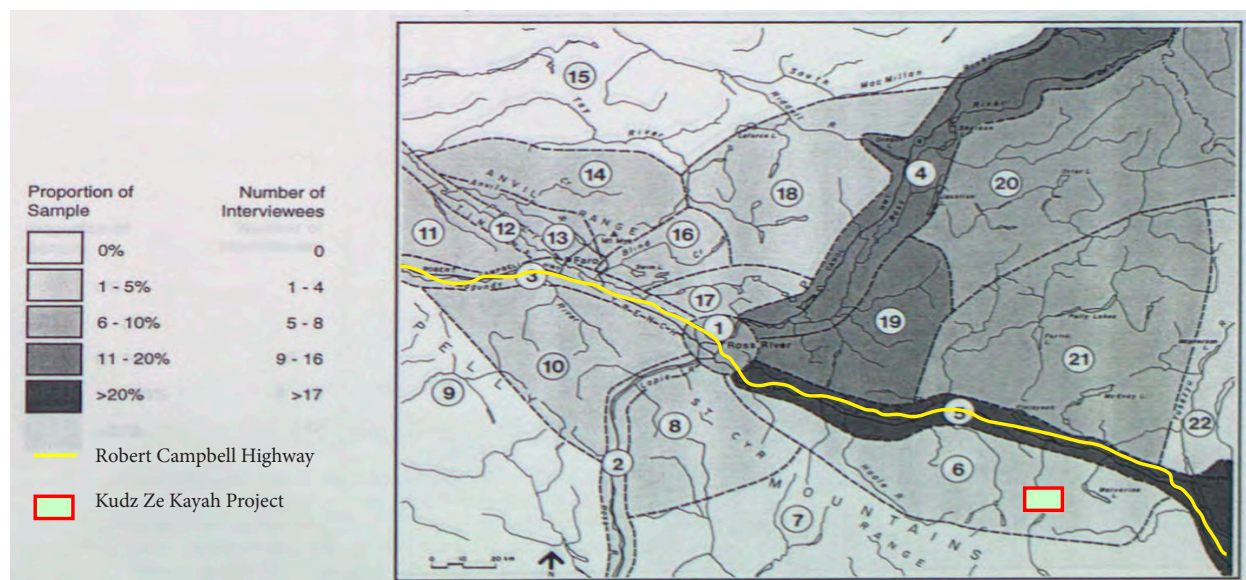
Tudie' Disela' is located about 10km west of the Narrows (*Kedelini Tue*) and was in the past an important moose hunting and fishing place for Frances Lake people. *Tudie' Disela'* means "lots of little islands across" (the lake in the Kaska language). ... Caribou and moose cross the lake here [along their migration toward Mount Logan] (Gotthardt, 1993:6).

Figure 3.2: Percentage of Kaska Interviewees Hunting



Source: Weinstein, 1992:137

Figure 3.3: Percentage of Kaska Interviewees Trapping



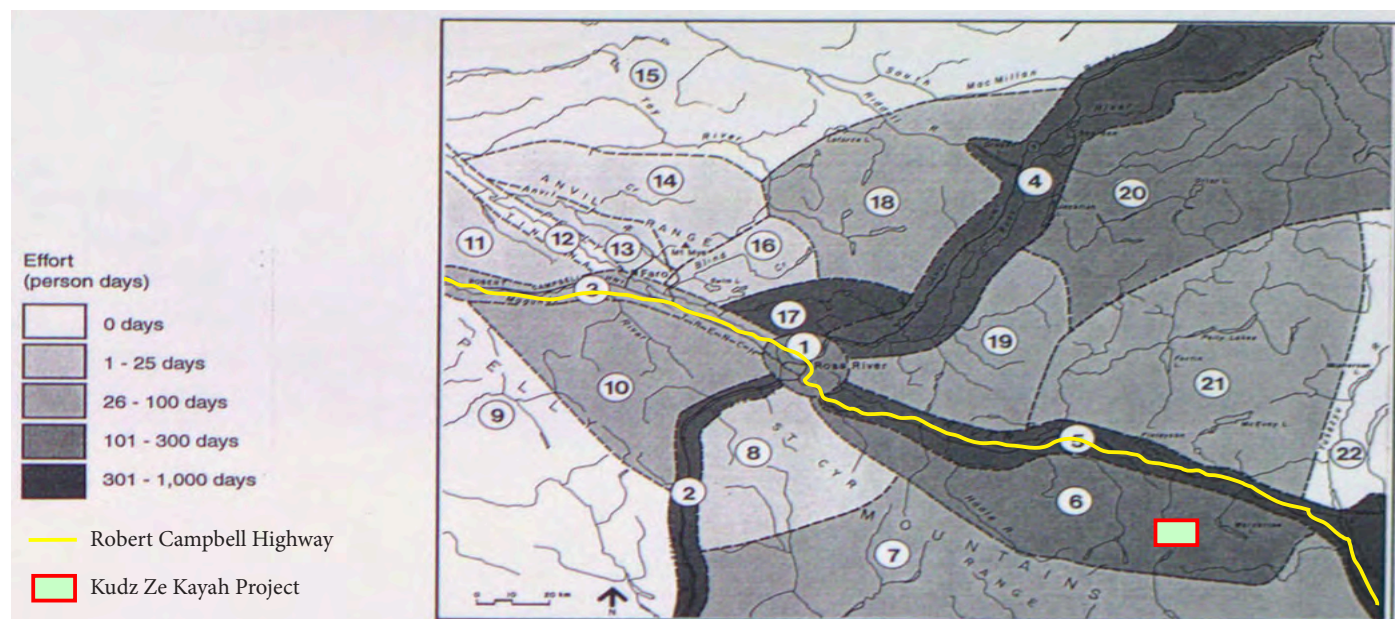
Source: Weinstein, 1992:137

3.4.3 Harvest Intensity

There are two key studies that measure Kaska intensity of harvest in and around the proposed Project area. In particular, Weinstein conducted a study of Kaska land use (including hunting and trapping) in the early 1990s and a harvest study was conducted in the late 1980s by the Yukon Department of Renewable Resources. These studies do not provide a comprehensive picture of Kaska harvest levels; however, together the studies provide an important glimpse into and a snapshot of the scale, seasonality, and types of harvesting efforts among Kaska citizens. Without additional quantitative data, it is not possible to determine whether these are numbers representative or outliers.

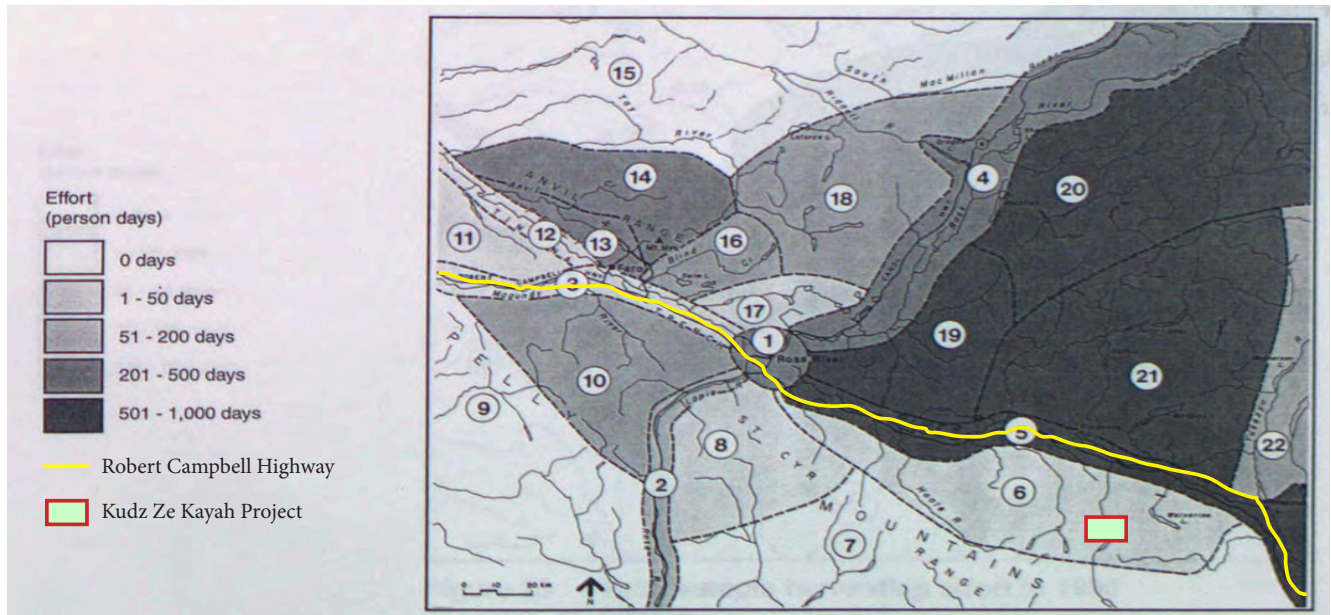
In Weinstein’s retrospective assessment of the Faro Mine on Kaska land use, the level of harvesting effort (as measured in person days) is high in Zone 6 for hunting (101 to 300 days), but lower for trapping and fishing (1 to 50 days) (Weinstein, 1992:142) as represented in Figures 3.4 and 3.5. The highest concentration of Kaska hunting effort is along South Canol (Zone 2) and North Canol (Zone 4) roads, and along Robert Campbell Highway (Zone 5) with between 301 and 1,000 person days of hunting (Weinstein, 1992: 142). However, without corresponding zone-specific harvest levels, it is hard to determine if these data reflect a concentration of Kaska hunting activity or a lack of wildlife abundance requiring more effort.

Figure 3.4: Level of Hunting Effort



Source: Weinstein, 1992:142

Figure 3.5: Level of Trapping Effort



Source: Weinstein, 1992:142

The 1987 Yukon Indian Harvest Survey included levels of Ross River hunting of the following wildlife species: moose, caribou, sheep, goat, grizzly bear, black bear, and wolf. The survey results noted a high number of hunters in the Ross River community compared to the six other Yukon communities (i.e., Pelly Crossing, Watson Lake, Teslin, Old Crow, and Dawson): “Over the total number of households, 76% had a hunter residing in the house and this ranged from a high of 87% in Ross River to a low of 59% in Watson Lake” (Quock and Jingsfors, 1988:10). Of the total number of hunters in Ross River, 90% labeled themselves occasional hunters. According to the survey results in Table 3.2, there were more Ross River men hunting (78%) compared to women hunting (22%) with more caribou hunters (47 hunters) than moose hunters (35 people). Table 3.3 summarizes Kaska harvest levels for seven wildlife species in 1987 reported by Ross River resident with the majority of kills being caribou and moose (Quock and Jingsfors, 1988:14).

The data indicate that no goats were harvested by Ross River members. The authors of the harvest study provide hypotheses as to why this might be: “The goat harvest is likely very minimal in Yukon as goats are very inaccessible and are not thought of as a good foods source. However, goat hides are sometimes used to make blankets” (Quock and Jingsfors 1988:17).

Table 3.2: Ross River Caribou, and Moose Hunters by Gender (1987)

	Male	Female
# of Caribou Hunters	87% (47)	13% (7)
# of Moose Hunters	100% (35)	0% (0)
Total Hunters	78%	22%

Source: Quock and Jingsfor 1988:14

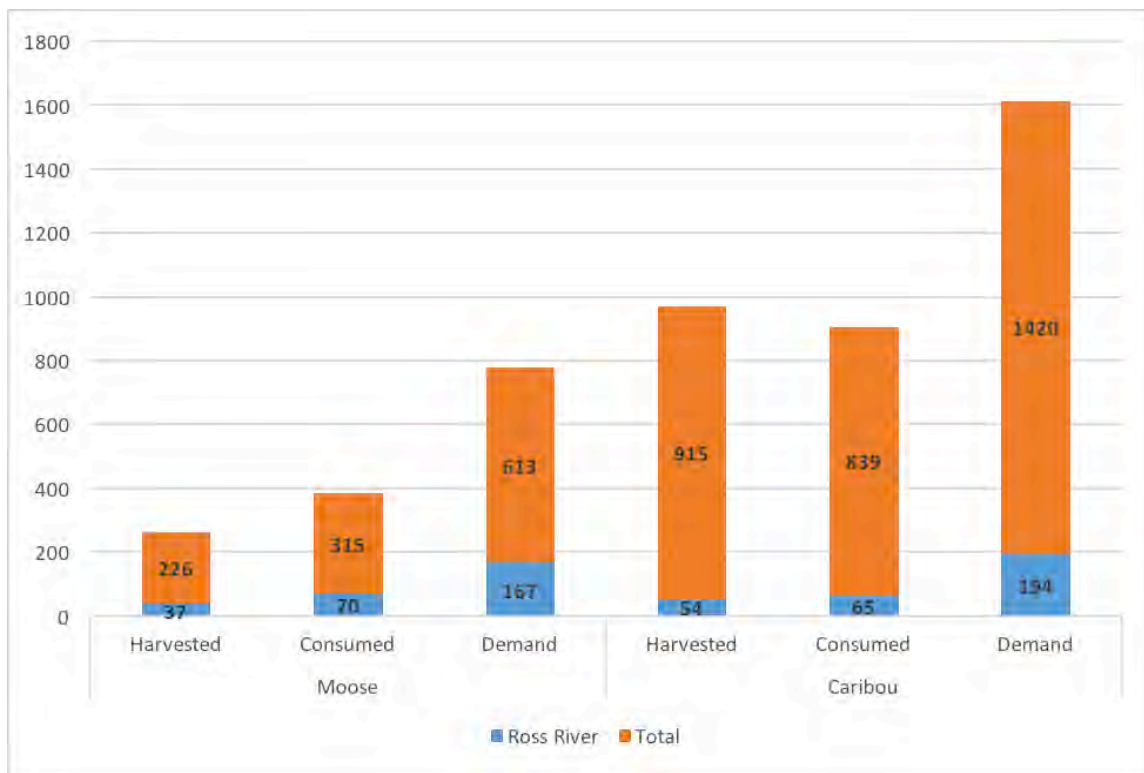
Table 3.3: Reported Ross River Harvest by Species (1987)

Location	Moose	Caribou	Black Bear	Grizzly Bear	Wolf	Sheep	Goat
Ross River	37	54	3	2	4	1	0
All Six Aboriginal Communities	226	915	17	11	22	1	2

Source: Quock and Jingsfor 1988:16

The authors of the study reported a notable difference between the level of harvest compared to wildlife consumed. This documented across all communities and also for Ross River in particular: “All communities except Old Crow consumed substantially more meat than they reported harvesting. ... The discrepancy between the reported harvest and current meat consumption suggest that most Yukon Indian hunters with the exception of Old Crow tend to underreport their actual harvest” (Quock and Jingsfors, 1988:18). There may be reasons other than these, including a strong tradition of sharing and trading meat across communities. This non-alignment between reported harvest and consumption levels is reflected in Figure 3.6. The measure of demand was generated from the responses to the question: “How many moose and caribou would you feel are needed for this household to have enough food for a year? (Quock and Jingsfors, 1988:30).

Figure 3.6: Harvest, Consumption, and Demand for Moose and Caribou



Source: Quock and Jingsfor 1988:20

3.4.3.1 Harvest Methods

According to secondary sources, traditional hunting equipment included spear, gaff stick, club and bow and arrow (Honigmann, 1954). Spears were used to kill bear or beaver. And gaff hooks were implemented by inserting into a beaver lodge to seize and animal and force it to where it could be clubbed to death. Bows were most often constructed from birch, and arrows from willow or birch tipped with obsidian, flint, horn or bone. To hunt moose a special birch bark horn was used to attract wildlife, or a moose scapula was rubbed against a tree. In winter, snow impeded the movement of larger game animals, such as moose and caribou, and the lighter hunters equipped with snowshoes could run them down (Honigmann, 1954).

Currently, Kaska use their knowledge of wildlife daily and seasonal movements to determine best hunting locations and approaches to maximize their chances of hunting success. Gotthardt (1993) noted hunting methods of Kaska who lived around Frances Lake and traveled to and from Finlayson Lake following the caribou migration through the area of the Project site:

Surrounds were constructed for hunting caribou in their winter range, on Simpson Tower (*Tenidze*) or on Finlayson Lake. ... Spring was the time of the caribou hunt, as the herds moved to their summer ranges [in and around Logan Mountain to the east of Frances Lake]. Caribou Crossing, on the East Arm of the Lake, was a traditional location for intercepting the caribou herds as they crossed the lake. ... [H]unting continued through the summer, but this was also the season when people travelled to visit with their neighbours” (Gotthardt, 1993:1).

Robert Campbell’s journal entries confirmed the Kaska method of hunting along the caribou migration route:

In March, however, when Reindeer [caribou] commenced to pass, our hunters were very successful ... (Campbell, 1958:73).

Gotthardt also described the hunting along Money Creek (*Al’as Tue*), which runs close to the Project site, and underscores the centrality and importance of licks as part of Kaska hunting technique:

Al’as Tue means “lick water”. Along the creek is a mineral lick where hunters went to find game. The creek runs down from the Campbell Range, it is likely that old hunting trail follow its course into the mountains. Trails probably lead from here to Flint Mountain, which is in the Campbell Range, according to John Dick (Gotthardt, 1993:7).

Mary Charlie in her interview for the Kudz Ze Kayah Archaeological Reconnaissance confirmed the prevalence and importance of licks in and around the Project site:

Past that Wolverine Lake, over that way. From that mountain, little ways down there. You see that moose lick here, and sheep lick right here, caribou lick right here. Three place, three different kind of lick. ... They call ‘em *eles* ‘lick’ *Eles Mene* [‘Lick Lake’] they call it” (Mary Charlie in Rutherford, 1995: Appendix C, p 30).

Tilly Smith also noted the area in and around the Project site as an important Kaska hunting destination:

They hunt around there. They were living around on *Tse Nehtsat* [possibly Money Peak]. They went for meat up there. They were drying meat. They lived up there on everything. They were snaring gophers. There were lots of gophers. Lots of marmots! They hunted around for marmots. There were lots of caribou up there and they shot them also. Even sheep, everything on that mountain they call *Tse Nehtsat*. There is a little lake up there. On top (Tilly Smith in Rutherford, 1995: Appendix C, p 50).

Gotthardt reports the use of snares among Kaska Elders as part of hunting sheep:

Leda and Robert Jules referred to hunting sheep with snare as at the head of the Liard River [45 km southwest of the proposed Project] (and in fact the Kaska name for the Liard River refers to this) ... (Gotthardt, 1993:6).

Hunter also described the snaring methods used by Kaska for harvesting sheep:

We find remains of old sheep-snares and toggles along the trails leading to the salt lake, so Caesar was not joking the other day when he said they did snare sheep at this place. ... The Yukon hunting season opens today [on August 1]... (Hunter, 1924:72).

Hunter acknowledged the superiority of Kaska techniques for harvesting to sheep after many days of stalking them throughout the proposed Project area: "I can now understand how the Indians snare sheep at the salt lake" (Hunter, 1924:77). This is further confirmed in Weinstein's study of Kaska land uses: "Sheep move to salt licks in the spring as soon as the snow melts. They remain around licks until lambing time and then return to the mountains for grazing" (Weinstein, 1992:73).

While the Kaska were adept at using these areas, they were also skilled in determining when an area needed rest. Weinstein explains the Kaska practice:

Through the exchange of information, the community would decide which areas would be left fallow to recover their animal populations and which would be in productive use making operated from the bottom-up, through consensus-building..." (Weinstein, 1992: 55).

This is an important consideration when assessing Kaska level of use and activity in an area. That is, non-use of an area should not be equated with non-productivity. The non-use may be temporary and intentional.

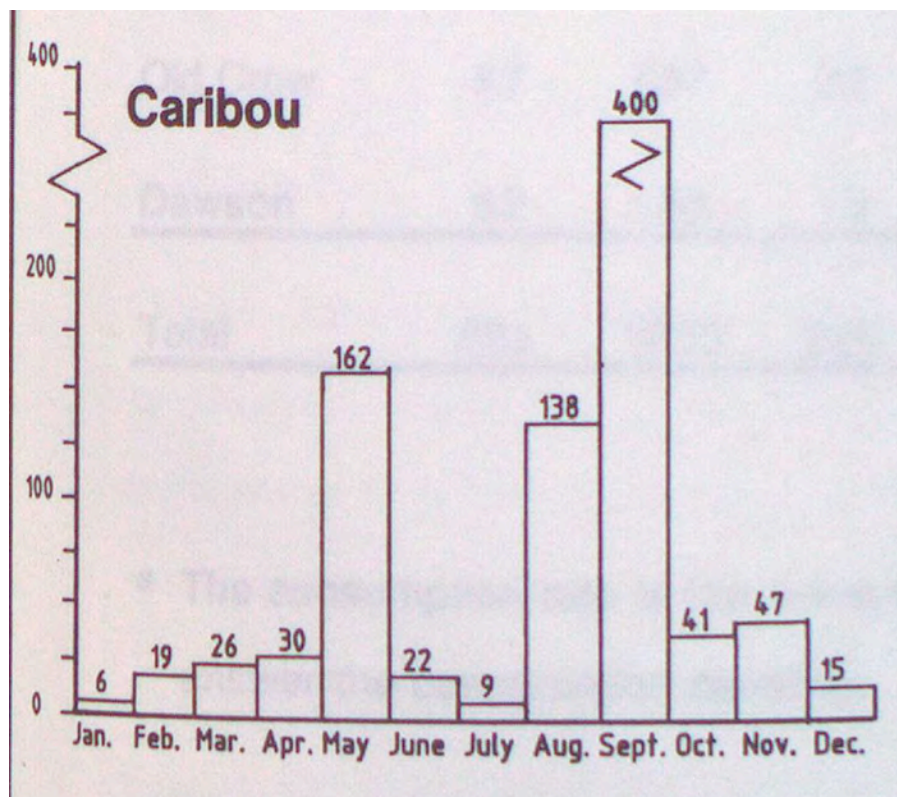
Pike also described Kaska harvesting efforts based on observations of animal behaviour:

A black bear had also been seen ... first of May was an early date for bears to be out of their winter quarters in such a latitude, but the Indians told me they always see them here when the ice in the Yus-ez-uh begins to break up (Pike, 1896:139).

3.4.3.2 Timing

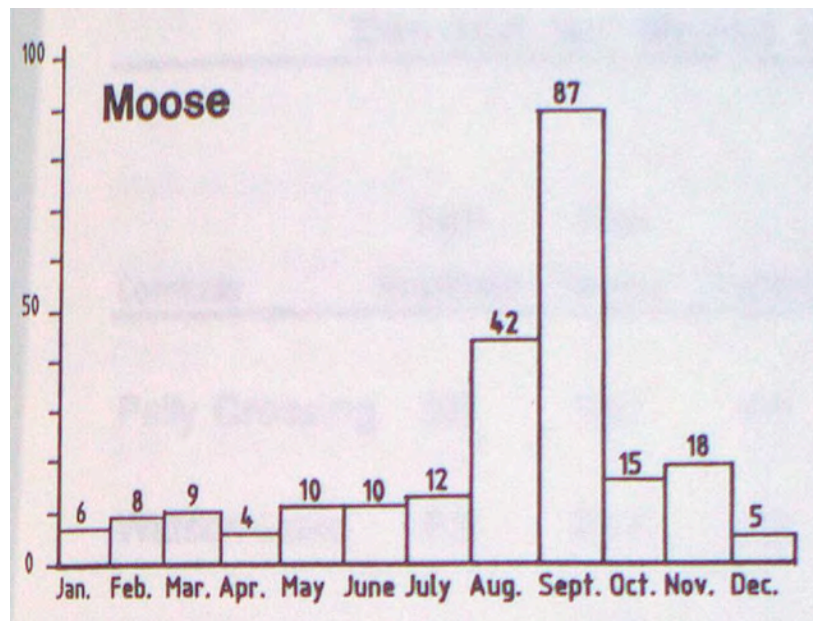
In general, Kaska hunting occurs in the spring and fall in mountainous areas and trapping is done in the winter months in the valley bottoms (RRDC, 1992:36; Gotthardt, 1993:1; Campbell, 1958:73). The desk-based research confirmed this by quantitative data from harvest survey results in the late 1980s, which included Ross River. Figures 3.7 and 3.8 indicate the concentration of months in which harvest of moose and caribou occurred across First Nation groups in Yukon in 1987, according to the harvest study conducted by the Yukon Department of Renewable Resources. While these are totals for all bands with no disaggregated data for Ross River, it provides insight into clear clustering of hunting activity for caribou in the spring (May) and fall (August and September) and for moose in fall (August and September).

Figure 3.7: Caribou Harvest by Month across Yukon Bands (1987)



Source: Quock and Jingfors, 1988:19

Figure 3.8: Moose Harvest by Month across Yukon Bands (1987)



Source: Quock and Jingfors, 1988: 19

3.4.3.3 Uses

Kaska people made many uses of the species they hunted and trapped, including meat for food, hides for clothes, bones for utensils, furs for sale, and general cultural fulfillment and wellbeing while maintaining a connection to their ancestral lands. One of the key uses of furs among Kaska citizens was selling them at trading posts:

It was one of the only ways people had to make money in those days to buy goods at the store and other supplies. During the 1920s and 30s the price of furs was generally quite high and people managed to make enough to get by from year to year. ... [I]t was fox – particularly black and silver fox – that brought the most money (RRDC, 1992:36).

Kaska also consumed the meat they hunted, which they dried: “And all through the winter, people lived off the dried meat and fish in their cache” (Gotthardt, 1993:1).

In his travels, Hunter noted Kaska other uses of animal products, including:

Have secured several pair of moccasins trimmed with porcupine quills. Hope to get some good pictures of these people tomorrow – women with papoose bags on their backs, and the Old Chief... He is all dressed up in a colored sash, old blue jeans, and a large black boat and hat. These people are all out of tea and tobacco...they seem quite friendly” (Hunter, 1924:61).

One of the Kaska Elders, Mary Charlie, noted the various uses of animal parts to make clothing and supplies:

[We] make moose skin for wintertime, moccasins, mitts, everything. And babiche, they make babiche, caribou skin. And sheep skin too, like that sometime. ... [M]ake babiche for snowshoe (Mary Charlie in Rutherford, 1995: Appendix C, p 34).

3.4.3.4 Population

As keen and interested observers, Kaska hunters have tremendous insight and knowledge about the levels and trends of wildlife population, which are noted in various secondary sources. In general, the area in and around the Project site is documented as being abundant with wildlife, especially caribou, moose, sheep, and marmot.

Based on Kaska customs and practices, they focus their harvest on male wildlife species, leaving the females to maintain the population of the species. This is further confirmed in the 1987 Yukon Indian Harvest Survey: “Indian hunters [including 239 members of Ross River] predominantly take males and that female harvest in comparison is small” (Quock and Jingfors, 1988: ii).

Careful management practices have maintained a healthy population of important game in areas near Ross River:

In contrast to other Yukon communities, approximately 60% of hunters in Ross River felt that moose and caribou numbers have increased and wolf numbers have declined. The DDR has conducted wolf control in the area for the last 6 years (Farnell and McDonald, 1988) in an effort to enhance the Finlayson Lake Caribou herd (Quock and Jingfors, 1988:22).

This wildlife plenty has had a beneficial effect in stabilizing the Ross River economy by providing a steady source of wildlife for Kaska sustenance purposes:

The Ross River economy is subject to less variance than many others because of the abundance of ungulates and the large amounts of meat a single kill represents. The availability and productivity of moose, caribou, and to a lesser extent sheep is one of the main reasons that the band has remained one of the more traditional Indian bands in the Yukon even in the face of severe dislocations and resource impacts (Weinstein, 1992:66).

Mary Charlie also noted that there was a resurgence of the beaver population after the area in and around the Project site was left unharvested for several years:

Springtime like that for beaver look around, but we couldn't find nothing. This time now every place, beaver. Everybody gone and then lots of beaver (Mary Charlie in Rutherford, 1995: Appendix C, p 34).

Euro-Canadians also made observations about the relative abundance of wildlife in Kaska Territory. Hunter observed moose and sheep in the proposed Project RSA on July 29, 1923:

Saw 3 moose in our pond when we got up at 5 this morning, and 4 more during the day. Saw caribou tracks this afternoon. ... [W]e looked through the glasses, and Charlie

hollered, “Sheep! White sheep! About 50 of them.” On the mountain to the south of us a whole flock were feeding; ewes and lambs, with surely some rams. ... here we have grassy round-topped mountains about 6500 feet ... There is a salt lake down in the flat below us, where Albert [Hunter’s guide] threatens to set a snare for sheep. This salt lake covers about 2 acres (Hunter, 1924:67).

Hunter makes several references to the abundance of sheep in the proposed Project RSA, the majority of which are ewes and lambs: “I took a look at “Soup Bowl” Mountain [perhaps Money Peak], and saw about 30 white sheep. ... Except for these 2 rams, all the balance were white ewes and lambs (Hunter, 1924:72). On other days of his expeditions he sees 65 and 40 sheep (i.e., August 4 and 5, 1923): “Lots of sheep in this country, but have not yet seen a real ram. The rams are probably lying in some hole off to the south, and if it were possible would move camp southward 10 miles” (Hunter, 1924:78).

3.4.3.5 Regulation and Management

Kaska citizens of Ross River have a long history and tradition of wildlife management that is socio-culturally informed. This has been at times at odds with and/or reflected in the territorial government regulation of wildlife species as demonstrated in the trapline registry system in the 1950s. Weinstein explains the context and complexity of Kaska decision-making related to harvesting within their dynamic and flexible family-based tenure system:

Choices about where to harvest are essentially inform social decisions. They were guided by traditional rules of tenure and perhaps by government restrictions, but they were modified by assessments about animal populations, family needs and relations with other people at the time the decisions are made” (Weinstein, 1992:14).

Weinstein (1992) explains the history of trapline registries among Ross River citizens:

Yukon traplines were first registered in 1951. At the onset of registration Ross River Indians registered individual trapping areas. During the late 1950s, however, band members requested that the traplines be re-registered as grouped traplines. The band’s traplines were grouped into 3 group traplines and ultimately grouped into a single band trapline. As result, fur harvest records cannot be attributed to particular regions of the band’s territory (Weinstein, 1992:14).

Pike noted the importance of Kaska family-based tenure system and its strong enforcement, even with newcomers with greater weight than gold:

The Casca Indians have the greatest objection to white men trapping on their own account in their country; gold dust they can take as much as they like, but the fur is the Indian’s equivalent for gold, and must be left for the Indian. They are very firm on this point – so much so that a couple of white men who were trapping on the Liard some years ago were killed by the Indians because they refused to let the fur alone. They were repeatedly warned, and their traps knowledge down or sprung every time they set them, but they persisted in bringing their fate upon themselves (Pike, 1896:112).

3.4.4 Fishing

Ethnographic sources confirm that fish were important for Kaska citizens, including those from Ross River. Families gathered in larger groups for summer and winter camps to harvest fish. Fish were speared, netted, trapped, and angled (Honigmann, 1954). Gill nets were set from canoes in the summer and under ice in the winter. Beaver bone was used traditionally to make fish hooks. In terms of food preference, fish were regarded as inferior to red meat (Honigmann, 1954). Fish species mentioned to have been harvested by Kaska people in the ethnographic record include grayling, trout, jackfish, whitefish, and sucker (Honigmann, 1954; Gotthardt, 1993). Most of the fishing areas noted in secondary sources are focused on Frances Lake, Frances River, and Hoole Canyon along the Pelly River with a few references to fishing in creeks and lakes proximate to the proposed Project. There may be additional Kaska fishing sites identified in the pending Kaska TK Report.

As noted by Arthur John, a Kaska Elder, there were a variety of fish species, seasons they were fished, and methods of preparing for consumption: “Grayling, suckers and jackfish were scooped with hands. ... Scoop in hands during the spawning period in spring, and in August for grayling, when young fish enter the streams at low water time to feed on mosquitoes. ... Dried suckers are a delicacy. Eat them as a snack like potato chips. ... (Arthur John)” (Weinstein, 1992:94).

Of particular relevance to the proposed Project is past and current Kaska fishing reported by Mary Charlie along Finlayson Creek, Money Creek, and Wolverine Lake for a variety of fish species in the spring and summer months:

Ya lots of fish. Indian way they call it *Luge Destie Tue* [“Fish Creek”] *Tu destsie la* [“the water is ...”]. ... Grayling. The other one, you know *El'es Tue*? I tell you? Trout, whitefish, and on top of that Wolverine Lake, any kind of fish mixed. People dry it you know long time ago. And the spring time, all summer (Mary Charlie in Rutherford, 1995: Appendix C, p 33).

Tom Smith shared about the abundance of fish in North and Fire Lakes:

I went up there with a hunting party. North Lake. Lots of trout. Hunt anything. That's Fire Lake, eh? (Tom Smith in Rutherford, 1995: Appendix C, p 53).

Amos Dick noted an abundance of suckers in North Lakes:

Flowing down from Wind Lakes. It's just full of sucker fish this time of year (Amos Dick in Rutherford, 1995: Appendix C, p 41).

Much of the ethnographic sources noted the varying degrees of success Kaska compared to non-Aboriginal people who were working at the HBC post. There are numerous records both from Fenley Hunter and staff at the Frances Lake post that indicated there were few fish in Frances Lake (or their fishing skills and knowledge of the area did not match their Kaska counterparts):

The fish in Frances Lake do not bite; not at this time of year, anyway. The Indians are using a ragged net without success (Hunter, 1924:63).

Robert Campbell noted the same in several journal entries, which was part of the reason for eventually abandoning the post at Frances Lake:

Our fisheries proving insufficient to meet our daily wants much less to allow us to lay aside fish for the winter, & strangers as we were to the resources of the country, I deemed in inadvisable to keep all the men we had...Then came better times, the Indians finding us out and spreading the news that we were stationed at Frances Lake, & gladly coming in to trade furs & provisions with us (Campbell,1958:64).

Gotthardt explained the Kaska location of fishing on the west arm of Frances Lake:

A jackfish spawning site is located here in the south shore of the lake, opposite narrow point. ... Lead and Robert Jules said people used to stay here all the time for fishing. ... Money Point was a very important fishing site for Frances Lake people in the past. The outlet of *Al'as Tue* (Money Creek) was a net fishing site and probably also where people used to set fish traps (Gotthardt, 1993:6).

There is a preference among Kaska members for particular species of fish: “Predatory fish species, such as lake trout and grayling, are favoured by both Indian harvesters and non-native sports fishers” (Weinstein, 1992: 112).

There are other areas well outside of the Project site where Kaska focus their fishing efforts: “The Band’s salmon fishing camps have historically been concentrated on the Pelly River between Fish Hook and Hoole Canyon, with a few camps located on the Lapie and Ross Rivers, near their junctions with the Pelly” (Weinstein, 1992:79).

3.4.5 Plant Gathering

Plant and berry harvesting was primarily done by women in summer and fall. Very important was the gathering of blueberries, raspberries, strawberries, currants, salmonberries, cranberries, and soapberries (Honigmann, 1954). Root vegetables were also collected, such as lily bulbs, wild onions, and fern roots. Other plants and plant products collected were wild rhubarb, rose petals, spruce and birch fibres, willow and spruce gum, and the sap of birch trees (Honigmann, 1954 and 1981). A main beverage prepared consisted of birch sap and rose petals steeped in water (Honigmann, 1954). Based on a review of secondary sources, there are no specific references of plant gathering that overlap with or are proximate to the Project site. There may be additional plant gathering sites identified in the pending Kaska TK Report.

3.5 Habitation

Kaska settlements and camps have varied over time. Traditionally, settlements were determined by subsistence activities and followed an annual sequence of aggregation and dispersal (Ives and Sinopoli, 1980; Honigmann, 1981). Before contact, Kaska people lived from fishing, hunting, trapping and gathering. This meant in summer and winter Kaska people primarily gathered in low-land areas around water bodies such as lakes for fishing, hunting and gathering, and in fall and spring headed to higher elevation areas for hunting, trapping and gathering (Ives and Sinopoli, 1980; Honigmann, 1981). With the introduction of the fur trade settlement patterns,

Research Results and Outcomes

Kaska adapted to new lifestyles, including an emphasis on trapping activities and traveling to and living around fur-trading posts (Honigmann, 1981).

Traditionally, shelters varied with seasonal needs. In the winter, semi-permanent winter dwellings or temporary shelters were constructed (Honigmann, 1981). The most commonly used semi-permanent dwelling was the conical lodge created by placing poles in a conical shape close to each other and covering the structure with sod or moss. Another semi-permanent dwelling was an A-shaped house, a composite structure made by erecting two lean-tos facing each other (Honigmann, 1981). Temporary shelters included simpler lean-tos and sometimes snow houses. When the fur trade was introduced, settlement location and structures changed. In the winter, people chose to live in log cabins with access to their trap lines. In the summer, they lived close to the trading posts in a frame house, log cabin, tent-frame, or wall tent (Honigmann, 1981). According to secondary sources, there are many semi-permanent and permanent habitation sites scattered throughout the area in and around the Project site, including North Lakes, Money Peak, Wolverine Lake, Frances Lake, Pelly Banks, and Money Creek. There may be additional camps and cabin locations identified in the pending Kaska TK Report.

In particular, according to Rutherford (1995), there is one Kaska cabin approximately 2 km south of the proposed Project at North Lakes with another two cabins approximately 3 km west and east of the Project. There are an additional 16 cabins at distances greater than 5 km from the Project in western, northern, and eastern directions. There is a greater concentration of cabins east of Finlayson Creek than west (e.g., 12 compared to 7 cabins).

Mary Charlie noted the location of several seasonal camps in the area of the Project site and she underscores the importance of sharing resources between groups of Kaska people:

The the Wind Lake [Kaska name for North Lake] too we go there, all the way. We camp little ways like that. And then we come to that mountain [Money Peak]. I tell you that high mountain. ... And there were lots of caribou. ...And sometime people when they got nothing to eat they got to look around for their friend. And they see a fire on top of the mountain, they go there. ... You gotta give some to people you know (Mary Charlie in Rutherford, 1995: Appendix C, p 36).

Amos Dick confirmed Mary's knowledge in his interview:

People used to live around there [mountain near Wind and Wolverine Lakes] all the time. Daddy [George Dick] had a cabin around there. Where they call it *Tl'oge Cho* ['Big Meadow'] (Amos Dick in Rutherford, 1995: Appendix C, p 38).

Amos Dick also noted past and recent seasonal Kaska residence in and around the Project site:

We lived up there. People are still living up there, like Franklin [Charlie]. There were people living around up there all over. You could find dried poles still sticking up [from camps] (Amos Dick in Rutherford, 1995: Appendix C, p 41).

Research Results and Outcomes

Another Kaska Elder confirmed the information about important Kaska summer camps south of the proposed Project:

[E]verything on that mountain they call *Tse Nehtsat*. There is a little lake up there. On top. Right on top, that's where the camp is. ... there are two little lakes near there. ... No they don't go up there in the winter time. Only in the summer time (Tilly Smith in Rutherford, 1995: Appendix C, p 50).

Pike described his encounters with Kaska west of Frances Lake in the area of the Project site:

Here [along the *Yus-ez-uh* west of Frances Lake] we found two families, who had left the main band of the Pellys in the autumn and had passed the winter between Frances and Pelly Lakes. ... [They were] evidently unspoiled by association with the whites. They were clothed almost entirely in skin garments of their own manufacture ... None of them were able to speak Chinook, but Secatz could understand them well enough, though he told me there was marked difference between their language and his own. ... It turned out she had never seen a white man before, as these Indians seldom go into any of the trading posts... (Pike, 1896:138).

Many early and late explorers of Kaska territory note the settlements connected by a network of trails. In particular, Fenley Hunter reported a settlement of Kaska on the south end of Frances Lake with their preference for trading at Pelly Bank compared to the Liard Post. He noted:

On a fair wind, with cloudy skies, entered Frances Lake at 3:45 this afternoon. Passed Indian grave on sand-spirt at west side of entrance, and dead ahead on site of old Fort Frances found collection of Indian cabins with the usual caches. Cabins unoccupied. Indians probably gone to Pelly Banks to trade, which they now prefer to Liard Post (Hunter, 1924).

He goes on to describe his encounter with the settlement of Kaska people on the west arm of Frances Lake:

As we neared this encampment of some 50 Indians, mostly old men, women, and children, we saw the kids playing on the beach. They scurried into the brush at the sight of our strange boat. Find the much-talked-of Old Chief. Most of the men are at Pelly Banks, which they tell us is about "2 days' travel" (Hunter, 1924:61).

About 15 km southeast of proposed Project site, Hunter discovered a Kaska camp (about 45 km west of Frances Lake at the headwaters of Money Creek – also known as *Il-es-too-a* Creek):

Old Indian meat-drying camp here, with lots of poles still standing for that purpose. That salt lake is over in the flat, $\frac{3}{4}$ miles away, in plain sight. About 100 yards behind this camp is an aerial graveyard – an Indian child's coffin stuck up on a tree stump about 20 feet above ground. We received quite a jolt when we first came upon this lonesome little coffin in the wilderness (Hunter, 1924:70).

This camp is confirmed in Mary Charlie's interview for the Kudz Ze Kayah Archaeological Reconnaissance:

From that lake [Wolverine Lake], close to mountain right there we walk around. Long time ago daddy said right here we stay right here ... People they stay together right there they make dry meat fall time ... Just about over grow[n], but you could still show off that meat pole, everything. ... Besdie it *El'es Tue* 'Lick Cree' [Money Creek] flows (Mary Charlie in Rutherford, 1995: Appendix C, p 32).

Pike described encountering a camp of Kaska people during his travels west of Frances Lake:

On reaching the mouth of the *Yus-ez-uh*, which enters the north end of the west arm [of Frances Lake], we were obliged to camp, as the sun was high and the snow melting quickly. Towards evening I sent the two Indians ahead to investigate the cause of the smoke, and to try to trade some meat from the encampment they were sure to find. They returned during the night, having met a band of Pelly Indians, who were trapping beaver along the *Yus-ez-uh*, but they were short of meat themselves and very little inclined to part with any (Pike, 1896:137).

Weinstein describes the selection criteria of the location for Kaska cabins, including access to water and wood to support various harvesting activities:

[C]abins were constructed at sites that provided all of the requirements for longer term residency, such as shelter, a good supply of wood and access to good harvesting sites and areas. ... Each family group had a complex of cabins and tent sites that they occupied seasonally as they followed the harvesting round. ... Cabins were built to provide shelter during winter trapping season. ... The trapping cabins would be occupied until March (Weinstein, 1992:74-75).

Today some members of the Kaska First Nation live on reserves in permanent settlements throughout their territory, including Ross River and Watson Lake. Weinstein (1992) reports the transition and timing of Kaska from semi-nomadic lifestyle harvesting wildlife and fish resources to settling permanently in Ross River and how this impacted Kaska harvesting patterns:

By the early 1960s most people had settled into houses in Ross River. A few people continued to live in the bush on a year round basis. ... The village became the residential base from which people traveled to harvesting lands for varying periods of time. ... Land use patterns shifted dramatically. Lands that could be efficiently accessed became more regularly used. Roads and good trails became important considerations for which areas remained actively in use (Weinstein, 1992: 91).

Weinstein also documents the rapid increase in population of Ross River in the 1960s:

The mid-1960s saw Ross River's rapid transformation from Indian village, with service facilities limited to fur trade post standards, to a regional centre in the southeast Yukon. The village population increased by about one-third during the summers of 1964 and

Research Results and Outcomes

1965, adding about 100 white males to the 200 Indian community residents. Employment opportunities also increased for Indians, drawing back a number of families which had left in the 1950s (Weinstein, 1992:38).

There was still movement of Kaska people between permanent villages, including Ross River and Watson Lake, as noted by Weinstein:

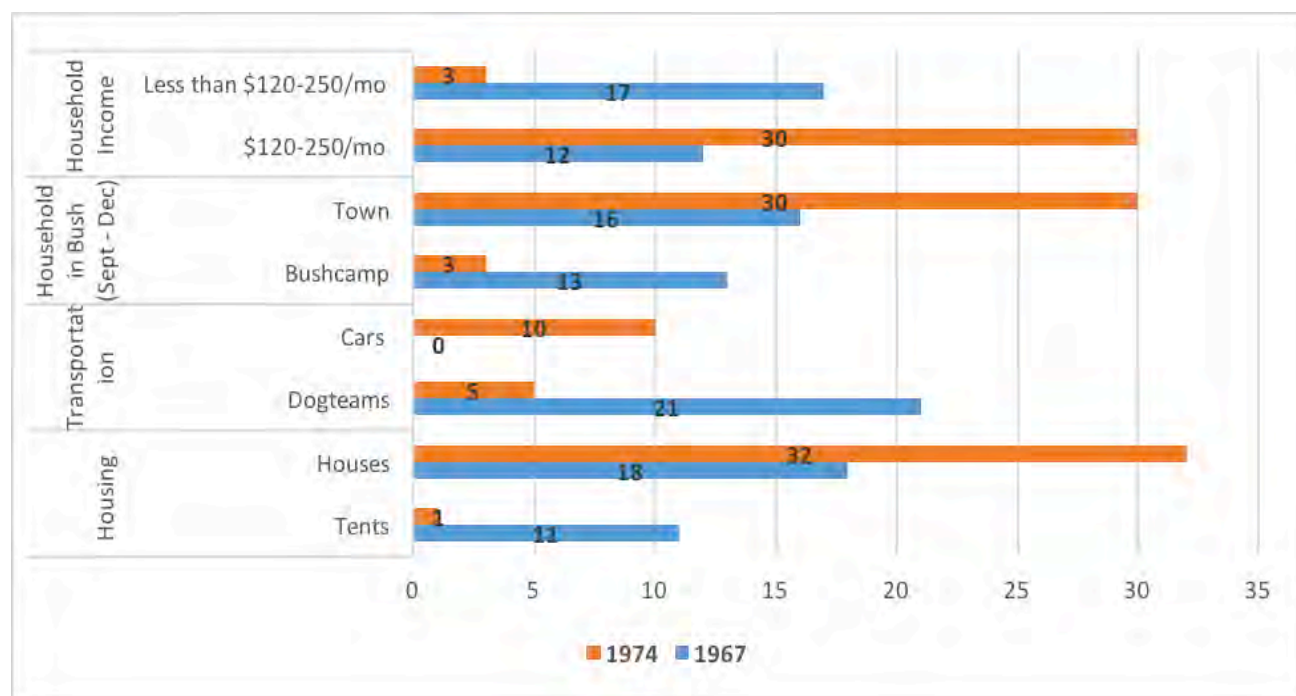
People who moved to Watson Lake and elsewhere frequently found jobs associated with the mining industry. ... Arthur John moved to Watson Lake along with 5 other Ross River area families. ... In addition, their bush knowledge was highly valued by professional prospectors (Weinstein, 1992:84).

Amos Dick spoke about his move to Watson Lake in his interview about the proposed Project:

Well we moved. ... After that we lived in Watson Lake. Fifteen years I stayed down there, Watson Lake. After that we would go trapping around Wolverine Lake and Frances Lake with dog teams (Amos Dick in Rutherford, 1995: Appendix C, p 41).

The dramatic shifts in settlement, transportation, and income patterns among Ross River members are captured in Figure 3.9.

Figure 3.9: Changes in Ross River Income, Housing, and Transportation



Adapted from: Weinstein, 1992:102

3.6 Travel and Trails

Ethnographic sources mention the importance of Kaska people traveling from low-land areas to the alpine for hunting and trapping as part of their annual travel to secure food (Honigmann, 1954; Ives and Sinopoli, 1980). Travel to the alpine for hunting and trapping is particularly important for the Kaska people during fall and spring. In winter and summer, Kaska people traditionally lived around fish bearing water bodies. It is also mentioned that traditional travel routes followed along water bodies (Honigmann, 1954). The use of rivers and lakes as primary access to Kaska Traditional Territory declined with the construction of the Alaska Highway in 1942, which generated the development of alternate or new travel routes (Honigmann, 1954).

Traditionally, food gathering depended heavily on upon being mobile and travel modes depended on the season (Honigmann, 1981). During the cold season when the water ways were frozen and snow covered the land, snowshoes, toboggans, and dog-sled teams were used to travel. When waterways were ice free, travelers were recorded using moose-skin boats, bark and dugout canoes, and rafts. Also, dogs were used to carry canvas packs (Honigmann, 1981).

Of particular relevance to the proposed Project, there are two key Kaska entry points into the area in and around the Project, namely a westerly set of trails from Frances Lake and another set of trails from the north via the Big Campbell Creek from Pelly Bank. The two trails from the west arm of Frances Lake to Finlayson and the headwaters of Money Creek (10 km from the Project site). Many ethnographic sources note the existence of these two trails from the west, which are depicted in Figures 3.10, 3.11, and 3.12 (Gotthardt, 1993; Pike, 1896; YZC, 2007). The map provided by Pike (1896) in Figure 3.12 shows several secondary trails into the Project site stemming from the main trail between Frances and Finlayson lakes. According to Rutherford (1995), many of the 10 trails within the Project area lead to the important hunting site in the Money Peak-North Lakes area. There may be additional trails identified in the pending Kaska TK Report.

Hunter described his westerly travels from Frances Lake along Kaska trails:

We travelled the first 5 miles from the lake [Frances] over the Old Indian trail to Pelly Banks, and I think this trail is a couple of miles south of the trail Dawson used, and the one I believe he looked for and could not find. It begins at the old cabin on the beach, which stands $\frac{1}{2}$ mile south of the mouth of Finlayson River. Upon leaving the trail, we turned southerly (Hunter, 1924:65).

Gotthardt describes the Kaska trail starting at the confluence of the Frances River with the Liard River taking a northwesterly trajectory into the mountains:

From Norman Stewart's camp [at the headwaters of Frances River], an old trail goes west into Campbell Range. John Dick said people used to get their stone for making stone tools in these mountains... (Gotthard, 1993:5).

Gotthardt also confirms the trail from the north end of Frances Lake to Finlayson Lake along the Finlayson River:

Research Results and Outcomes

The Finlayson River was the beginning of the old winter trail across the divide to the Pelly River. The trail from Frances Lake along the river leads to Finlayson Lake, which was one of the main areas Frances Lake people used for caribou hunting. In the old days, caribou were hunted by constructing fence surrounds on the lake. ... The Finlayson River trail across the divide to the Pelly River was the trail used by the Hudson's Bay Company between 1841 and 1851 to supply their posts at Pelly Banks and Fort Selkirk (Gotthardt, 1993:8).

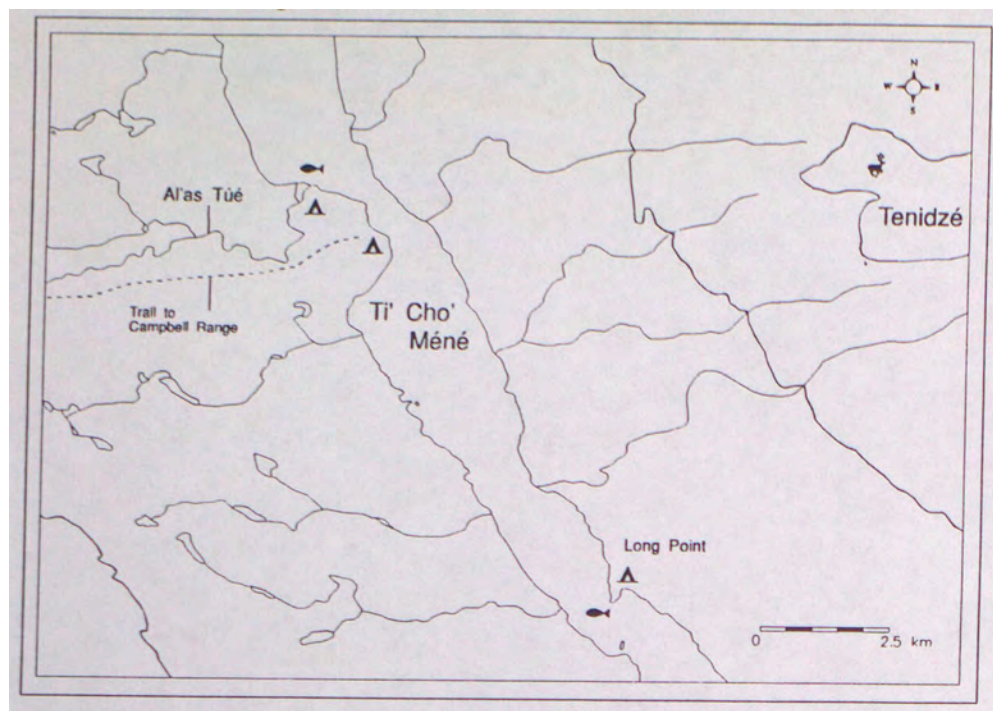
This trail is also acknowledged in the Wolverine Project Heritage Protection Plan:

At these and other times, family and community members used Wolverine as a staging area for traveling to harvest throughout the territory. Kaska Dena set camps at and near *Nougha Mene* [Wolverine Lake], and then followed traditional trails to Finlayson, Frances (Tu Cho) and other lakes. Often Elders remained at camps near *Nougha Mene*, even in winter (YZC, 2007:1).

This is further confirmed in a collaborative study between CPAWS and Liard First Nation that identified trails between Frances Lake and Pelly River:

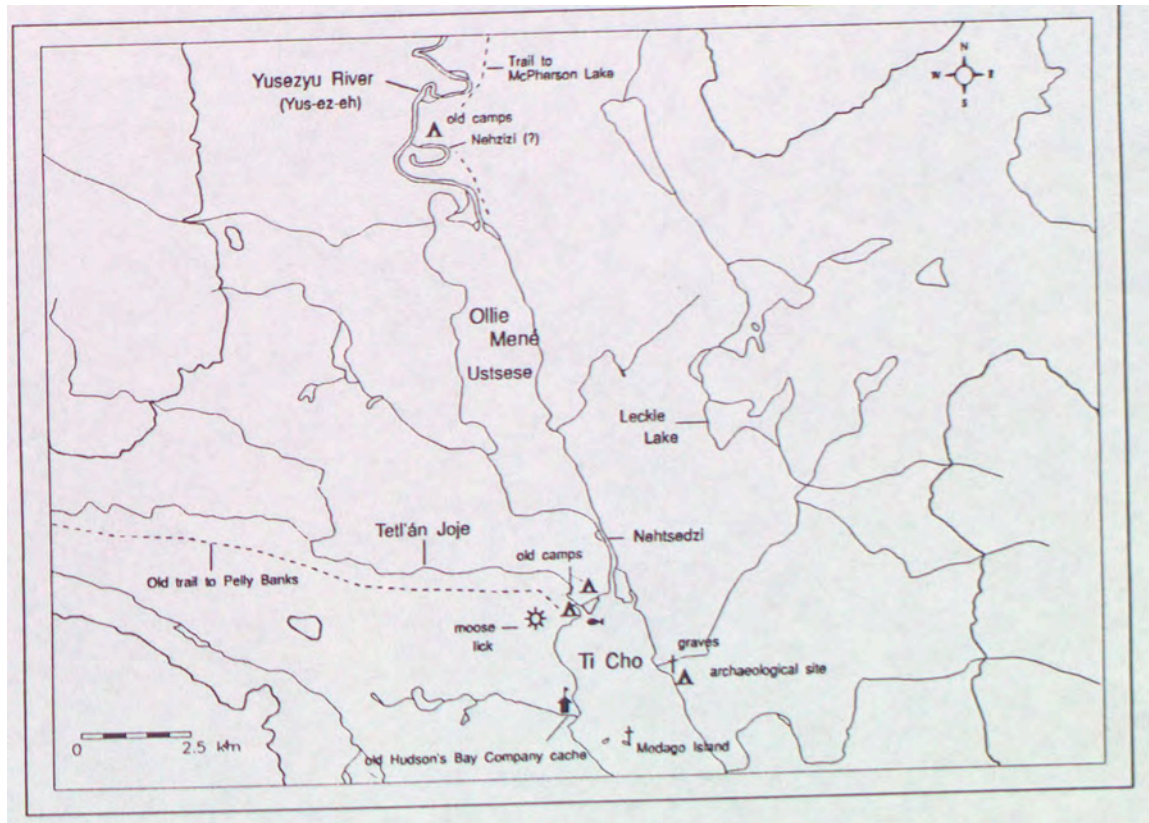
Historic trails which run from Frances Lake to Liard River and to the Pelly River; ... hunting and fishing opportunities important part of way of life for residents on the lake; important trapping values for local residents... (CPAWS, 1990:iii).

Figure 3.10: Kaska Trail West of Frances Lake along Money Creek



Source: Gotthardt, 1993:7

Figure 3.11: Kaska Trail West of Frances Lake along Finlayson River



Source: Gotthardt, 1993:8

Figure 3.12: Pikes's Notes of Kaska Trails from Frances Lake to Pelly Banks



Source: Pike, 1896

There are also another set of trails emanating from the north of the proposed Project that provide Kaska access to the area via the Big Campbell Creek and Finlayson Creek, connecting with the other high use area of Pelly Banks and Lakes. This information is substantiated by Mary Charlie:

They got a trail up the mountain, everything. From Pelly Bank way back in the bush. They go up the mountain, they make dry meat. Still trail go around. There's still our older people still living. I like to follow that trail you know. Up Campbell River way, *Tanidzi* ['In the Middle'] up that way too. People come fall time around August they go in the bush, for dry meat (Mary Charlie in Rutherford, 1995: Appendix C, p 34).

Sid Atkinson noted accessing the area in the Project site via Finlayson Creek:

Finlayson Creek, that little one. We went up here not too long ago. Harry and the whole works, right up to here. The creek flows down this way from the mountain, we went up there [approximately 1980]. ... We walk around up there with dogs and packs (Sid Atkinson in Rutherford, 1995: Appendix C, p 34).

One of the Kaska Elders, Tom Smith, explained the changes to the methods and frequency in accessing the area in and around the proposed Project site:

It got too easy [lifestyle]. Now I've got truck. We used to travel around with dogs, lots of times. All the way to Wind Lake. Walk all the way from Frances Lake. Now too much easy living, can't even walk around (Tom Smith in Rutherford, 1995: Appendix C, p 40).

The secondary sources indicate several key methods of travel with a focus on travel by foot and boat, including the Kaska trademark boat made of moose hides. This is confirmed by information produced by RRDC: "People travelled many, many miles in their search for food. They travelled by snowshoes, on foot, and in marvelously light moose skin boats that Mary Charlie has fond memories of" (RRDC, 1992:6).

Anton Money documented Kaska boats with its superb craftsmanship, including benefits of speed and soundlessness:

Plainly these Indians were not canoe people. [T]hey had long ago mastered the technique of making remarkable and very serviceable skin boats of moose hide. The one this band used in crossing Frances Lake at the delta of the Finlayson was typical. About twelve feet long, it consisted of a light frame made from alder poles with three moose skins stretched over it. The skins were sewed together wheel green, stretched in place as tight as a drumhead, laced with rawhide, and allowed to dry. They shrank as they dried, and the finished boat was as waterproof as any canoe. So light that one man could lift it over his head or raise it up to a cache without effort, the boat could carry a ton of meat and several people and still draw no more than a few inches of water. ... [F]ast and quiet, with no sound when waves slapped against the dried skins. On many occasions, using a wooden boat, I have known its noise to alert moose (RRDC, 1992:7).

Weinstein confirmed the use of moosehide boats by the Kaska as well as their easterly neighbours:

People from the up-river country – from Pelly Banks or Lower Post people would build moose skin boats or rafts and float down the river. People from the NWT would walk through the Mackenzie Mountains and then build moosehide boats (Weinstein, 1992: 62).

Hunter shared his observations of Kaska making their type boats from moose hide:

[F]rom the head of the lake, where we found the rest of his tribe camped on the west shore. Found the Indians building a new moose-skin boat, about 25 feet long, a good one (Hunter, 1924:83).

Travel is not just measured in kilometres of trail, but also the expediency with which news travels along Aboriginal trails as supported by communications between groups, which Fenley Hunter noted in his journal:

They told us that a Hudson's Bay steamer on the Mackenzie River sunk about a month ago, and lost all her freight but no passengers. It is wonderful how news travels in this country. That happened 1000 miles away, and we know it here. The old mystery of native communication (Hunter, 1924:43).

Hunter noted the difficult travel conditions in the area in and around the proposed Project, which may explain the infrequent access by non-Aboriginal people:

It was a pretty hard pull today... Must have covered 20 miles, and the muskeg on the last 3 miles was surely tough. Saw some wonderful ridges and canyons. One one height the aneroid showed 8000 feet (Hunter, 1924:71).

Hunter tracked the travels of his party from the proposed Project area to Pelly Banks in a one-day trip on foot:

Hope our Indians are near Pelly Banks store today, and that they secure lots of grub. We surely need it. Believe we saw their smoke about 7 o'clock last night, over near Finlayson Lake (Hunter, 1924:72).

Hunter also described Kaska trail marking methods:

A few broken sticks, laid in a certain pattern in the trail [to Pelly Banks], told Caesar that his tribe had decamped from the head of West Arm and had moved down the Lake. I noticed the newly placed sticks, but it required the Indian to decipher the message (Hunter, 1924:82).

Weinstein describes the types of travel methods employed by the Kaska people, including shifts to motorized methods in the 1960s:

Travel throughout the territory in the past was mostly by walking. Very few Ross River people had permanent boats. Rafts and moose-hide boats were constructed for downstream travel as required. ... Many of the old trails are still in use. However, motor vehicles – truck or in some cases boats – provide the means for travel between the village and the entrance to a trail (Weinstein, 1992: 79).

3.7 Water

Water bodies are indicated to be especially significant to the Kaska people. In general, fish bearing lakes were the main gathering sites for large groups of Kaska people particularly in winter and summer. Areas in and around lakes are treated as sacred areas with cultural importance due to the potential for burial grounds along lakeshores (KDC, 2010:16). Specific water systems that were identified in ethnographic sources are Frances Lake, Wolverine Lake, Finlayson River and Lake. There may be additional waterbodies identified in the pending Kaska TK Report.

Wetlands are also noted as areas of cultural importance and special consideration because they provide suitable habitat for a variety of species, are preferred hunting and trapping areas and

serve an important role in maintaining water quality and quantity (KDC, 2010:16). Of particular focus and interest for Kaska citizens are areas where headwaters occur:

Headwater and source watersheds are important to maintain water quality and support the flow, storage, and hydrology of the adjacent watersheds. In addition, these watersheds tend to have a higher density of Kaska sites, hunting areas, traditional uses, and Kaska values (KDC, 2010:17).

More specifically, the headwater of the Liard River is approximately 45 km southwest of the proposed Project, which one of the main rivers flowing through Kaska Territory to and past the Kaska community of Lower Post (200 km southeast of the Project). Kaska people have a keen interest in protecting water to maintain its abundance quality given its connection to maintaining life for the land, fish, and wildlife Kaska Traditional Territory.

3.8 Customs and Ethics

The Kaska people have a long history with strong customs and practices of how to manage and use their lands and resources. This is based on multiple generations of close observations and interactions with various complex ecologies in their Traditional Territories. Many of the customs centre on respectful and generous treatment and consideration of species and conditions as a way to ensure right relations as well as ecological sustainability. Many ethnographic sources note Kaska practices. In particular, Weinstein documents the Kaska worldview towards animals with regard to their proper killing and use:

Primary to the rules of proper Kaska behaviour is respect for animals according to Kaska principles. Among the codes is the ethics of minimizing intrusion – blending in, as much as possible, into the environment – not wasting any useable part of the kill (Weinstein, 1992: 116).

Kaska are taught from an early age about the timing of killing species in order to ensure sustainable populations, especially avoiding female species with young. One of the Kaska Elders, Charlie Dick, explains for ducks and grouse:

I think the first kids could learn ... which one to kill, which one not to kill. Well, ducks everything come back up, up this way, even chicken [grouse] what time they have eggs... So they gotta learn that, not to kill it in June because they got eggs. ... [M]an chicken, kinda dark. Kinda dark colour, they know they could kill that in the springtime (Charlie Dick in RRDC, 1992:62).

Charlie Dick goes on to indicate the same principle and consideration for caribou:

[B]ull caribou you kill, it's alright, but cow they got young ones. So that's the way you gotta teach kids. ... [Otherwise] you starve because of what you did. That's what happened. Lots, lots happen to Indian people like that. So we don't kill for nothing" (Charlie Dick in RRDC, 1992:62).

Research Results and Outcomes

Another Kaska Elder, Grady Sterriah, explains the importance of right relations with people and animals:

You got to have respect for older people, visitors, all these things. Not to tease animals, have respect for them, otherwise you wouldn't catch them the next time when you really need it (Grady Sterriah in RRDC, 1992:63).

Charlie Dick speaks to the deeply engrained Kaska ethos of not wasting any meat:

I quit [working for a guide outfitter] because I don't like, that's my food. Big bull moose they kill, just for the horns. Just left the meat like that, guts everything. I don't like to see it, so tell 'em I quit, not coming back. Just for the horn. Because that's my food they kill, they just leave it. Oh, how much big bull moose. Just left it like that. Just shame, they do it. Oh, how much dry meat you get out of it. I feel bad about it because, me, I don't leave moose like that. 'Cause my grandpa he say "Don't kill for nothing" (Charlie Dick in RRDC, 1992:74).

4. Potential Effects

Kaska members have extensive experiences with, employment at, and observation of resource development over decades in their Traditional Territory, including exploration, mining, forestry, and hydroelectric projects. Their lives and livelihoods have been inextricably linked and shaped by these developments, including effects to Kaska culture, social relations, settlement, and land and resource uses. The gold rushes in the 1800s and the subsequent decline in the fur trade in the mid-1900s brought more of a dependence on the wage economy and the services and supplies offered in communities, such as Ross River and Faro. The most recent and large-scale effects on Kaska land uses arose from the Faro Mine (1969 to 1998). Weinstein (1992) conducted a retrospective effects assessment which details the Kaska response to and changes of their land and resource uses based on the development and operation of Faro Mine. Closer to the proposed Project is Ketza Mine, which operated from 1988 to 1990. The experiences and reflections from these and other resource development projects provide important considerations for the KZK Project for proper planning to avoid or eliminate the issues that arose in the past. Table 4.1 provides a summary of the main effects on land use arising from past development experiences with supporting quotes from ethnographic sources. There may be additional effects identified in the pending Kaska TK Report and through consultation with BMC.

While specific effects of the Faro Mine are discussed in more detail in Table 4.1, the overall effects shifted Ross River land use further east from the Anvil range to Ross River and beyond, including the area in and around the proposed Project:

The land use shown by both groups has largely shifted to the east. There was no harvesting the areas directly affected by the mine, the tailings pond, and tailings pond outflow. The focus of fishing also shifted further east ...” (Weinstein, 1992: 128).

Also important in the determining of effects of the proposed Project on Kaska land use is the concept and approach among Kaska people that their Traditional Territory is viewed as a whole with distinct yet interdependent parts. This is explained further in the KDC court submission to support their Comprehensive Land Claim:

It is difficult to view the lands used by the Kaska Dena as being in some way divisible. Rather, the image that comes across most clearly is that the Yukon area harvested by the Kaska Dena form as a whole an integral and integrated part of the resource base upon which their sociocultural integrity relies (KDC, 1982:58 in Exhibit 3).

Table 4.1 Summary of Effects of Past Resource Development on Kaska Land Uses

Category	Description of Effect	Supporting Quote (Source)
<p style="text-align: center;">Water Quality</p>	<p>Reduced water quality due to release of contact water to surrounding streams and lakes and related effects on wildlife, fish, and drinking water</p>	<p>“This study demonstrates that RRDC members are very concerned about water quality both Cache Creek and the Ketzra River [90 km west of the proposed Project site]. Many people are not willing to drink the water. None of the interviewees has fished in the system since the mine has been in operation, although many did so in the past. Several interviewees expressed concern that the health of the game animals may be threatened by contaminated water or food, and some people worried that the game meat may be hazardous to human health. ... It relates to differences in safety standards; many people consider that any addition of contaminants to water or food is unsafe, regardless of scientific studies designed to establish tolerable levels” (Morrell, 1992:20).</p>
<p style="text-align: center;">Wildlife</p>	<p>Increased access introduces overhunting</p>	<p>“Local people report that hunting pressure can be greatly affected by the booms and busts of local economies. For example, they noted at times when the Faro mine was up and running, large numbers of hunters from this town came to hunt moose at Frances Lake, causing a noticeable reduction in the moose population” (CPAWS, 1990: 34).</p> <p>“Upgrading the Ketzra River road to service the mine has made the area more accessible to people from outside the area. Traffic and hunting pressure have increased, and interviewees consider that populations of game animals have declined as a result” (Morrell, 1992:22).</p>
	<p>Disturbance of wildlife habitat</p>	<p>“Mineral exploration and mining activity have destroyed habitat of upland furbearers like marten and lynx” (Morrell, 1992:22).</p>
	<p>Changes to wildlife behaviour with challenges to Kaska hunting practices</p>	<p>“Disturbance does a number of things to Indian harvesting methods. The location and behaviour of fish and game become modified; the animals move away to less disturbed areas, or if they remain, they learn new ways to avoid the increased risks. They may become more skittish or avoid former habitats, change travel routes, etc. Hunters who persist in disturbed areas are</p>

Potential Effects

		required, in turn, to learn the new animal behaviour patterns. ... A common response to disturbance is avoidance [of harvesting]" (Weinstein, 1992: 115).
	Changes to wildlife abundance	"People noticed a decline in the population of some small mammals after the mine had been in operation for a number of years. There was a relative abundance of marten and fox for the first few years after the mine was constructed. Then they began to decline. People also noted local reductions in the population of lynx, wolves and wolverine" (Weinstein, 1992: 111).
Aquatic Resources	Changes to aquatic abundance	"[People] watched the fish become depleted [near the mine] to the point where it was no longer an efficient provider of food" (Weinstein, 1992: 112).
	Changes in the quality of fish resources	"Generally when people hear about mining activities being initiated they avoid fishing in downstream waters. There is a fear of health problems resulting from consumption of fish contaminated with toxic substances used in the mining operation" (Weinstein, 1992:81).
Land Uses	Alignment of early exploration activities with Kaska subsistence patterns	"The early exploration [of the Faro Mine in the 1950s and 60s] did not stop people from hunting and trapping. The work was treated as part of the seasonal round. Family camps were established near the areas the men were working. ... After the [exploration] work was completed, the group would continue trapping. ... The cut lines and tote roads also represented benefits for the harvest economy, since they provided improved access at a time when Ross River Indians were exclusive harvesters of the area. Many of the new roads and access routes followed well used Indian trails" (Weinstein, 1992:89).
	Shift between mining exploration and operations	"During the early stages of the development Indians were seen by outsiders as significant figures. They had desirable skills, a high degree of self-sufficiency in the bush, and they were the main human population in the area. As development progressed and the work force increased and the work became progressively technical, Indians became more marginal. The area took on attributes of white settlement" (Weinstein, 1992:95).

Potential Effects

	<p>Restricted access to Kaska harvest sites and areas during mining operations</p>	<p>“The impacts to land use commenced as access began to be restricted, ostensibly for safety reasons, during the exploration which followed initial staking. ... Elders were told by company officials that they could no longer trap in the area; that it had become private property. When younger family members who were working on site tried to pursue the conflict, the restrictions were explained as industry regulations for public safety” (Weinstein, 1992:93).</p> <p>“People travelling to their camps and trails were stopped and told the area was closed due to the mining operation and safety considerations. In some cases they were warned of danger due to blasting, in still other areas they were told that the water was no longer safe” (Weinstein, 1992:110).</p>
	<p>Avoidance of land use in areas of development during mining operations</p>	<p>“The area [overlapping with the Faro Mine] was nearly abandoned by the most intensive category of harvesters. Among the regular harvesters the number indicate a group of 2-6 harvesters who use the affected area as a primary harvest area for hunting, trapping and gathering. The areas have been largely abandoned for significant fish harvesting” (Weinstein, 1992:146).</p>
	<p>Loss of lands in areas of development during and after mining operations</p>	<p>“The camp and harvesting areas in the valley were no longer available [after development of the Faro mine]. Families used to camping in this area returned to a scene of devastation on habitually used lands. The loss was (and still is remains) heartfelt” (Weinstein, 1992:118).</p>
	<p>Shift from harvesting to monitoring</p>	<p>“When the idea of abandonment is explored in greater depth, however, the result is something closer to environmental monitoring than abandonment. While this group no longer uses the affected lands for their regular harvesting areas, they make irregular trips to check the state of the environment and the animal population” Weinstein, 1992:119).</p>
	<p>Shift of land uses to other areas of Kaska territory during mining operations</p>	<p>“The ties to the Mye Mountain/Blind Creek areas are still powerfully felt by the people with historic family ties to that country. The families who have switched their primary hunting focus to the North Canol Road have walked into another set of problems. The North</p>

Potential Effects

	Canol Road is one of the most intensively hunted areas of the Territory. Hunters from many parts of the Yukon travel to the North Canol Road for the fall moose and caribou sports hunt” (Weinstein, 1992:148).
Decline in revenues from fur sales	“Mineral exploration and mining activity have destroyed habitat of upland furbearers like marten and lynx. This has had a direct impact on the cash income opportunities for people who trap in this area” (Morrell, 1992:22).
Disturbance of Kaska cultural and spiritual life during mining operations	<p>“Much of the motivation for going into the bush is being home. Encounters with strangers in the bush, for Indians with these motivations, is comparable to coming across unannounced strangers using your kitchen and your bedroom” (Weinstein, 1992:171).</p> <p>“People describe the effects of the intrusion as a loss of privacy, particularly in the vicinity of traditional campsites. This loss is especially important to people who have grown up in the valley and have strong family ties to the area. Interviewees were especially concerned about inappropriate and disrespectful use of mineral licks and areas of special spiritual significance by people from outside of the community” (Morrell, 1992:23).</p>
Competition from other users of the same resource during mining operations	“There is resentment of well-equipped people who obviously have large disposable incomes competing with local Indians for whom local fish and wildlife are economic resources” (Weinstein, 1992:112).
Remaining close ties to land and sense of longing	“However, the area is not abandoned in the sense of “to go away from without intending to return.” People have deep ties to place. Monitoring of changes at various sites which have been left because of intrusion takes place simply because people return to try the fishing or berry picking or the hunting, simply because they miss the place” (Weinstein, 1992:81).

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