

**ABORIGINAL VALUES, SACRED LANDSCAPES, AND RESOURCE
DEVELOPMENT IN THE CARIBOO CHILCOTIN REGION OF BC**

by

Titilope I. Kunkel

B.Sc., University of Lagos, Nigeria, 1989
MBA, University of West London, England, 1994
MNRES, University of Northern British Columbia, 2008

DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
NATURAL RESOURCES AND ENVIRONMENTAL STUDIES

THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA

May 2014

© Titilope Kunkel, 2014

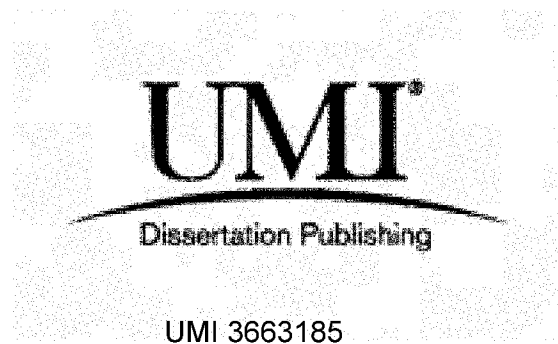
UMI Number: 3663185

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.

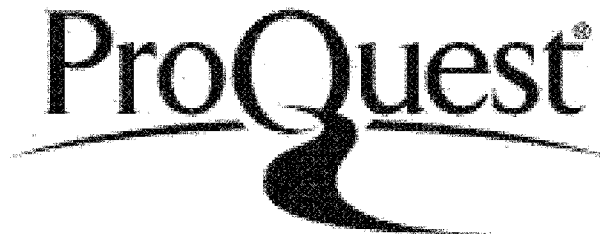


UMI 3663185

Published by ProQuest LLC 2015. Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Abstract

The Aboriginal values and epistemologies of Indigenous people in the Cariboo and Chilcotin region of British Columbia are nested within one of the province's resource development hinterlands. These geographic locations are the birthplace of various cultures, legends, and stories of Indigenous groups. Resource developments at these locations continue to highlight the collision of values arising from urban-remote interactions. Using a hybrid approach of grounded theory and Indigenous research methodology, this dissertation uses two case studies to capture (1) the struggles and resistance of the Indigenous Tsilhqot'in communities as they defend their land against an incumbent mining company; and (2) insights into Aboriginal community planning through documenting the Nazko First Nation's Comprehensive Community Planning process. Major themes addressed in this study are (1) Aboriginal values expressed during a Federal Panel Assessment of a proposed mine development in the Cariboo Chilcotin region; (2) the contemporary culture of the Tsilhqot'in people including how some women continue to survive on the land; and (3) geothermal energy as a potential primary resource. Outcomes of this research study highlight the critical Aboriginal values within the Cariboo Chilcotin region, and how these values are important considerations in resource development decisions. These outcomes provide new insights into how cultural values are embedded within traditional activities and landscapes. Furthermore, the findings show that despite contemporary challenges, community values continue to influence resource development considerations and choices made by the Aboriginal people. This research concludes with new theory propositions about Native Space and why the location and ecological footprint of resource development within the traditional territories of Aboriginal people are important in meeting the needs of their daily lives.

Table of Contents

Abstract	ii
List of Tables	vii
List of Figures.....	viii
Glossary of acronyms	x
Acknowledgements.....	xii
Chapter 1 Thesis introduction.....	1
1.1 Aboriginal rights and title in BC.....	2
1.2 Resource development and meeting the needs of daily life.....	3
1.3 Research goal and objectives	5
1.4 Thesis overview	9
Chapter 2 History and context	14
2.1 Stages of Aboriginal people and Settler relationships in Canada	14
2.1.1 Stage 1: Stories of resource usage pre European contact	15
2.1.2 Stage 2: Contact and cooperation	21
2.1.3 Stage 3: Displacement and assimilation	22
2.1.4 History of resource development in the Cariboo Chilcotin region – fur trade, gold rush, railway	23
2.2 Negotiation and renewal	26
2.3 Conclusion	28
Chapter 3 A review of contemporary issues facing Aboriginal communities.....	29
3.1 Historical context for the lack of infrastructure development	30
3.2 Aboriginal rights and title, and failed treaty settlements	35
3.3 Factors that make Aboriginal communities vulnerable	40
3.3.1 The legacy of the residential school system	42
3.3.2 Indigenous women and their relationship to the land.....	45
3.4 Failure to build capacity.....	47
3.5 Conclusion	57
Chapter 4 Methodology and methods.....	58

4.1	Hybrid Indigenous research: Situating my Afrocentric position	58
4.2	Critical race feminist, Black feminist and Indigenous research.....	62
4.3	Using mixed methods and community participation	64
4.4	Research ethics and community participation	69
4.5	Research focus: Action and participation	71
4.6	Collaboration, support and cooperation	73
4.7	Primary data collection: Immersion, chats, focus group meetings, and field trips ...	74
4.8	Primary data collection: Extant text.....	79
4.8.1	Extant text: Content analysis of 2010 CEAA Panel Hearings.....	80
4.8.2	Extant text: Court case document, <i>Tsilhqot'in v. British Columbia</i>	83
4.8.3	Extant data: Learning from the Tsilhqot'in Language Group members.....	84
4.9	Participant observation and semi structured interviews with Tsilhqot'in women ...	85
4.10	Data coding and analysis	86
4.11	Conclusion	91
Chapter 5 Cariboo Chilcotin resource development and impacts		93
5.1	Regional strategy development.....	93
5.2	Southern Carrier beetle action plan.....	99
5.3	Tsilhqot'in Nation beetle action plan.....	101
5.4	Regional economic development plan	103
5.5	Regional energy sector.....	106
5.6	Options and constraints for First Nations communities.....	109
5.7	Conclusion	114
Chapter 6 The ongoing negotiation and renewal stage: Community case studies		115
6.1	The Nazko people: An introduction.....	116
6.1.1	Nazko community and logging activities	118
6.1.2	Nazko economic development activities: From 2002 to date.....	127
6.1.3	The Nazko people: History of community planning	133

6.2	The Xenigwet'in people: An introduction	137
6.2.1	Xenigwet'in community and logging activities.....	142
6.2.2	Xenigwet'in community and mining development	148
6.2.3	Xenigwet'in community and tourism development	151
6.2.4	Xenigwet'in energy development.....	154
6.3	Conclusion	156
Chapter 7 Results: Geothermal field trip report		158
7.1	Day one: Geothermal 101	159
7.2	Day two: Geothermal power plant at Soda Lake	162
7.3	Day three: Geothermal power plant at Blue Mountain.....	168
7.4	Unexplored geothermal resources prospects within the Cariboo Chilcotin region	172
7.5	Summary and lessons learned.....	173
Chapter 8 Results: Critical Cariboo-Chilcotin Aboriginal values		176
8.1	Critical Aboriginal values	179
8.2	Tsilhqot'in epistemology and place-based assets	183
8.3	Emerging themes in Aboriginal values.....	187
8.3.1	Place-based teachings and learning centres.....	189
8.3.2	Spirituality and sacredness of place-based assets.....	193
8.3.3	Health and healing	196
8.3.4	Protection of place-based assets	198
8.4	Community Environmental Impact Assessment components	202
8.5	A summary of Aboriginal values.....	208
8.6	Conclusion	210
Chapter 9 Results: How Tsilhqot'in women survive on the land.....		211
9.1	Interviews at Fish Lake Gathering.....	212
9.1.1	How Doreen William survives on the land.....	214
9.1.2	Alice William's experiences of living off the land.....	216
9.1.3	How Lennie Billy feeds a family of 12	220
9.2	Brittany Gathering, September 2012	222

9.2.1	Annie Williams’ perspective on Tsilhqot’in ways of knowing	223
9.2.2	Susie Lulua’s perspective on teaching on the land	226
9.3	Cross cultural communications and conclusion.....	227
Chapter 10	Native Space and theory propositions.....	229
10.1	Native Space and Aboriginal identity: It is “who we are”	231
10.2	Native Space and development: “Probably they don’t even know we lived here all our lives”	234
10.3	Native Space and development: Jagged worldviews and jagged communities	237
10.4	Tribal sacred eco-environment: “It’s our culture, our lives”	240
10.5	Conclusion	243
Chapter 11	Recommendations, reflections, limitations, and conclusion.....	245
11.1	Summary of the findings and recommendations.....	245
11.2	Reflections: Indigenous research revisited	248
11.3	Study limitations	249
11.4	Research outcomes, future research, and final words.....	252
References.....		257
Cases sited		275
Appendix 1: UNBC ethics approval		277
Appendix 2: Community support letters, Nazko First Nation.....		280
Appendix 3: Community support letters, Xeni Gwet’in First Nation		281

List of Tables

Table 1: Community and economic development foundation for Aboriginal communities...	33
Table 2: Trends in postsecondary qualification attainments of some First Nations communities in the Cariboo Chilcotin region.....	52
Table 3: Trends in labour force participation of some First Nations communities in the Cariboo Chilcotin region	53
Table 4: Labour force participation for the year 2006.....	54
Table 5: Trends in earnings of some First Nations communities in the Cariboo Chilcotin region	55
Table 6: Cariboo Chilcotin First Nation communities: Population and distance from service centres	56
Table 7: Hybrid research method used in this study.....	68
Table 8: Timeline of Mountain Pine Beetle Response	95
Table 9: Schwartz individual level values and Aboriginal communal values.....	209

List of Figures

Figure 1: Map of geothermal resources, BC.....	7
Figure 2: Map of BC showing the Cariboo Chilcotin region	12
Figure 3: Map of the Cariboo and Chilcotin region	13
Figure 4: Stages of relationship - theoretical model proposed by Mark Dockstator	15
Figure 5: Off-reserve 2010 labour force participation.....	48
Figure 6: Off-reserve 2010 unemployment rate	48
Figure 7: Grounded theory illustration by Strauss and Corbin.....	67
Figure 8: Flowchart illustration of data collection and analysis approach used in this study .	88
Figure 9: Observed MPB infestation in the region in 2012.....	96
Figure 10: Map of the Cariboo Chilcotin Beetle Action Coalition region	97
Figure 11: Lava rock mine at the Nazko cone, 2013	118
Figure 12: Lava rock mine at the Nazko cone, 2013	119
Figure 13: Challenge wall at Nazko Community Visioning Gathering, August 2012.....	136
Figure 14: Konni Lake, Nemiah Valley 2013	140
Figure 15: Grizzly bear sow and her cubs at Chilko Lake, September 2012	140
Figure 16: Solar and wind energy installation at Xení Gwet'in, 2013.....	156
Figure 17: A geothermal energy turbine at the Magma Power site, May 2010.....	165
Figure 18: A water pump and production well at Magma site, May 2010.....	165
Figure 19: View of Nevada Power Inc. showing the water cooling tanks and the power plant facility, May 2010.....	169
Figure 20: Schwartz's individual level value structure averaged across 68 countries	178
Figure 21: An illustration of place-based assets and traditional activities	180
Figure 22: An illustration of Tsilhqot'in epistemology used as a framework	184

Figure 23: A summary of Aboriginal values which emerged in this study 188

Figure 24: An illustration of VSCCs from the Land that emerged from the content analysis of data 204

Figure 25: An illustration of VSCC from the Landscape which emerged from the content analysis of data 205

Figure 26: Examples of place-based assets as VSCC that emerged from the content analysis of data 206

Figure 27: Incorporating community values in the Environmental Assessment process 207

Figure 28: View of Fish Lake showing the mountain range in the vicinity of the proposed tailing pond dam, August 2012 213

Figure 29: Traditional salmon drying at Brittany Gathering, September 2012 223

Figure 30: A summary of the interconnection of Aboriginal values within the transformed Native Space 230

Glossary of acronyms

AAC: Allowable Annual Cut

AANDC: Aboriginal Affairs and Northern Development Canada

CCBAC: Cariboo Chilcotin Beetle Action Coalition

CCP: Comprehensive Community Plan

CCTC: Carrier Chilcotin Tribal Council

CEAA: Canadian Environmental Assessment Agency

CEAR: Canadian Environmental Assessment Registry

CIE: Cariboo Indian Enterprises

DGS: Diesel Generating System

EA: Environmental Assessment

EIA: Environmental Impact Assessment

FIMI: Foro Internacional de Mujeres Indigenas (International Indigenous Women's Forum)

FRA: Forest and Range Agreement

FRO: Forest and Range Opportunity

IK: Indigenous Knowledge

INAC: Indian and Northern Affairs Canada

MEMPR: Ministry of Energy, Mines and Petroleum Resources

MOAL: Ministry of Agriculture and Lands

MOFR: Ministry of Forest and Range

MPB: Mountain Pine Beetle

NDIT: Northern Development Initiative Trust

NRCan: Natural Resources Canada

NTFP: Non-Timber Forest Products

OCAP: Ownership Control Access and Possession

PAR: Participatory Action Research

PSYU: Public Sustained Yield Unit

RA: Responsible Authority

RCAP: Royal Commission on Aboriginal Peoples

REB: Research Ethics Board

TEK: Traditional Ecological Knowledge

TN-A1A: Tsilhqot'in Nation Appendix 1A

TN-A2: Tsilhqot'in Nation Appendix 2

TN-A3: Tsilhqot'in Nation Appendix 3

TNG: Tsilhqot'in National Government

TREK: Targeting Resources for Exploration and Knowledge

TSA: Timber Supply Area

TLG: Tsilhqot'in Language Group

UBC: University of British Columbia

UBCIC: Union of British Columbia Indian Chiefs

UNBC: University of Northern British Columbia

VEC: Valued Ecosystem Component

VSC: Valued Social Component

VSCC: Valued Socio-Cultural Components

WCFP: West Chilcotin Forest Product

WED: Western Economic Diversification Canada

Acknowledgements

I would like to acknowledge the Southern Carrier, Northern Shuswap and Tsilhqot'in Nations in whose traditional territories I conducted my research. For the past five years, I have worked with several people from the different communities. Their generosity and kindness is humbling. This resulting dissertation is due to the collective efforts and work of all these people and their participation in various projects.

My deepest gratitude is to my supervisors, Drs. Bob Ellis and Ellen Petticrew, and to my committee members – Drs. Antonia Mills, Greg Halseth, and Mory Ghomshei. When I started, I had no clue where I was going and how to get there. Their foresight, their leadership and mentorship is what gave me the strength. I could not have done this without their patience, help, guidance, and support. I extend my gratitude to my external examiner, Dr Leroy Little Bear. Thank you to Dr. Gail Fondahl who was a part of my committee at the beginning. Her contribution helped me get started. In addition, other UNBC administrative and academic staff provided encouragement, review of some of my work, and mentorship. These include Drs. Blanca Schorcht and Heather Peters. My gratitude also goes to friends who assisted me in organizing some of my projects.

Thank you to all the communities who participated and the people who gave their time for the field trip, the focus group forums, interviews, those who contributed through discussions, chats, and presentation reviews. To co-researchers and travel companions, I appreciate the valuable insights which they shared during the field trip.

I am deeply grateful to the Tsilhqot'in Language Coordinator, Sherry Stump, the Executive Director of the Tsilhqot'in National Government, Crystal Verhaeghe, and my Tsilhqot'in teacher, Bella Alphonse. Thank you for teaching me the Tsilhqot'in culture and for entrusting me with community knowledge. I am deeply grateful to the Chiefs (both past and present) and the community leaders. Sechanalyagh.

I am indebted to the Nazko people. Through the years, they have welcomed me into their community. They taught me so much about First Nations people in Canada when I knew nothing. What I learned from them gave me my much needed foundation. Their support is truly appreciated. In addition I am grateful for the continued support I received from the current Chief and his administration, including the Directors and staff of the Nazko Economic Development Corporation. Sunachailya.

I am truly grateful for the Tribal administrators at the Tsilhqot'in National Government and the Carrier Chilcotin Tribal Council who took time to review my work and organized meetings with community leaders. I am grateful to the Chiefs of the other First Nation communities in the region. Conversations with these Chiefs at different times and with their community members gave me very useful insights. I met amazing people - too numerous to name. *My sincere appreciation goes to all the Cariboo Chilcotin First Nation people who assisted me and taught. You welcomed me into your communities and shared their stories.*

I received financial and in-kind support from a number of organizations including University of Northern BC, Westcana Electric Inc., Geoscience BC., Fraser Basin Council, Green Heat Initiative, Community Future Development Corporation of the North Cariboo,

Williams Lake Credit Union, All Nations Trust Company, and the Canadian Institute of Mining, Metallurgy and Petroleum. Without these, it would have been impossible to conduct this study. I am also grateful for the in-kind contributions from the First Nations Bands and their employees.

Finally, to the Kunkel family -- Tom, Theodora, and Taddea -- thank you for being my companions all the way. You sacrificed a lot and also put up with me throughout the process. You laughed with me and you showed me love when the going was tough. Your collective faith in my ability and your enduring patience throughout the years made all the difference. Words cannot express my gratitude and appreciation. Thank you!

For Tom, Theodora, and Taddea

Chapter 1 Thesis introduction

Prior to European contact in the early 1800s, First Nations people in the Cariboo and Chilcotin area of British Columbia Canada had established trade networks and economic systems with each other and neighbouring communities. These trade networks relied on resources available within their traditional territories in relation to their craftsmanship, kinship relationships, and community values (Furniss 1993b, Ignace 1998, Isaac 2004, Kunkel 2008). The economic growth of Canada now relies heavily upon natural resource extraction within the traditional territories of these communities. This reliance has created increased competition for resources on lands used by First Nations people for traditional purposes.

First Nation communities will likely be the largest land owners in the Cariboo Chilcotin region when all treaties and land claims are settled in the region. There is wide variation in these communities ranging from coastal to inland, from urban to rural, to remote and isolated. The First Nations reserves typically have marginal economic infrastructure and lag behind in social and economic well-being (Kunkel 2008, Markey et al. 2012, Wilson and Macdonald 2010). The communities have higher than average unemployment rates, and many of their members live in chronic poverty (Jorgensen and Taylor 2000, Peredo et al. 2004, Wilson and Macdonald 2010). Despite efforts from community leaders and regional initiatives, the socio-economic gap between these communities and the mainstream society continues to widen (Kunkel 2008, Wilson and Macdonald 2010). The exploitations of natural resources within and around areas used by First Nations people have not helped their cause. Wilson and Macdonald estimated that if economic conditions are favourable, it could take up

to 63 years to close this socio-economic gap (2010). Contemporary First Nations people in BC believe that meaningful economic development within their communities is essential to close this gap (Kunkel 2008). However, challenges such as the minimal economic infrastructure, the effects of the residential school system, the removal of Aboriginal children from their communities (also known as the 60's scoop), intergenerational trauma, violence within the communities, physical and mental well-being, and the loss of language and culture continues to plague these communities and further widens the gap (Frideres 2011, Markey et al. 2012). Furthermore, traditional beliefs, community values, legends, and stories are set within these remote landscapes, thus creating added complexities for development options acceptable by the people. While there is widespread knowledge of First Nations traditional activities such as hunting, gathering, trapping, and fishing, very little is known about the community values that surround these activities and how they influence community decisions and their sense of wellbeing.

1.1 Aboriginal rights and title in BC

Aboriginal people roamed their traditional territories and accessed seasonal resources for subsistence and trade prior to contact with Europeans. The creation of reserve lands after Canada became a sovereign Nation in 1867 changed all of this. Treaties with Aboriginal people were settled for most of the country. However, it was assumed that the rights of First Nations people in BC had been extinguished when the province joined the confederation in 1871 (Harris 2002, Tennent 1990). In BC, uncultivated lands were pre-empted by settlers and reserve lands were subsequently allocated in undesirable and remote areas (Miller 1996, 75; Tennent 1990). The discovery of gold and valuable minerals changed the dynamics of trade

between the settlers and the Natives. The Natives were no longer required, as during the fur trade era, and their cooperation was not essential (Furniss 1993a, Lutz 2008, Markey et al. 2012). Resource development progressed in BC within the ancestral lands of the Aboriginal people without their full participation or cooperation and consent and, in the case of the Tsilhqot'in, with strenuous opposition (Hewlett 1973).

1.2 Resource development and meeting the needs of daily life

First Nations people who live in geographically remote communities continue to meet the needs of their daily lives by practising their traditional activities such as fishing, hunting, and gathering medicinal plants and berries. These communities remain isolated and face social and economic marginalization. The communities lack the social, economic, and logistical infrastructures required by developers for the processing of extracted resources which are currently leaving their traditional territories (Kunkel 2008, Parfitt 2007, St. Germain and Sibbeston 2007). These resources are thus processed within urban centres where there is the availability of skilled and semi-skilled labour, suppliers of materials and equipment for construction, and adequate transportation and logistics infrastructures. Members of remote First Nation communities have to travel to urban centres to participate in employment activities and to access services such as banking, postal, and health care (ibid). As such, the people who live on these reserves rely on their traditional activities such as fishing, hunting, and picking medicinal plants and berries for their continued sustenance and to meet the needs of their daily lives (*Delgamuukw 1997, Haida Nation 2004, Taku River 2004, Tsilhqot'in Nation 2007*).

The devastation caused by the Mountain Pine Beetle epidemic in BC has resulted in the accelerated harvesting of marketable timber from the forests in the affected areas (Caverley 2009, Kunkel 2008, MOFR 2001-2006, Parfitt 2005 and 2007). The harvest rate was unprecedented (ibid). The impacts of the accelerated harvesting of resources took its toll on the ability of the affected First Nations communities to continue their traditional practices in certain areas. The ability to hunt, trap, and gather berries and medicinal plants was limited in places due to logging activities, while areas of spiritual and cultural significance were disturbed or no longer accessible (*Tsilhqot'in Nation 2007*). However, little economic benefits accrued to these communities despite these impacts on their daily lives (Parfitt 2005 and 2007).

Mining activities within lands with Aboriginal interests continue to come against opposition (The Human Rights Clinic 2010). First Nations people believe that these activities alter the landscape and affect the wildlife and plants upon which their communities depend (ibid). The environmental impacts of mining such as land degradation, ecosystem disruption, acid mine drainage, chemical leakage, slope failures, toxic dust, contamination and use of lakes for tailings and waste, deforestation for roads, disruption of wildlife habitats, noise pollution, degradation of traditional use sites, the disturbance of archaeological and sacred sites, and those that are spiritually and culturally significant, continues to be of concern to First Nations people (Ali 2003,17; The Human Rights Clinic 2010; Turkel 2007, 63). Any resource development activity which competes with First Nations people for use of land continues to challenge their traditional values and activities, and their environmental ethics (The Human Rights Clinic 2010). The people believe that it is essential that development activities accommodate their epistemological, ontological and historical vocation, as these still characterize their realities (Hindle et al. 2005). As a result, First Nations people have to

articulate their current use of land and resources (See CEAA 2010b). With a smaller ecological footprint and the potential for sustainable exploitation (Massachusetts Institute of Technology 2006), it is believed that the development of geothermal resources can potentially present unique opportunities for First Nations communities to achieve economic and community sustainability consistent with their desire to maintain the integrity of the environment (Grasby et al. 2011, Kunkel et al. 2012, Lebel 2009).

1.3 Research goal and objectives

The socio-economic conditions of Aboriginal people living on reserves in rural and remote locations are far behind that of mainstream Euro-Canadian society. It is believed by some that resource development will create employment opportunities locally and help to bridge some of the gaps (BC First Nations Mountain Pine 2005). However, these communities are only able to participate marginally and, in some cases, they resist certain types of development activities. In the past, it has not been clear why this is so. This study is about resource development within the traditional territories of First Nations people in the Cariboo Chilcotin region. This is rooted in my greater interest to understanding how these communities can create sustainable economic development which is compatible with their values. The study is not intended to provide technical insights into resource development in the region, but to increase the understanding of Aboriginal values and the role these play in development considerations. The goal of this research is to contribute further to the understanding and discussion of Aboriginal economic development in the region.

Schwartz reported that values play an important role in the motivation of people and their behaviours (2009). He described values as beliefs and desirable goals which transcend

specific actions and situations and serve as standards or criteria which guide actions (ibid).

The main objective of this research is to answer the overriding questions: **‘what are Aboriginal values associated with resource development?’** and more specifically, **‘is the development of geothermal resources compatible with Aboriginal values in the Cariboo Chilcotin area?’**

Based on my previous research work with the Nazko Band, I selected geothermal resources for this study. This resource is widely available in the region as shown in Figure 1. My selection criteria included the smaller ecological footprint, the ability to create sustainable energy for remote and isolated communities, the diverse applications in which the resources can be utilized, lower environmental impacts from development, and availability of geothermal resources within the region (Fairbank and Faulkner 1992, Fairbank Engineering Ltd. 1991, Grasby et al. 2011, Kunkel et al. 2012, Lebel 2011). Direct use of geothermal resources include applications such as residential and large space heating, spa, aquaculture, and greenhouse heating, all of which could be beneficial in remote communities which are currently off major electricity grids. The potential benefits of exploiting, processing, and using this natural resource at its indigenous location includes the ability to create local sustainable community and economic development for remote First Nations communities (Kunkel 2008, Kunkel et al. 2012). The development of geothermal resources has the added advantage of potentially creating much needed economic and community infrastructure within these remote regions, and perhaps providing other benefits such as local food sustainability through the use of greenhouses. With this in mind, the purpose of this study included increasing knowledge of geothermal resources within the region and contributing to theories on Indigenous community and economic development. The scant peer reviewed literature on Aboriginal values shows the lack of knowledge on what these are. This lack of

knowledge and understanding of Aboriginal values necessitated the need for me to broaden the scope of the study to include my participation in the regional discussions about a proposed mine at Fish Lake within the Chilcotin area.

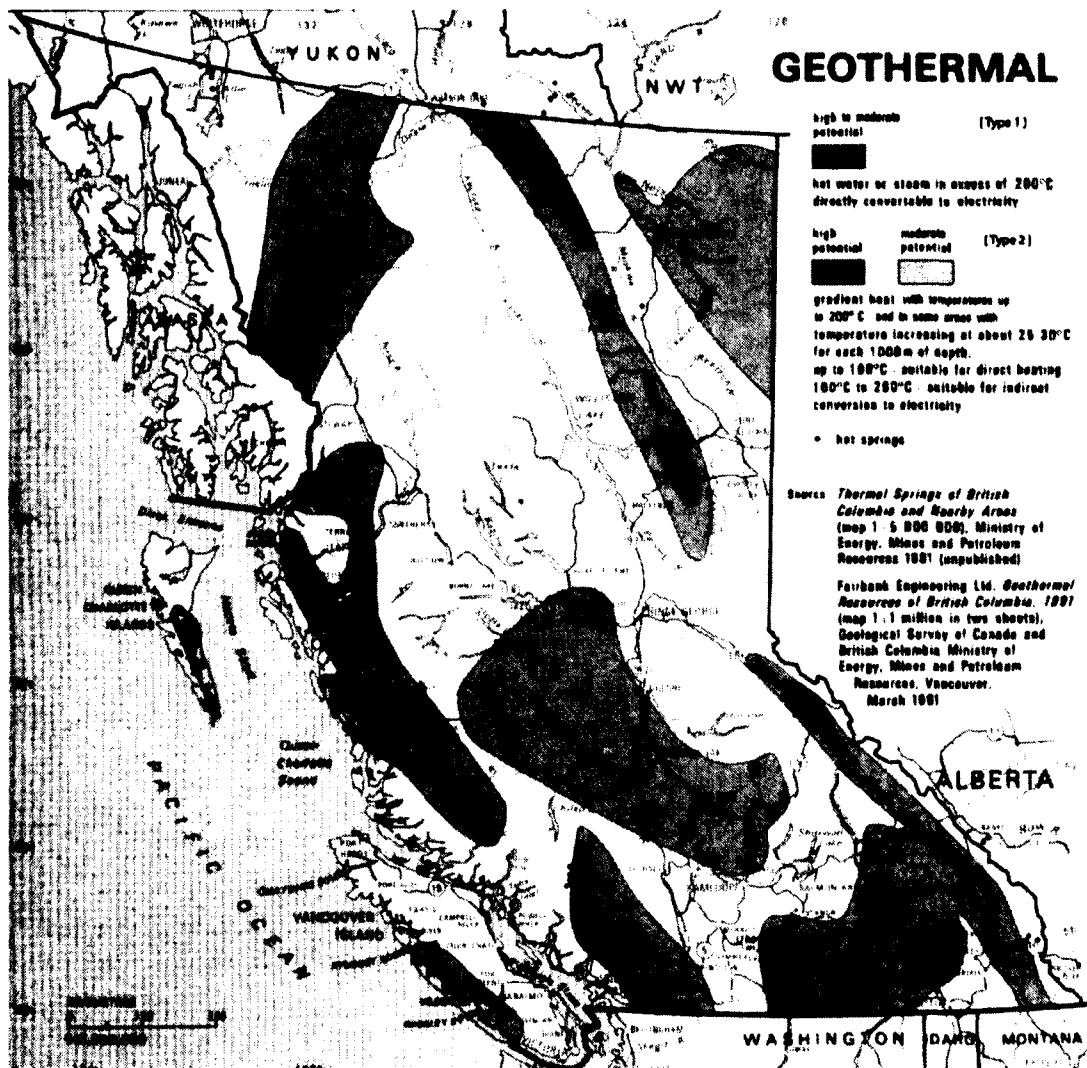


Figure 1: Map of geothermal resources, BC (Fairbank Engineering Ltd. 1991)

The mine proposed by Taseko Mine Ltd. threatened to destroy a watershed and a lake in an area described as the heartland¹ of the Tsilhqot'in people (*Tsilhqot'in Nation 2007*). The transmission lines required to bring electricity to the mine site were planned to cross both the Tsilhqot'in and Secwepemc territories (CEAA 2010b). The Environmental Assessment (EA) of the project by the Canadian Environmental Assessment Agency (CEAA) was extensive and provided a forum for Aboriginal people from the affected and neighbouring² communities to express their concerns and interests (CEAA 2010b). This forum provided more clarity of what Aboriginal values are within the Cariboo Chilcotin region.

Instrumental to my understanding of Tsilhqot'in values was my involvement in the development of Tsilhqot'in Culture courses and the accompanying textbook. Through this project, I worked closely with the Tsilhqot'in Language Group (TLG), learning their culture and values. In addition to the course development, I was also able to participate in three different community gatherings, two by the Tsilhqot'in Nations and one by the Nazko First Nation. The Tsilhqot'in community gatherings were cultural celebrations while the Nazko community gathering was part of the Nation's Comprehensive Community Planning (CCP) process. These gatherings provided me with opportunities for participant observation, to meet community members, to listen to elders and leaders, and to interview women where appropriate. As a result, this study was able to capture the resistance of the Tsilhqot'in communities to mining development within their traditional territory and to gain insights from the community planning process of the Nazko First Nation. While some aspects of this study can be generalized, it is important to note that the two case study examples I have used

¹ Heartland in this context refers to an area defined in the Tsilhqot'in court case documents as the cultural centre of the Tsilhqot'in people.

² Members of Ulkatcho Band, a Southern Carrier Nation, also participated at the Federal Panel Hearings.

in this study is not a representation of all the Aboriginal communities within the region but that of two groups seeking different approaches to their land claims.

1.4 Thesis overview

The history of Aboriginal people and settlers in the Cariboo and Chilcotin region of BC, locally referred to as Cariboo Chilcotin, provides a context for this study. To understand this context, I am providing extensive explanation in the first seven chapters of this document to give the reader a good background. The Cariboo Chilcotin region, defined as the Cariboo Regional District, consists of two cities, two district municipalities, 78 Indian reserves, and 12 electoral areas. The region, as shown in Figure 2 and Figure 3, forms 8.72% of BC's landmass with an area of 80,629.34 square km (BC Stats 2008, Statistics Canada 2007). The main industries are forestry, construction, tourism, mining, and agriculture (Horne 2009). The economic base³ for most of the communities in this region is largely driven by forestry. The issue of unresolved Aboriginal rights and title in British Columbia (BC) raises questions about the jurisdiction of resource development on native lands. This chapter is an introduction to the research and research questions. Chapter Two provides some history of the Aboriginal relationship with resource development in the Cariboo Chilcotin region and indicates how resource usage has changed Aboriginal communities. Chapter Three reviews the contemporary issues faced by Aboriginal communities, pertinent issues such as Aboriginal rights and title, and failed treaty settlement in BC; the legacy of the residential school system; failure to build capacity; lack of economic infrastructure; and factors that

³ The economic base for a particular community is defined as the total employment income within a local economy that is generated by demand from outside the community (NRCan 2006).

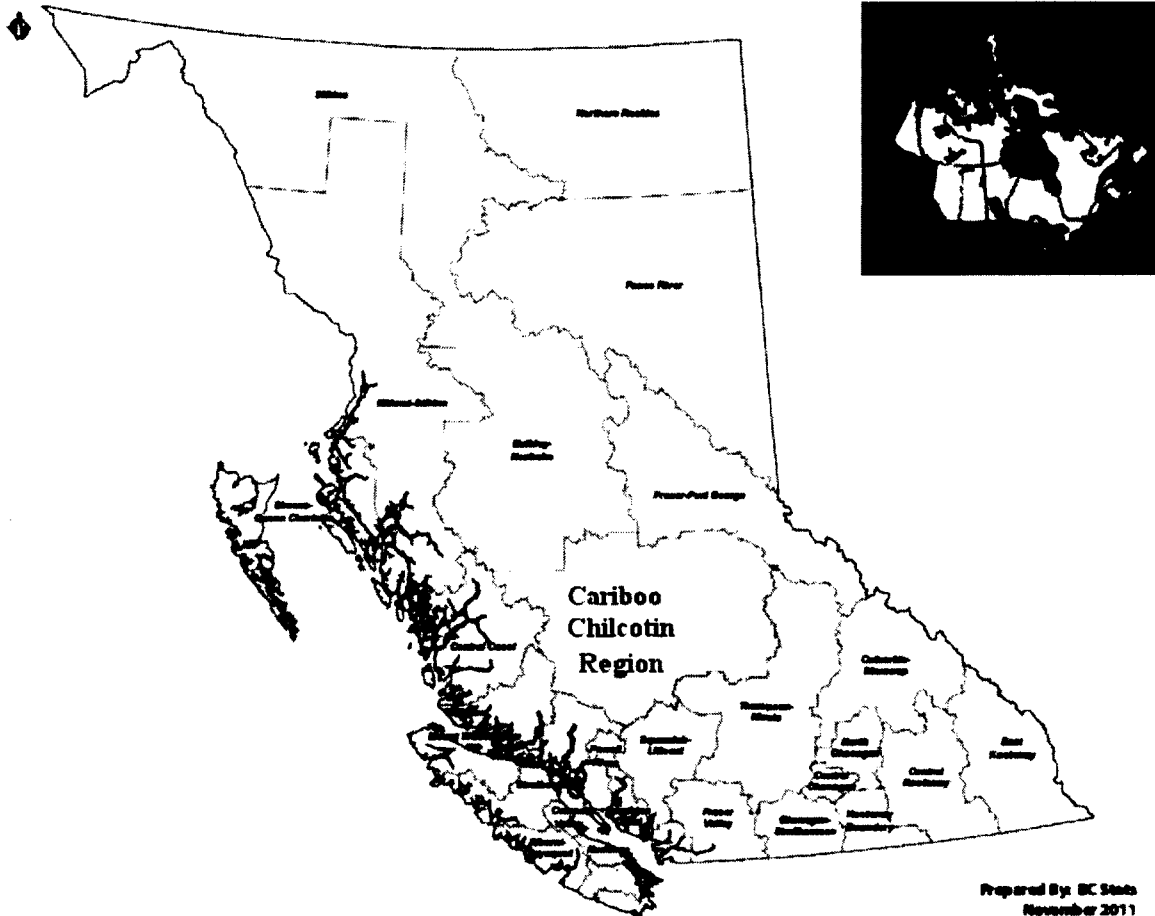
make Aboriginal communities vulnerable are discussed. The research methodology and approach is discussed in Chapter Four. The chapter also explains how an Afrocentric Indigenous paradigm has been applied to this study. Chapter Five discusses the impact of the Mountain Pine Beetle infestation in the Cariboo Chilcotin region and the strategy responses for different industry sectors in the region along with the response from the First Nations communities. Chapter Six presents the case study of two communities, the Nazko and Xenigwet' in First Nations. The Xenigwet' in community are the Tsilhqot' in people who live in Nemah Valley. The chapter also discusses resource development impacts on these communities and how they are proceeding with their land claims. Chapters Seven, Eight, and Nine are the discussion of the study results: Chapter Seven reports on the findings of the geothermal field trip to Reno, Nevada; Chapter Eight discusses the critical Aboriginal values which emerged during the Canadian Environmental Assessment Agency (CEAA) Panel Hearings for a proposed mine within the traditional territories of First Nation communities in the Cariboo Chilcotin region; and Chapter Nine contains the stories of the current use of land by Tsilhqot' in women and how they survive. The gendered stories in Chapter Nine offer more insights into Aboriginal values and the connections which the people have to their traditional lands. A series of theory propositions are offered in Chapter Ten. No research is without limitations. In Chapter Eleven, I write about some of the limitations of this research and also provide the final conclusions and recommendations from the study.

Some of the information in this dissertation has been previously published and presented as follows:

1. **'Geothermal energy as an indigenous alternative energy source in British Columbia'**, was published in the Journal of Ecosystems and Management 13(2).

This publication is my work and was co-authored by Dr Mory Ghomshei and Dr Bob Ellis (Kunkel, Ghomshei, and Ellis 2012);

2. A document with some research outcomes was submitted in July 2013 to the Federal Panel for the Environmental Assessment of the New Prosperity Mine and subsequently presented at the Topic Specific Hearing session at Williams Lake on August 01, 2013. The submission and presentation were both titled '**Aboriginal values and the use of land and resource for traditional purposes: A presentation to the Federal Review Panel for the proposed New Prosperity Gold-Copper Mine Project**' (Kunkel 2013);
3. Part of my research outcomes were also presented as a poster at the 23rd World Mining Congress in Montreal in August 2013. The poster was titled '**First Nations expectations from the Mining Industry: Lessons from the Tsilhqot'in People**'. The poster paper was published in the Congress' proceedings. This paper is also my sole writing and was co-authored by my supervisory committee (Kunkel, Halseth, Petticrew, Mills, Ghomshei, and Ellis 2013);
4. In addition, I have made presentations to the Xeni Gwet'in and Nazko First Nations communities, Fraser Basin Council at Williams Lake, and the Community Futures Development Corporation of the North Cariboo in Quesnel. At these presentations, I shared some of the research outcomes and was able to obtain feedback from the people present.



Prepared By: BC Stats
November 2011

Figure 2: Map of BC showing the Cariboo Chilcotin region
(BC Stats 2013)

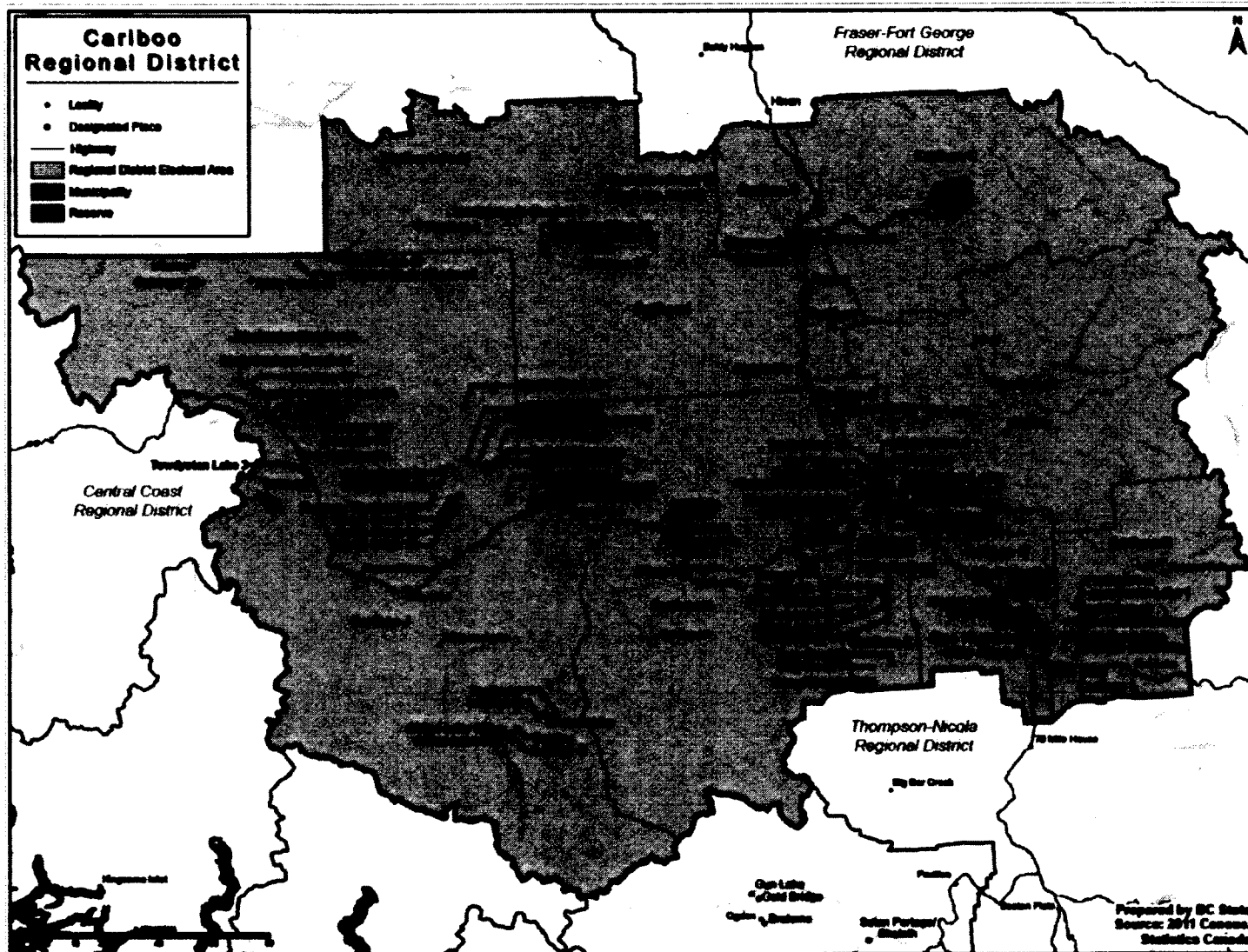


Figure 3: Map of the Cariboo and Chilcotin region (BC Stats 2013)

Chapter 2 History and context

The term Aboriginal people in Canada refers to the first peoples and consists of Inuit, Métis, and First Nations (Laliberté et al. 2000, RCAP 1996a). The history of Aboriginal land issues and European colonization of native lands has been addressed by a wide body of literature (see, for example Furniss 1993a, 1993b, and 1995; Lutz 2008; RCAP 1996a; Wilson 2003). Nevertheless, it is important to have some historical background for context and to inform this discussion. This chapter provides a history of resource development in the Cariboo Chilcotin region.

2.1 Stages of Aboriginal people and Settler relationships in Canada

The different stages of the relationships between settlers and the Natives are best described by the theoretical model proposed by Mark Dockstator in Figure 4 (RCAP 1996a). This theoretical model was useful in organizing historical events that shaped relationships between Aboriginal people and the settlers. The model was used in the comprehensive report produced by the Royal Commission on Aboriginal peoples of 1996. The four stages -- separate worlds, contact and cooperation, displacement and assimilation, and negotiation and renewal -- across the country are well documented in the report (ibid). This four-stage approach to understanding the relationships between settlers and the Natives is very broad. In this model, the stages are linear. The model also suggests that the communities are in a post-colonized stage. However, specific events during the different stages occurred at different times for each community across the country. There were some accounts of communities

which became extinct after contact and accounts of those who did not cooperate or participate in the fur trade. Furthermore, there are still government policies in place which are designed to assimilate the people, leaving no real distinction between stage 3 and stage 4. Despite these policies, negotiation and renewal is deemed to be taking place. Regardless, the model provides some boundaries to frame the context of this study within the Cariboo Chilcotin region.

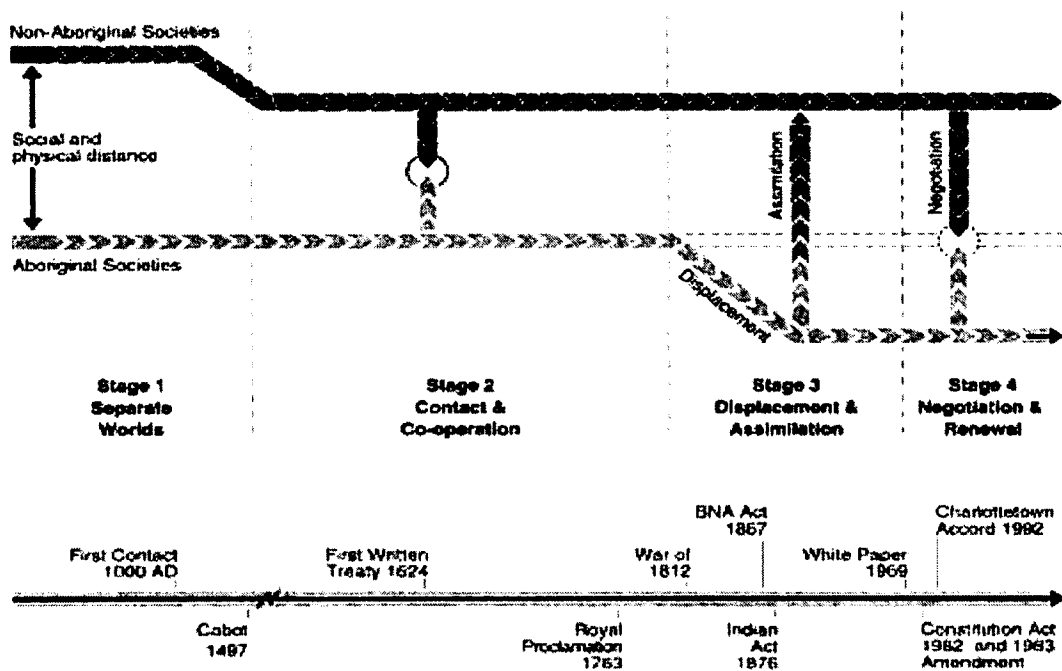


Figure 4: Stages of relationship - theoretical model proposed by Mark Dockstator

2.1.1 Stage 1: Stories of resource usage pre European contact

The Southern Carrier, Shuswap and Tsilhqot'in people occupied the Cariboo Chilcotin region of BC pre-contact – stage 1. Each of these people had their definite patterns of resource usage within their respective traditional territory prior to European entry. The patterns of resource usage by the early Shuswap, Southern Carrier, and Tsilhqot'in people

were quite similar (Teit 1909, 779). Furniss documented some of the history of the Southern Carrier from 1793 to 1940 (1993a, 1993b). Prior to European contact, the Southern Carrier nations traded with their neighbours using the network of trails which connected them all the way to Bella Coola (Furniss 1993a, 1993b; Kunkel 2008). Teit described the subsistence life of the Shuswap people in 1909 as follows:

The meat on which they lived was of importance in the following order: deer, elk, caribou, marmot, sheep, hare, beaver, grouse, bear, moose, duck, goose, crane, squirrel, porcupine. Goat meat was not eaten by most bands, except when other meat could not be obtained. Turtle was eaten by the North Thompson people. Moose were found only in the extreme northeast hunting grounds. Buffalo and antelope did not inhabit the tribal territory, but they were known, and a few Shuswap had hunted them east of the Rocky Mountains. Elk became practically extinct about fifty years ago, and were scarce seventy years ago. At one time they formed the chief object of the chase with many bands, as they were easy to hunt, and their flesh and skins were most highly esteemed. . . . The fish-supply consisted of salmon of four or five varieties, sturgeon, and trout and white-fish of several varieties; but almost every kind of fish was eaten. Fresh-water clams and other shell-fish, which are found in some lakes, were never eaten, except perhaps in cases of famine. Roots and berries formed an important part of the food-supply, and the latter were gathered in great quantities. (1909, 513 - 514)

Furthermore, in describing the tools and subsistence resources used by the Southern Carrier, the Shuswap, and Tsilhqot'in, Teit provided some insights into the subsistence activities of the people, including similarities. Teit stated,

The main food-supply of the Chilcotin consisted of fish, game, roots, and berries, as among other tribes. Some salmon were caught and cured by them, but the bulk of their supply was procured from the Bella Coola and the Shuswap. Bag-nets were not much used in olden times, but at the present day are extensively in use along the main Chilcotin River. They are of the same kind as those of the Shuswap. Weirs and traps are employed for catching salmon about the mouth of the Chilco River. Trout and small fish were caught in great numbers with large nets and traps set in the streams and lakes. Nearly all the kinds of fish-traps used by the Carrier and Shuswap were also utilized by the Chilcotin. (1909, 779)

The people exploited forest resources to manufacture the tools both for their own use and for trade (Teit 1909, Furniss 1993a). Items manufactured included knives, spear points, and

arrow heads from basalt and obsidian (Teit 1909, 765). In the Chilcotin, glassy basalt was mined around Puntzee Lake while dark grey and black obsidian were mined at Anahem Peak (ibid). Forest resources were used for making tools such as bows and arrows for hunting, fish traps, various types of animal traps, and for building dug-out canoes which were used to navigate rivers and lakes (Teit 1909, Furniss 1993a). Trees were felled with chisels of caribou and elk antlers (Teit 1909). All the communities made different types of baskets from birch bark (ibid). Stones and animal antlers were used to work on hide for clothing and moccasins (Teit 1909, Furniss 1993a). Teit observed that tents were typically not covered in much coveted hides but, rather, the hides were used for other purposes while tents were covered in leaves and branches (1909). First Nations people continued this pattern of resource use within their traditional territories during contact with Europeans.

The Tsilhqot'in Nation's court case against the province of British Columbia provides a compendium of how the people utilized and value their traditional territory both prior to European contact and after. The works of anthropologists supported the testimonies of community elders. Anthropologists found evidence of Tsilhqot'in resource use in the Nemiah Valley dating as far back as 1590 plus or minus 80 years AD (TN-A3 2007, 6). In the winter, known as Xi, Tsilhqot'in ancestors lived in rectangular log structures with gabled roofs (niyah gungh) and in circular pit houses (lhiz qwen yex) also known as kiglie hole (Lane 1953, 261; TN-A3 2007, 2-8). These homes were situated around lakes and rivers, close to the winter fishing, hunting, and trapping grounds of the people. There is an abundance of lakes within the Tsilhqot'in territory. These were used as winter fishing sites (TN-A3 2007, 53). Timber was an important resource for the people (TN-A3 2007, 2-8). The people built their houses by felling trees using obsidian obtained from the Anahim Lake area (TN-A3 2007, 30, 31). These trees were secured with spruce roots or softened willows (ibid). Tree

bark was used for insulation, and firewood was vital to keep the houses warm. Spruce root was used for making different types of baskets, including woven watertight baskets which were fine enough to hold water.

Court case evidence from Tsilhqot'in elders and expert witnesses showed that the people migrated following the melting snowline, moving to the higher country to get to the hunting and gathering sites by early summer (TN-A3 2007, 80). Historical evidence of early contact with the Tsilhqot'in people showed that there were abundant animal resources within the territory. Animal hide was a very important resource for Tsilhqot'in ancestors. Hide straps were used to secure loads slung onto the back or around the forehead (TN-A3 2007, 10). Blankets, beddings, and robes were made from fur pelts of various small animals including rabbits and marmot. Fur from larger animals such as sheep and bear were used for mattresses. These mattresses were also used as travelling packs by the people (TN-A2 2007, 22). Records of contact in 1822, during the fur trade era, described the Tsilhqot'in people as "generally well and warmly clad, with clothes made from animal fur and good leggings of excellent leather, and they were not shabby in appearance" (TN-A3 2007, 24, 25). The British fur trader, William Connolly, in 1825, noted his hopes to get Tsilhqot'in people to part with their fur clothing (TN-A3 2007, 22). In 1831 the fur trader, Ross Cox, documented Tsilhqot'in land consisting of abundant beavers as the people were clad in beaver fur robes. In 1832, a report from the Chilcotin Trading post noted that most of the beaver within their territory must have been converted into winter clothing, not because of a beaver shortage but for the quantity and quality of the people's clothing (TN-A3 2007, 22). In 1863, surveyor Henry Palmer reported meeting Tsilhqot'in people "clothed in fur and armed with bows and arrows, devoid of all resources except those provided by lakes, rivers, prairies, and wood" (ibid).

In a more recent account, Lutz described the Tsilhqot'in people as deriving more of their food from hunting rather than fishing (2008). However, older accounts from anthropologists such as Dinwoodie, Dewhurst, and Lane showed that the people fished throughout the seasons as this did not require as much work or energy as hunting (Lane 1953, 43; TN-A1A 2007). Other anthropologist, Robert Tyhurst and William Turkel summarized the pattern of winter land and resource use noting that in the winter months (Xi), Tsilhqot'in ancestors ice-fished, hunted for deer, mountain sheep, bears, squirrel, rabbits, lynx, muskrat, beavers and marmots (ground hogs) (TN-A3 2007, 32). A variety of hunting techniques were used, including different types of snares, deadfall traps, and bows and arrows. Snowshoes made of spruce and hide were used during winter hunting (TN-A3 2007, 52). Tsilhqot'in ancestors traded mountain goat wool blankets and woven lynx skins with the Shuswap people (TN-A3 2007, 21). Beaver, wolf, deer, mountain goat, mountain sheep, lynx, and bear fur were used for clothing, gloves, caps, and shoes. The women wore skirt-like wraps and apron-like garments over their winter leggings which were made of leather (TN-A3 2007, 24). Tsilhqot'in people traded large quantities of dentalium-shells, woven goat's hair blankets and belts, bales of dressed marmot skins, rabbit-skin robes, snowshoes described to be of the best type and value in exchange for dried salmon and salmon-oil, woven baskets of the best type, paint, and horses from their Shuswap neighbours (Teit 1909).

Spring activities included fishing rainbow trout on lakes (Lane 1953). The Tsilhqot'in people had several spring fishing camps and used various types of technologies to fish, including cone and box fish traps, fences, three-prong spears, and gill nets (Lane 1953, TN-A3 2007). Other fish species caught in the spring included Dolly Varden, trout, and steelhead. These were dried, making it easy and light to transport and to store (TN-A3 2007, 60).

In the summer months, the people hunted and gathered blossoms and roots on mountain slopes (TN-A3 2007, 82). Important summer species included plant foods which were preserved for winter supplies or traded with their neighbours (ibid). These plant foods included corns, mountain potatoes, yellow avalanche lily, wild onions, berries, soapberries (known as nuwish) and mountain carrots. Historically, the people picked mountain potatoes and stored them in cache pits until their return down the mountain. In addition, the people hunted deer, mountain goat, marmot and bear in the summer, and fished both the early spring and the sockeye salmon (TN-A3 2007, 61, 89).

In the fall season, Tsilhqot'in people hunted deer and gathered plants and medicine. Plants harvested included kinnick kinnick and silverweed (TN-A1A 2007, 67). Some families also hunted ducks and geese during this time of the year (TN-A1A 2007, 77, 82). People continued these activities until early winter. Lutz noted that that Tsilhqot'in people travelled to salmon fishing sites on the Chilcotin River or the Dean River systems where they used conical traps to catch salmon (2008,125). The Hudson Bay Company reported that with a good salmon run, the people could catch between 800 and 900 fish daily (ibid). Anthropologists Dr. Dinwoodie and Mr. John Dewhurst described Tsilhqot'in's land use as a socially institutionalized schedule of exploiting seasonal variations in local resources which are abundant in the area (TN-A1A 2007, 82). Extended family members camped together to exploit local resources at different times of the year. While pre-dating contact, the Tsilhqot'in people continue to observe these traditions and carry out these activities to this date.

2.1.2 Stage 2: Contact and cooperation

During the 'Contact and Cooperation' stage of the relationship (Stage 2, Figure 4), Europeans traded goods for fur and crafts from the Aboriginal peoples (Cummins 2004, Furniss 1993a, Ray 2000, RCAP 1996a). Trading posts were set up in strategic locations to enable more Natives to sell their fur directly to the Europeans (ibid). The fur trade era saw cooperation between the Natives and the Europeans. In addition to trade, contact with settlers brought an epidemic of diseases to which the Natives had no biological immunity (Harris 2002). The wave of smallpox started on the North coast in 1770 and moved further south in 1780 (Harris 2002, 47). In BC, a wave of measles swept through in 1849 followed by smallpox in 1862 (ibid). The deliberate massacre of Natives through the spread of smallpox in the early to mid 1800s brought about mistrust and suspicion of settlers in the Chilcotin region (Hewlett 1973, Swanky 2011). These epidemics left a number of Native settlements depopulated and bare. These 'bare' lands fostered the notion of the land being empty, thus leading to pre-emption by some settlers (Harris 2002).

The advent of the gold rush came with much greater encroachment on Native lands (Furniss 1993a, Hewlett 1973, Hogg 2010, Quesnel Community and Economic Development Corporation 2005). The Europeans settled on pre-empted Indigenous lands, built roads, and put up fencing and barriers, thus preventing the Natives from using parts of their territories (Furniss 1993a, Hewlett 1973, Hogg 2010). This era was marked with conflicts between the Aboriginal people and Europeans. A notable conflict in the study area was the Chilcotin uprising of 1864 (Hewlett 1973, Lutz 2008, *Tsilhqot'in Nation* 2007). The Tsilhqot'in people, led by six chiefs, went to war killing 14 members of a road building crew and some European settlers within their territory. The road was being built from Bute Inlet to access goldfields in the Cariboo Chilcotin region. It was reported that some road crew members had threatened to

kill a Native with smallpox (Hewlett 1973; Lutz 2008, 134-137). This war resulted in the hanging of six Tsilhqot'in men, five in the town of Quesnel and one in Victoria (Hewlett 1973; Lutz 2008, 134-137).

In British Columbia, the exploitation of resources within traditional territories of First Nations people continues to take place without the consent of the First Nations and thus is problematic where treaties have not been established (*Delgamuukw 1997, Elliot 2008; Haida Nation 2004, Isaac 2004, Marsden 2005, Mills 2005, Parfitt 2007, Taku River 2004, Tsilhqot'in Nation 2007*). Unresolved Aboriginal title and rights further complicates the exploitation of these resources on 'Crown' lands as discussed in the section below entitled 'Aboriginal rights, title, and interests.'

2.1.3 Stage 3: Displacement and assimilation

In Stage 3 of the relationship termed 'Displacement and Assimilation' (see Figure 4), the residential school system was introduced, communities were relocated, and several cultural practices were outlawed (Haig-Brown 1993, Milloy 1999, Mills 2005, RCAP 1996b). Milloy stated that the churches understood that the Aboriginal children gain their ontological inheritance from their parents and the community through language (1999, 38). Oral teachings were used to transmit the culture from one generation to another. The notion of "killing the Indian in the child" in order to "sever the artery of culture that ran between Aboriginal generations" led to residential school abuse (Milloy 1999, 42). Government policies were designed to assimilate Aboriginal peoples across the country and to 'Christianize and civilize' the Indians. Sadly, these policies have left a legacy of mistrust, abuse, pain, and anguish which continues to shape the lives of First Nations people and their

communities (Kunkel et al. 2011, Milloy 1999). Aboriginal communities which were once vibrant and economically and socially independent are now in the margins of Euro-Canadian socio-economic systems (Stock 2008, Hedican 2008, Kunkel 2008, Kunkel et al. 2011, Wilson and Macdonald 2010). However, First Nations people remain optimistic about their future and believe that economic development is essential to their struggles for self-determination and self-government. The remote and isolated location of communities, low education levels, limited economic infrastructure, poor standards of health, and lack of access to capital are some of the challenges faced by these communities (Cornell 1987, Cornell and Kalt 1992, Greenwood and Place 2009, Kunkel 2008, Kunkel et al. 2011, Peredo et al. 2004, St. Germain and Sibbeston 2007, Wilson and Macdonald 2010).

2.1.4 History of resource development in the Cariboo Chilcotin region – fur trade, gold rush, railway

The economic history of the region started with trade amongst the First Nation people prior to contact with Europeans (Teit 1909). The fur trade era brought about the establishment of trading posts in the region (Furniss 1993a, Kunkel 2008). Records showed that the Southern Carrier people traded and conducted business with the fur traders while the Tsilhqot'in people continued their hunter-gathering lifestyle and traded solely with the neighbouring nations (TN-A1A 2007, 126). The Carrier people were described as being fluent in Canadian French language and versed in the customs of the Europeans (ibid). Records from anthropologists showed that the First Nation people in the region traded fur for European goods at these trading posts (Teit 1909, TN-A1A 2007). The discovery of gold on

the Fraser River paved the way for the famous Cariboo Gold Rush. This era started circa 1858 to 1860 (Furniss 1993a, *Tsilhqot'in Nation 2006*).

Teit reported that the discovery of gold and the opening of trading facilities led to the eastward movement of the Tsilhqot'in people around 1865 (1909). An excerpt from the court case document showed that the Shuswap and Tsilhqot'in chiefs were concerned about resource exploitation as reported by Peter Dunleavy in 1859 (*Tsilhqot'in Nation 2006*).

According to the report, Chief Dehtus of Anaham, the Yubatan Dené headed by Chief LoLo, and the Shuswap represented by Chief Williams (Willyums) of Williams Lake attended an inter-tribal powwow near Lac La Hache where Chief Dehtus, also known as Chief Anahim, stated:

It makes warm the heart of the Chilcotin to come to this old time meeting place of the Shuswaps to visit with our brothers the Denés and the Yubatans and our cousins the Shuswaps. These games are the chief attraction, for they keep us strong and brave, eager and fleet, not only for the hunt but to scare away our enemies. It is mainly for this last point that Anahim of the Chilcotins has come to make talk and consult with his brother chiefs at this meeting. For some time our scouts have been bringing us news of white men who are coming up our rivers. We have tolerated these men, thinking them to be weak-minded and therefore entitled to the reverent regard which all Indians have for these weak ones as dictated by the Great Spirit. However, we have found that these men are really not crazy and are washing out little pieces of yellow stone which they call "gold" and which they use for what we call sunia [Tsilhqot'in word for money], to use as we use skins to trade for other goods. The Indians from Lillooet have already been corrupted... this sunia really belongs to us and the white men are taking it without asking for it. The priests tell us this is stealing. If we steal they tell us that their God will punish us. But these white men are stealing from us. Will their God punish them for this bad act or have they made a convenient arrangement with this God? Has he one law for the Indian and another law for the white man? We must keep these white men out. We tribes must act together. If we do not act immediately we will only have to drive them out later. This will result in much bloodshed for them and also for our own people. We must act now or we are lost! (Quoted in *Tsilhqot'in Nation 2006*, 51-52)

The colonies of Vancouver Island (formed in 1849) and mainland Vancouver (formed in 1858) were amalgamated into one in 1866. This was the beginning of the colonial empire. Canada subsequently became a country in 1867. The exploitation and development of natural resources became the driver of economic activities in the Cariboo Chilcotin region of BC. European settlers started the pre-emption of land in the region in 1860 and began to establish permanent settlements (Furniss 1993a, Story 2004, Tennant 1990). Alfred Waddington, who had pre-empted land at Bute Inlet, sent out his crew to survey land between Bute Inlet, through the Tsilhqot'in territory to Alexandria with the intention of building a road with the shortest distance from the Cariboo goldfields to the coast (Furniss 1993a, Hewlett 1973, Lutz 2008, Swanky 2011, *Tsilhqot'in Nation 2007*). The colony of BC later joined the Confederation in 1871. Permanent mining towns were created for the European settlers while a reserve commission was created in 1872 for the Natives. These towns were then supported by forestry, agriculture, and a network of wagon roads along with railways.

Between 1862 and 1964, there were outbreaks of diseases such as flu, whooping cough, measles, and smallpox epidemic which decimated more than half the population of the Aboriginal communities (Furniss 1993a, Teit 1909). Several reports showed that smallpox infected blankets were given to the Natives; these spread the diseases, wiping out several Carrier, Tsilhqot'in and Shuswap communities (Furniss 1993a, Lutz 2008, Swanky 2011). With population at a fraction of what it had been, reserves were created at the fringe of urban areas (Harris 2002). Fishing spots and grave sites were also set aside for the people. The First Nations people and their reserve communities were subject to the government policies of marginalization which continues to date.

2.2 Negotiation and renewal

The fourth stage of the relationship, termed 'Negotiation and Renewal', is still ongoing. The Aboriginal communities had been marginalized with little or no participation in the economic prosperity of the country. The government released the White Paper on Federal Indian policy in 1969 following false consultation with the people (RCAP 1996a). The objective of the White Paper was to terminate the fiduciary responsibility of the government towards the Aboriginal people by terminating the collective rights of the people in favour of individual rights, thus eliminating the protection of reserve lands, terminating the legal status of Indian people, and delivering services to them through the provincial governments (RCAP 1996a, 187). This, in effect, aimed to destroy the nationhood of the people and reduce their status within society to that of settlers. By so doing, there would be no land claims, no Aboriginal rights, and a collective extinguishment of Aboriginal titles. This caused a major uproar among the Aboriginal people, thus several protests, as they strongly denounced the main terms and assumptions contained in the paper. The White Paper left "a legacy of bitterness at the betrayal of the consultation process and suspicion that its proposal would gradually be implemented" (RCAP 1996a, 163). This led to the Aboriginal people coming together to organize themselves politically. This also marked the beginning of the participation of Canada's Indigenous people in national and international movements. The White Paper was not passed; however, the underlying philosophy can still be seen in government policies with respect to Aboriginal people in Canada.

Aboriginal people started gathering strength to break free from some of the barriers that kept them from moving forward during the Renewal and Negotiation stage. For example, the *Indian Act of 1876* which was amended in 1920 to make it illegal for the 'Indians' to formally organize and in 1927 to prevent anyone, Aboriginal or otherwise, from soliciting

funds for Indian legal claims was changed in 1951. The *Indian Act* also mandated that Aboriginal people required permission from the federal government to access Band funds. This was also a barrier for people getting together to organize politically or to obtain funds for legal fees. However, after 1951, this situation changed. As described in the RCAP report, the role of the courts had been limited in the articulation of Aboriginal and treaty rights within the Canadian federation (RCAP 1996a, 201). This was possibly a result of the common law of England which does not include Aboriginal perspective and culture. However, the courts today still have difficulty reconciling Aboriginal concepts with Euro-Canadian legal concepts.

The Negotiation and Renewal period also marked the beginning of legal actions by the Aboriginal people and their communities against the Crown. The Supreme Court decision in the Calder case in 1973 led the federal government to establish a land claims policy and to acknowledge that Aboriginal title had indeed existed at the time of the Royal Proclamation of 1763 (*Calder v. Attorney General of BC 1973*). *R. v. Guerin* acknowledged that the federal government has a trust-like relationship or “fiduciary duty” towards First Nations specifically in regards to reserve lands (*R v. Guerin 1984*). The Court ruled, in the *Simon v. The Queen 1985* case that the Treaty of 1752 has not been extinguished and continues to be in force and remains effective. The court characterized the fiduciary relationship between the federal government Crown and Aboriginal people as being ‘sui generis’ by nature with the capacity to evolve as the Canadian society itself evolves. In other words, the federal government has the obligation to act in the best interest of the Aboriginal people and their reserve lands.

2.3 Conclusion

The unprecedented acceptance of oral evidence by the Supreme Court of Canada in the *Delgamuukw 1997* case provided some hope for Aboriginal people. The case, in a sense, can be described as charting a new course for some convergence in law and possibly true reconciliation. However, the RCAP report concluded that Aboriginal communities are now regarded not as equal partners in resource development decisions by the governments but as another interest group such as a non-governmental or an activist organization (RCAP 1996a). Nonetheless, the relationship between these communities and the governments continues to evolve. On June 11, 2008, Prime Minister Harper offered a full apology on behalf of Canadians for the residential schools system. The federal government committed lump sum payments for survivors and established The Truth and Reconciliation Commission of Canada to deal with injustices done to communities. Nevertheless, Walters cautioned that the concept of reconciliation is subject to different interpretations in legal politics (2008). Court cases involving Aboriginal communities interpreted reconciliation as relationships in *Bernard and Marshall*, and *Delgamuukw 1997*; reconciliation as consistency; and reconciliation as resignation to the current state of affairs in *Van der Peet 1996* paragraphs 19, 30, and 31(*ibid*). It remains unclear at this current stage how the Truth and Reconciliation Commission would interpret the concept of reconciliation.

Chapter 3 A review of contemporary issues facing Aboriginal communities

The current geographic location and space allotted to Aboriginal communities was granted by Europeans with an ideology that supported their own economic development, and political and military interests. This ideology created space for colonial settlers which superseded existing political, economic, and cultural systems of the Aboriginal people (Harris 2002). Furthermore, the Aboriginal space, termed 'Native Space', was created to monitor the movement of the First Nation people thereby defining them as the 'other' (ibid). Native Space is central to the identity and the continued survival of the Aboriginal communities. For the majority of First Nations people in BC, the space is governed and controlled by the *Indian Act of 1876*. In addition, the space is the geographic location of vast deposits of natural resources. Under the *Indian Act*, the ability of the First Nation people to control the space is constrained.

The settler ideology continues to shape the Aboriginal communities and their ability to transform and grow along with the mainstream society. The Aboriginal people and their communities now find themselves relegated to the socio-economic margins of Euro-Canadian society. This chapter is a review of the historical context which led to the lack of infrastructure development; Aboriginal rights and title, and failed treaty settlements; the factors that make Aboriginal communities vulnerable including perceptions and ideas on Indigenous women and their relationship with the land, and the legacy of the residential school system; and failure to build capacity. All of these are some of the contemporary issues faced by the First Nations communities in the Cariboo Chilcotin region of BC.

3.1 Historical context for the lack of infrastructure development

Prior to colonization, Aboriginal communities had extensive networks of trails which allowed them to trade with neighbouring communities. Anthropologists' reports also showed that the people traded local harvests and crafts with neighbouring communities prior to contact with Europeans (Farrand 1900, Lane 1953, Teit 1909). Teit gave a detailed account of the trade dealings of First Nations communities in the central interior of BC (1909). He described in detail how the communities traded with each other prior to the fur trade era. In his memoir of the Shuswap people, Teit stated:

Considerable trading was done by some Shuswap bands. The Canon [sic] division were the greatest traders, and acted as middlemen between the other Shuswap bands and the Chilcotin, whom they would not allow to trade directly with one another. They bought the products of both, and exchanged them at a profit. They controlled part of the Chilcotin salmon-supply, and the Chilcotin traded extensively with them. Because of their frequent trading and profit-making, the Canon [sic] Indians were a wealthy people, and gave frequent potlatches. They gave all their energies to salmon-fishing, the preparation of oil, and trading, and did very little travelling or hunting. They were almost completely sedentary, most of them living summer and winter in the same locality. Some families lived within a radius of half a mile for years. From the Chilcotin they received large quantities of dentalium-shells, some woven goat's-hair blankets and belts, bales of dressed marmot-skins, a few rabbit-skin robes, a few snowshoes of the best type, and in fact anything of value they had to give. In exchange they gave chiefly dried salmon and salmon-oil, some woven baskets of the best type, paint, and in later days horses. Indian hemp was hardly ever sold to the Chilcotin, because it was scarce; and horses were not sold until they had become plentiful among the Shuswap. (Teit 1909, 535)

Furniss gave an account of how Aboriginal people led fur traders and explorers such as Simon Fraser and Alexander Mackenzie from the central interior of BC to the coast using established trade routes (1993a). Reports showed that Aboriginal people were on horseback in 1808 when they met Simon Fraser (Furniss 1993a, *Tsilhqot'in Nation* 2007). The Carrier

and Shuswap people spoke Chinook Jargon which was the trading language with the European during the fur trade era (Furniss 1993a, Lutz 2008, *Tsilhqot'in Nation 2007*). The people were shrewd in their negotiations with the traders (Furniss 1993a, Kunkel 2008, Markey et al. 2012). Trading posts were established across BC, including Fort Kluskus, Fort Chilcotin, and Fort Alexandria in the Cariboo Chilcotin region (Furniss 1993a, *Tsilhqot'in Nation 2007*).

The discovery of gold in the mid 1800s brought large numbers of Europeans into the Cariboo Chilcotin region (Furniss 1993a). There were conflicts and wars between the natives and the Europeans over lands and rights of passage (Furniss 1993a, Hewlett 1973, Lutz 2008). This period marked the beginning of land pre-emption by Europeans for permanent settlement (Furniss 1993a, 50; *Tsilhqot'in Nation 2007*). The colonial governor, James Douglas, received instructions for land settlement from the British government and to ensure the well-being of the Aboriginal people and to protect them from oppressive measures (Tennant 1990, 27). The colonial governor had proposed English-style villages as Aboriginal communities. These reserve communities were being created as per these instructions, with help from the missionaries. However, James Douglas did not settle treaties with the Aboriginal communities except the 11 treaties he made on Vancouver Island. Harris pointed out that there was a major departure from Douglas' native land policy between his retirement in 1864 and BC joining the confederation in 1871 (2002). Douglas' successor left Joseph Trutch as the dominant policy maker. Trutch was of the opinion that the Aboriginal people did not have title. Furthermore, Trutch was prejudiced and promoted the interests of the settlers above that of the natives (Tennant 1990, 39). Reserve lands were surveyed and set aside as 'Native Space' for the First Nations people and the rest of the province for everyone else (Harris 2002). These reserves lands were at geographic locations which consisted of their

villages, grave sites, cultivated fields, and fishing grounds. The reserves were small and designed to “force the Native people into the workplace, there to learn the habits of industry, thrift, and materialism, thus becoming civilized” (Harris 2002, 265). The nature of reserve settlement created was such that the rights of the Aboriginal people were reduced to subsistence only. All resource harvesting by the Natives during their seasonal rounds were now controlled by regulations or open to competition from settlers. Natives needed permits to fish, hunt, and trap for subsistence as it was generally believed that their Aboriginal rights had been extinguished. As Europeans pre-empted lands for settlement and created new and permanent dwellings, Aboriginal people were pushed to the margins of the new Euro-Canadian society (RCAP 1996b). These reserves were not designed as permanent settlement centres; hence, there were no plans for infrastructure development or the creation of an economic base. This act was described as creating marginal and vulnerable Aboriginal communities (ibid).

Economic development is enabled by having adequate physical, human, community, and economic infrastructure (Markey et al. 2012, 53). Development infrastructure such as communication services (telephone and internet access) and transportation are often lacking in remote Aboriginal communities (Kunkel et al. 2011). Levels of literacy, both reading and writing, are typically low (Kunkel et al. 2011, Stock 2008). Inadequate housing, mental health issues, and addiction add further complexities to the multiple challenges faced by people living in these remote communities (Greenwood and Place 2009). The foundation for economic infrastructure for these remote Aboriginal communities (Table 1) is lacking. This lack of infrastructure limits the ability of First Nations communities to participate meaningfully in economic development opportunities; hence, resources are being exploited

from their ancestral lands to be processed in urban centres where the jobs and wealth are being created (Kunkel 2008, Markey et al. 2012).

Table 1: Community and economic development foundation for Aboriginal communities (Adapted from Kunkel 2008 and Markey et al. 2012)

<p>Physical infrastructure: transportation, communication (telephone and internet services), energy (electricity and heat), community/regional facilities, basic infrastructure – adequate housing, drinking water, schools and libraries.</p>	<p>Economic infrastructure: access to capital, labour force, industry network, market information, training, three-phase power supply for industry, promoting social enterprises (micro finance and Band lending packages) and social entrepreneurship (cooperatives).</p>
<p>Human infrastructure: food security, education and training (computer literacy included), health, empowering people, personal safety and security, protection from abuse, treatment and healing from abuse and trauma.</p>	<p>Community infrastructure: human capacity, leadership development, voluntary sector, culture, services, separating business from politics, effective Band governance structure and processes.</p>

The geographic location of reserve communities limits the access to education opportunities which further limits their labour force participation and opportunities for meaningful employment. The resource revenue sharing agreements created by the Province of BC, through the Forest and Range Agreement (FRA) and Forest and Range Opportunity (FRO), have so far been inadequate in addressing the lack of infrastructure in remote Aboriginal communities (Parfitt 2007). Several of these remote communities could not benefit from the forestry licenses awarded to them because of the lack of human capacity or economic development infrastructure (ibid). In his report, Parfitt described the situation with the Esket’emc community as follows:

But the problem that nations such as the Esketemc [sic] First Nation near Williams Lake confront is that they lack sufficient electrical power to even run a mill on their reserve lands. A sufficient wattage of power would require new hydro infrastructure that would, at a minimum, cost \$1 million. That cost alone would eat up more than half of the revenues provided to the Esketemc [sic] under its FRA. By the time such power was provided, the FRA would likely have expired, leaving the nation to secure a new agreement with the province and then begin shopping around for the necessary investment capital to build the mill. (2007, 27)

The Esket'emc people are not alone in this situation. The lack of adequate power supply limits the ability of the communities to attract industry partners and investment (Kunkel 2008, Parfitt 2007). However, Aboriginal communities in prime geographic locations are able to benefit from resource development opportunities. Parfitt reported on how the Osooyos Indian Band benefitted from the expansion of a ski resort within their traditional territory (Parfitt 2007). The Band is located in an area surrounded by productive agriculture, forests, and range lands and was able to develop business-sustainable ventures which are generating economic returns for its community members. This is contrary to the experience of the Tsilhqot'in people in the Nemiah valley. The inability to participate meaningfully in resource development resulted in the Tsilhqot'in Nation proceeding with court actions against the provincial Ministry of Forests (*Tsilhqot'in Nation 2007*). The lack of development infrastructure means that Tsilhqot'in people, along with other remote Aboriginal communities, have to depend on their ancestral lands for their continued subsistence and survival. This is the same story for many remote First Nations communities in the Cariboo Chilcotin region. As a result, these communities face bleak prospects of overcoming their contemporary challenges and closing the socio-economic gap between their communities and the neighbouring non-Native ones.

3.2 Aboriginal rights and title, and failed treaty settlements

The report of the Royal Commission on Aboriginal Peoples (RCAP) concluded that the social, economic, and political weaknesses of most modern Aboriginal communities stem from the failure of imperial, colonial, and Canadian authorities to respond to their request for the ability and opportunity to evolve in harmony with the growth of the settler society emerging around them (RCAP 1996a, 581). The report recommended a negotiation and renewal of relationships. The political context of the BC First Nations communities is centred on Aboriginal rights and title to lands. The assumption that Aboriginal rights and title had been extinguished in BC was challenged in court. However, the Supreme Court ruled that Aboriginal people in Canada are deemed to have rights within their ancestral lands by virtue of their ancestors' nationhood and occupancy of land prior to the arrival of settlers (*Calder 1973, Delgamuukw 1997, Laliberté et al. 2000, RCAP 1996a*). The rulings from the *Delgamuukw* and *Calder* court cases affirmed that Aboriginal rights and title have not been extinguished in BC. These rulings also established Aboriginal title as a collective and exclusive right over lands and resources held by the Aboriginal people (Grant and Sterritt 2000, *Delgamuukw 1997, Haida Nation 2004, Taku River 2004*). Furthermore, court rulings confirmed that Aboriginal title, while communal, is more than the sustenance rights to hunt, fish, gather, and trap because it comes under the doctrine of continuity from the practices, customs, and traditions of the people (ibid).

Aboriginal title is Indigenous ownership of the land and the rights to occupy, possess, and use the land and sub-surface resources for purposes desired by the community but not confined to activities carried out in 1846 (*Delgamuukw 1997, Haida Nation 2004, Taku River 2004*). The title includes an inescapable economic component. As an exclusive right, court

rulings showed that a community can exclude other users and activities, including resource exploitation for economic activities where there is Aboriginal title (ibid). However, Aboriginal title within First Nations' traditional territories is not automatic where treaties are not signed. First Nations communities have to prove their exclusive occupation of land before 1846, either through the treaty process or by litigation, in order to establish their Aboriginal title (Marsden 2005, Mills 2005, *Tsilhqot'in Nation* 2007).

In *Tsilhqot'in Nation v. British Columbia*, late Chief Justice Vickers stated that the *Forestry Act* is not applicable to lands with proven Tsilhqot'in Aboriginal title which means that the Ministry of Forests is not in a position to grant tenures on these lands (*Tsilhqot'in Nation* 2007). Furthermore, the case also proved that Crown lands with Aboriginal titles are under the jurisdiction of the federal government, not the provincial government (ibid). This case is currently being appealed at the Supreme Court of Canada. The uncertainty of who controls and has jurisdiction over lands without treaties in BC further complicates resource development in the province. Exploration permits, licenses, and tenures for resources are currently issued by the provincial government. This authority is now questionable. The settlement of this case at the Supreme Court of Canada will provide First Nations communities and resource developers with some assurance or certainty about who has the rights to use and control the resources on these lands. First Nations and resource developers view these decisions from disparate positions.

The suggested route for negotiation and renewal of relationships with BC First Nations communities is through the tri-party, six-stage BC Treaty process (BC Treaty Commission 2009a, Isaac 2004, Mills 2005, PBC 2013a). This process was initiated following the *Calder 1973* court case, which was described as being the lynchpin for the

Government of Canada's comprehensive claim policy (PBC 2013a); however, a third of BC First Nations communities chose not to participate, believing it would extinguish their Aboriginal rights (Mills 2005).

The six-stage tri-partite treaty process in BC is time consuming and expensive. Some people doubt that these negotiations are conducted in good faith because the communities that have successfully completed the process end up with less than 10% of their claim area (Kunkel 2008, Marsden 2005, and Mills 2005). However, it is believed that the BC treaty will remove the constraints of the *Indian Act of 1876*. The basic premises of this Act were that the Aboriginal people were wards of the federal government and were incapable of managing their lands, their lives, and communities (Coates 2008). As a result, the Act imposes constraints on the Aboriginal people, their communities, and their lands; in addition, it delegates authority and control over their affairs to federal civil servants. The treaty process is currently the only path available to self-governance for the people. The Nisga'a Nation was the first to sign a modern treaty agreement in BC prior to the six-stage tri-partite process. Since then, two other Nations -- the Maa-nulth and Tsawwassen First Nations have signed treaty agreements under the six-stage tri-partite process (BC Treaty Commission 2012). The Nisga'a chiefs initiated the land claim process back in 1887 but were denied resolution until after the *Calder 1973* court case (PBC 2013a). As a Nation, the Nisga'a people entered into the treaty process in 1973, first with the federal government, and the provincial government later joined in 1990. What became the first historic BC modern treaty was signed by the Nisga'a Tribal Council in April 1999. This settlement included self-government, the transfer of 2,000 km² of Crown land to the Nisga'a Nation, the establishment of Bear Glacier

Provincial Park, and a 300,000 cubic decameter water reservation. This treaty became law and took effect in May 2000.

The Tsawwassen and Maa-nulth First Nations are both at the implementation stage, stage six, of the tri-partite treaty process. The Tsawwassen First Nation entered into the treaty process in 1993 and signed the final agreement in June 2008. The final agreement included self-government in addition to 724 hectares of land in fee simple of which 434 hectares were provincial crown land and 290 hectares were former reserve lands; 10,000 km² for land title and rights to harvest migratory birds, wildlife, and plants; and an agreed percentage of total annual Fraser River sockeye catch and fishing opportunities for non-commercial crabs (Minister of Aboriginal Affairs 2013). This took effect in April 2009. This historic treaty was the first urban treaty in BC and also the first modern Treaty under the tri-partite BC Treaty process. The Maa-nulth First Nations started the six-stage treaty process in 1994. Maa-nulth represents five bands, the Huu-ay-aht, Kyuquot/Checlesseht, Toquaht, Uchucklesaht and Ucluelet First Nations. Collectively, Maa-nulth Nations signed the final agreement in June 2009. This final agreement included jurisdiction over and ownership of approximately 24,498 hectares of land of which 22,342 hectares were provincial Crown land, 2,064 hectares were Indian reserve land, and the remaining 92 hectares were purchased as private land (PBC 2013c). The Maa-nulth Final Agreement was the first modern-day treaty on Vancouver Island and took effect in April 1, 2011. These two treaties, Tsawwassen and Maa-nulth, are currently being implemented and set the stage for other communities to follow or not, depending on the outcomes.

There are six First Nations currently at stage five of the BC Treaty process. Two of these, Tla'amin (Sliammon) and Yale First Nations, have signed their final agreements and

are waiting for it to be ratified. However, not all final agreements lead to treaties. The Lheidli T'enneh Band entered the BC treaty process in 1993 (PBC 2013a). In July 2003, the three parties, namely Lheidli T'enneh Band and the federal and provincial governments, signed an Agreement in Principle which enabled them to negotiate a Final Agreement in 2006. The agreement package included 4,330 hectares of land. The Lheidli T'enneh community voted against the agreement in 2007. This stalled the treaty process for the Nation. It should be noted that there is no other path to self-government for communities who enter into the treaty and discover that it does not serve their purpose. While the Lheidli T'enneh stalled at stage-six of the process, there are several other communities who did not make it so far. It is still unclear if there is a course of action, or the forgiveness of loans, for money borrowed by the communities to participate in the treaty process. The expense accrued for withdrawing is high.

There are 44 nations in stage four of the six-stage process. Some of these have signed Incremental Treaty Agreements in advance of final treaties. The Incremental Treaty Agreements advance treaty-related benefits such as land transfer for economic purposes to First Nations communities. In addition to these 44 nations, two nations are in stage 3 and an additional six are in stage 2. All of these represent a small fraction of the 200 First Nations communities in BC. Meanwhile, the Tsilhqot'in Nation, representing six communities, went through the court system in an attempt to settle their land claims (*Tsilhqot'in Nation 2007*). The court case was an amalgamation of various court actions taken against companies in the forestry industry and the BC Ministry of Forests (Personal communication with Roger William 2013). The Nation proved Aboriginal title to about 200,000 hectares or more than 40% of land in an area representing about 5% of their traditional territory in the Nemiah

Valley. It should be noted that while the court system proved Tsilhqot'in Aboriginal title to about 200,000 hectares of land, this system will not give the people self governance or free them from the constraints of the *Indian Act of 1876*. In spite of the proofs, late Justice Vickers of the BC Supreme Court denied the request for a declaration of Aboriginal title, given the all-or-nothing nature of the pleading. The Appeal Court of BC upheld Justice Vickers' decision in 2010. This case was heard at the Supreme Court of Canada on November 07, 2013, and the community is awaiting the verdict. The case is being watched carefully as it is another landmark case on Aboriginal title and highlights the potential disparity in land settlement through courts system versus the current treaty process.

3.3 Factors that make Aboriginal communities vulnerable

The history of Aboriginal peoples and settlers' relationships is quite complex. Assimilation policies within which these relationships were built have created vulnerable Aboriginal communities to this day (Frideres 2011, Lutz 2008, RCAP 1996a, Wilson and McDonald 2010). Aboriginal peoples are regarded as wards of the federal government; however, there has been very little investment in community and economic infrastructures for their communities. Consequently, the people are forced to depend on handouts, thus creating the dependency society (Lutz 2008, RCAP 1996a). With tight regulations on harvesting resources such as fish and wildlife, a significant number of First Nations people depend on government transfers and welfare cheques for income, resulting in the creation of the stereotyped 'lazy Indian'.

Assimilation policies such as the residential school system which was designed to 'civilize' Aboriginal people have caused contemporary issues. In addition, resource development activities such as logging and forestry activities have resulted in the building of 1000s of kilometers of roads in rural and remote regions used by First Nations communities (Kew 1974). The impact of forestry activities and resource development has limited the ability of the people to continue to practise their traditional activities at pertinent locations, thus resulting in the loss of aspects of their cultures. Furthermore, these resource development activities were not designed to create an economic base at the locations, but to provide employment for urban areas.

The remote and undesirable location of reserve lands has caused high poverty levels, high unemployment rates, and low educational attainments within the communities (Markey et al. 2012, Miller 1996, Milloy 1999). Furthermore, census information shows that 39% of houses on reserves in BC are in poor condition and in need of major repairs (Statistics Canada 2007). The results of high poverty levels and inadequate housing within the communities have led to chronic diseases, mental health issues, and addictions. Aboriginal communities have become increasingly vulnerable to social and economic marginalization as a result of the cumulative impact of population decline due to foreign diseases, the residential school systems designed to assimilate, and resource development activities which limit their ability to practise their culture on the land at pertinent locations.

3.3.1 The legacy of the residential school system

The *Constitution Act of 1867* assigned the responsibility of the Aboriginal people and their lands to the federal government. The government chose to adopt policies designed to assimilate Aboriginal people. Educational systems, social policies, and economic development plans were crafted without consulting the people. The residential school policy was designed “to move communities, and eventually all Aboriginal peoples, from their helpless ‘savage’ stage to one of self-reliant ‘civilisation’ and thus to make in Canada but one community – non-Aboriginal, Christian one” (RCAP 1996a, 309). Ethnocentric philosophies that deem the superiority of ‘civilized’ Europeans above ‘uncivilized,’ even ‘savage’ Aboriginal peoples have led to policies such as the residential school system which was a joint government and church program (RCAP 1996a, 171, 578). The residential school program started in 1849. The program included boarding schools for children between the ages of eight and fourteen, and industrial schools near urban centres to train older children in trades. At the peak of the program, there were up to 80 of these schools. Amendments to the *Indian Act* in 1920 made it illegal for parents to keep their children from attending residential schools. The penalties varied from fines to imprisonment. The school was to be a ‘Canadian home’ for the children. The system was designed to ‘remove the Indian in the child’. It was meant to be a threshold into the non-Aboriginal world, where Aboriginal languages were forbidden, where the children had their long hair cut or shaved, dressed in European clothing, did their daily routine by clocks and church bells rather than the seasonal rounds of hunting and gathering, and the children celebrated church and state festivals such as Christmas and Dominion Day. Regardless, the system left a legacy of failed assimilation and displacement:

The [forced] removal of children from their homes and the denial of their identity through attacks on their language and spiritual beliefs were cruel. But these practices

were compounded by the too frequent lack of basic care — the failure to provide adequate food, clothing, medical services and a healthful environment, and the failure to ensure that the children were safe from teachers and staff who abused them physically, sexually and emotionally. In educational terms, too, the schools - day and residential - failed dramatically, with participation rates and grade achievement levels lagging far behind those for non-Aboriginal students. (RCAP 1996a, 172)

The three-stage plan – separation, socialization, and assimilation through enfranchisement⁴ - was a failure, which no doubt set the stage for the Aboriginal communities as we know them today. The effects of this school system were far reaching. The continuing negative impacts include Residential School Syndrome (RSS), alcohol addictions leading to Fetal Alcohol Syndrome Disorder (FASD), violence, and loss of language and culture in communities (Brasfield 2001, Miller 1996, Milloy 1999). While the adults suffer from RSS, the younger generation of Aboriginal people inherited intergenerational trauma as a result of the experiences of their parents. The system produced traumatized graduates who are now called ‘residential school survivors’. The graduates were not well educated and could not participate in employment within the settler society. On returning to their communities, these people had become displaced as most had lost their language and culture. This has resulted in generations of unemployed people within rural and remote communities.

The health and social issues in the Aboriginal communities include mental health problems and addictions to drugs and alcohol. This legacy continues to plague Aboriginal people and their communities across Canada today through intergenerational transfer of trauma and fetal disorders (Fournier and Crey 1997, 208; Frideres 2011, 93). Fournier and Crey described Aboriginal youth as being disadvantaged from birth (1997, 208). In order to

⁴ Enfranchisement is a legal process through which Aboriginal people give up their Indian status.

succeed, these young people have to overcome barriers such as systemic racism, discrimination, and higher rates of illness, disease, substance abuse, school dropout levels, and unemployment (ibid). It is believed that the forcible removal of children from their families to attend the residential schools resulted in the inability of parents to fulfil their traditional roles of parenting and passing on their culture to the younger generation (Milloy 1999, RCAP 1996a). Furthermore, the policy of removing Aboriginal children from their homes and placing them into foster homes or adoption with non-Aboriginal families, and in some cases placement in correctional facilities or welfare agencies was implemented by the government following the failure of the residential school system (RCAP 1996a, 323). As a result of the RCAP report, a public inquiry was held which led to the formation of The Truth and Reconciliation Commission of Canada. This Commission was established in 2008 with a mandate to acknowledge residential school experiences, impacts, and consequences. In addition, the Commission had to provide a holistic culturally appropriate and safe environment for former students to come forward and share their experiences. Furthermore, the federal government established a 'Common Experience Payment' fund in 2007 to compensate people who had attended residential schools with additional money for those who suffered abuse. In addition, Prime Minister Stephen Harper offered an apology on behalf of all Canadians for the Indian residential schools system on June 11, 2008. Some of the churches involved, along with the Royal Canadian Mounted Police, also offered their apologies to the families of those who attended residential schools. Needless to say, the impacts of the schools on the communities are ongoing and it will take much more than apologies and monetary compensations to restore these people and their future generations back to health and wellbeing.

3.3.2 Indigenous women and their relationship to the land

Indigenous women have the most knowledge of traditional forest food items, their nutritional value, and their use as herbal medicinal plants (Roy 2004). These women play a key role in transmitting oral culture and traditions from one generation to another (FIMI 2006, RCAP 1996c, Roy 2004, Sen and Grown 1987). The International Indigenous Women's Forum (FIMI: Foro Internacional Mojero Indigenai) reported on violence suffered by Indigenous women as a result of neoliberalism and development on their ancestral lands (2006). The report coined the term 'development aggression' to emphasize the nature of aggression faced by the people as a result of the implementation of large projects (ibid). Development aggression includes forced displacement, ecological degradation of their territories, loss of spiritual connection, and armed conflicts (FIMI 2006, Sen and Grown 1987). The impact of physical displacement of women from their ancestral territories includes the loss of their production base which has led to economic and cultural dislocation. The FIMI report showed that Indigenous women also experience gender-based violence both within their communities and outside as a result of development aggression (2006). Other reports also confirmed that women bear the burden of land dispossession more disproportionately than men (Roy 2004, Sen and Grown 1987). With the loss of their land, Indigenous women also lose control over the natural resources that have been their survival resources since birth (ibid). Changes to the land threaten food security and health of these women and consequently their families. The degradation of natural forests also leads to the extinction of many plants which serves both as medicine and food for the people. The Traditional Ecological Knowledge (TEK) of their natural resources held by these Indigenous

women is also lost. Without their lands, Indigenous people cannot survive and potentially face cultural extinction (Roy 2004, FIMI 2006). Indigenous women, in particular, face ongoing violence in addition to social, economic, and political marginalization both at home and in urban centres. Some believe that development projects on Indigenous lands aimed at improving the economic conditions of communities tend to further marginalize these women.

As Indigenous cultures are intricately linked to their ancestral lands, the migration of Aboriginal women would certainly have an impact on the survival of their cultures. There are physical and spiritual dimensions to these linkages to ancestral lands (Roy 2004, FIMI 2006). A higher percentage of Aboriginal women between the ages of 24 and 35 now live off-reserve in Canada rather than on-reserve (Norton 2008). Challenges faced by Aboriginal communities in Canada, and their women in particular, are no different from other Indigenous communities worldwide (FIMI 2006, RCAP 1996c, Roy 2004). The linkages between Aboriginal cultures, their values, and nature are interwoven and cannot be easily separated. Stories and testimonies from First Nations people, including court case witnesses, affirmed that their connection to the land is a value shared by many communities in BC (*Delgamuukw 1997, Tsilhqot'in Nation 2007, Mills 2005*). Berkes described this connection to land as more than a physical landscape (1993). Indeed, land is seen as a living environment; however, Aboriginal people are moving off the land by migrating to urban centres (Berkes 1993, Bulizuk 2011). These migrations are not without challenges. Off-reserve, Aboriginal people face challenges such as high unemployment, low education attainment, lower income rate, marginalization, and ultimately increased hardship (Bulizuk 2011, Kashaninia 2011, Stock 2008). Moving off reserve does not guarantee these women better employment prospects.

3.4 Failure to build capacity

Albert Memmi, in his analysis of the colonized and the colonizer, described the settlers' position as being privileged by institutions, customs, and people (Memmi 1965). The intent of the residential school system was to assimilate Aboriginal people by changing the culture of the younger generation to that of the settler society, thus building their capacity to participate in the new colonial economies (Milloy 1999, RCAP 1996a). Colonial jobs were designed for the settler cultures with qualifications that the Natives typically do not possess (Memmi 1965). Despite the industrial training and education in Christian values, the residential schools did not provide the qualifications for the Aboriginal people to fully participate in the new colonial economies surrounding them. Consequently, Aboriginal people and their communities remain marginalized by comparison to the mainstream Euro-Canadian economic and social systems (Greenwood 2005, Stock 2009, Wilson and Macdonald 2010). It has been over 15 years since the RCAP report made the recommendations for increased educational attainment and for better housing conditions, today, Aboriginal communities still lag behind the settler society (Kashaninia 2011, Stock 2009, Wilson and McDonald 2011). The 2006 census showed that 43% of Aboriginal people aged 25 to 64 living on reserves in BC have not completed high school. This lack of a high school diploma is a major contributor to the high unemployment rates faced by the communities. In 2006, the unemployment rate on reserves was 24% for the same age group, while for off-reserve Aboriginal people it was 16.9% with non-Aboriginal people at 5% unemployment. With the 2008 economic downturn, the gap in labour force participation and unemployment rates between off-reserve Aboriginal population and the non-Aboriginal population widened as shown in Figures 5 and 6.

Since 2008 the labour force participation rates are declining for the Aboriginal population

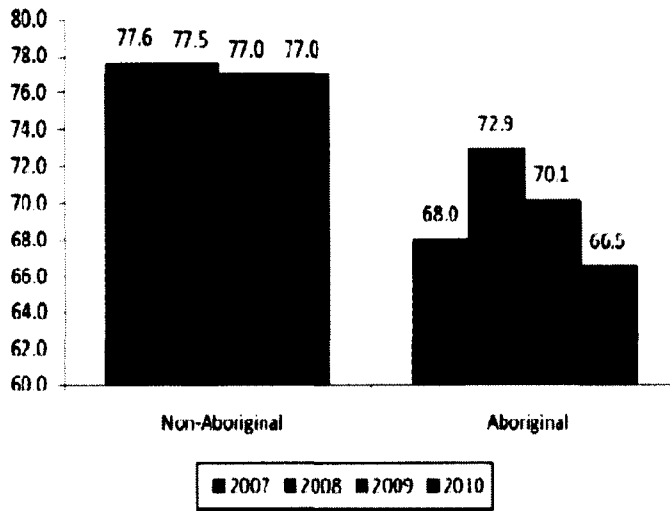


Figure 5: Off-reserve 2010 labour force participation (Bulizuk 2011)

The unemployment rate gap widens between the Aboriginal and non-Aboriginal population between 2008 and 2010

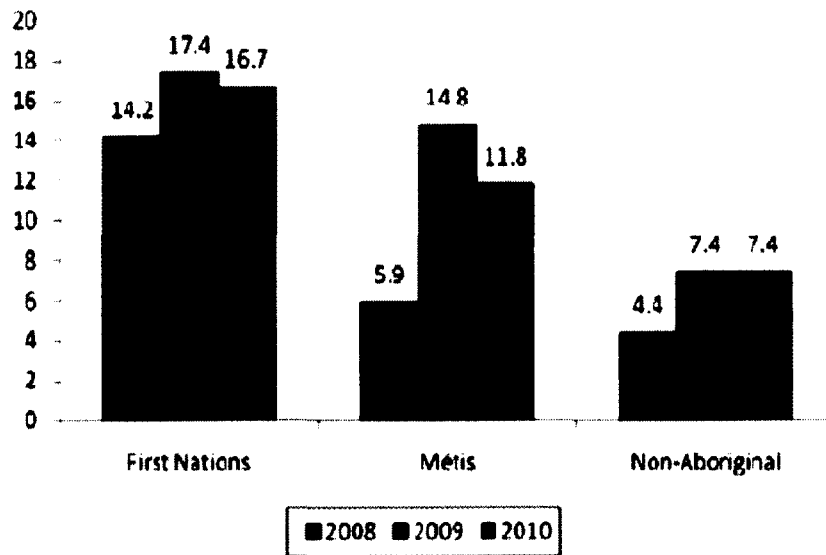


Figure 6: Off-reserve 2010 unemployment rate (Bulizuk 2011)

This failure to build capacity continues to marginalize the Aboriginal communities. It is alarming that it could take up to 63 years to close this gap (Wilson and Macdonald 2010). Factors such as educational attainments, gender, size and location of community, and industry all play a significant role in improving labour market outcomes as shown in the 2006 census data. Nevertheless, Wilson and Macdonald found that educational attainment only matters where an Aboriginal person has a Bachelor's degree or higher (2010, 3, 4). Regrettably, only 8% of Aboriginal peoples have earned a Bachelor's degree or higher by comparison to 22% of Euro-Canadians. First Nations people living on-reserve without a high school diploma face the lowest employment rate in the province. Despite the same educational attainment, on-reserve First Nations people face higher unemployment rates compared to other British Columbians. For similar occupations and the same educational attainments, BC Aboriginal people reported lower earnings than their non-Aboriginal counterparts (Statistics Canada 2007, Stock 2009).

The socio-economic gap of First Nation reserves in the Cariboo Chilcotin region of BC is of particular interest in this study. First Nation reserves make up 0.36% of the Cariboo Chilcotin region's landmass (BC Stats 2008). In 2006, this region had a population of 62,190 of which 9,090 are of Aboriginal ancestry (Statistics Canada 2007). This represents 14.6% of the Cariboo Chilcotin population. The traditional territories of the Northern Shuswap, Chilcotin, and the Southern Carrier people encompass the entirety of this region. There are 15 Bands represented in the region with a total of 78 reserves.

The 2006 census revealed that there are significant inequalities in Aboriginal education. Table 2 shows the trends in education attainments for some selected communities in the region as compared with all British Columbians and the total on-reserve population for

the years 1996, 2001, and 2006. The education data for some First Nation people within the Cariboo Chilcotin communities are not available due to the relative small population of these communities. Moreover, other communities did not participate in census surveys (Statistics Canada 2007). While people in communities such as Esket'emc and Canim Lake have educational attainments well above the total on-reserve figures, other communities such as Xení Gwet'in and Ulkatcho do not.

People with Aboriginal identity in the Cariboo Chilcotin region face bleak employment prospects. The trend for the region has been high labour force participation and unemployment rates (Statistics Canada 2007). Table 3 shows that the labour force participation of some of the Aboriginal communities is comparable to that of the Cariboo Chilcotin region as a whole; however, the First Nation communities experience very high unemployment rates and low employment figures as shown in Table 4. Although a high percentage of First Nation people aged 15 and over participated in the labour force for the years 1996, 2001, and 2006 as compared with on-reserve participation rate in BC, the unemployment rate remains significantly high (see Table 4). While the reported unemployment rate in the region for the year 2006 was 6% and that of the total on-reserve Aboriginal population was at 25%, the Cariboo Chilcotin First Nations communities reported a higher than average unemployment rate, with the exception of the Tl'etinqox-t'in Nation where the reported participation rate was low at 16.9%, employment rate was 14.5%, and unemployment rate⁵ was 14.3%.

The reported earnings by on-reserve First Nations people in the Cariboo Chilcotin region were significantly lower than that of other British Columbians for the census years as

⁵ Participation, employment, and unemployment rates are expressed as percentages of the total population 15 years of age and older.

shown in Table 5. Most communities reported even lesser earnings when compared with the average earnings in the region for the year 2000. A higher percentage of people on-reserve, in the region, depended on government transfer incomes. The majority of these First Nation communities are in remote locations and are at considerable distances from service centres (see Table 6). These distances from service centres, primarily Williams Lake, and the low education attainments are major contributors to the high unemployment rates being experienced at these communities.

Table 2: Trends in postsecondary qualification attainments of some First Nations communities in the Cariboo Chilcotin region
(Statistics Canada 2007)

	Total population aged 25 to 64, 1996	Population aged 25 to 64 with postsecondary qualifications, 1996	Total population aged 25 to 64, 2001	Population aged 25 to 64 with postsecondary qualifications, 2001	Total population aged 25 to 64, 2006	Population aged 25 to 64 with postsecondary qualifications, 2006
British Columbia	2,022,390	1,054,980	2,144,050	1,209,655	2,284,470	1,410,995
%		52.17		56.42		61.76
On-reserve British Columbia	19,325	6,110	21,950	7,730	24,845	9,230
%		31.62		35.22		37.15
Cariboo Chilcotin Region	53,045 ⁶	22,210				
%						
Canim Lake Band	110	50	125	50	130	80
%		45.45		40.00		61.54
Canoe Creek Indian Band	65	10	95	30	110	40
%		15.38		31.58		36.36
Esket'eme First Nation	170	70	205	75	190	95
%		41.18		36.59		50.00
Tl'etinqox-t'in	-	-	185	45	290	30
%	-	-		24.32		10.34
Ulkatcho First Nations	95	10	-	-	215	25
%		10.53	-	-		11.63
Xeni Gwet'in First Nation	75	25	80	25	80	15
%		33.33		31.25		18.75

⁶ Total of all persons 15 years and over excluding institutional residents.

Table 3: Trends in labour force participation of some First Nations communities in the Cariboo Chilcotin region (Statistics Canada 2007)

	British Columbia	On-reserve British Columbia	Cariboo Chilcotin region ⁷	Xeni Gwet'in First Nation	Canim Lake Band	Canoe Creek Indian Band	Esket'emc First Nation	Tl'etinqox-t'in	Ulkatcho First Nations
Labour force participation rate %, 1996	66.4	58.8	69.0	59.1	58.8	60.0	59.6	-	39.4
Labour force participation rate %, 2001	65.2	58.5	68.2	72.7	60.6	55.6	60.3	52.7	-
Labour force participation rate %, 2006	65.6	57.1	65.6	69.6	61.5	56.8	57.4	16.9	56.1

⁷ This number includes off-reserve Aboriginal people

Table 4: Labour force participation for the year 2006
(Statistics Canada 2007)

	British Columbia	On-reserve British Columbia	Cariboo Chilcotin region	Xeni Gwet'in First Nation	Canim Lake Band	Canoe Creek Indian Band	Esket'enc First Nation	Tl'etinqox- t'in	Ulkatcho First Nations
Total population aged 15 and over	3,394,910	37,220	50,765	115	195	185	305	415	330
In the labour force	2,226,385	21,235	33,285	80	115	100	175	70	185
Employed	2,092,770	15,925	29,935	50	85	75	120	60	125
Unemployed	133,615	5,305	3,345	25	30	25	55	10	60
Not in the labour force	1,168,530	15,985	17,485	35	75	85	135	350	145
Participation rate %	65.6	57.1	65.6	69.6	61.5	56.8	57.4	16.9	56.1
Employment rate %	61.6	42.8	59.0	43.5	43.6	37.8	39.3	14.5	36.4
Unemployment rate %	6.0	25.0	10.0	31.3	29.2	28.6	28.6	14.3	32.4

Table 5: Trends in earnings of some First Nations communities in the Cariboo Chilcotin region
(Statistics Canada 2007)

	British Columbia	On-reserve British Columbia	Cariboo Chilcotin region	Canim Lake Band	Canoe Creek Indian Band	Esket'eme First Nation	Tl'etinqox-t'in	Ulkatcho First Nations
Population aged 15 and over median earnings (in constant 2005 \$), 1995	26,875	12,185	-	12,208	-	17,984	-	-
Population aged 15 and over median earnings (in constant 2005 \$), 2000	28,147	13,450	19,521	-	15,264	17,344	6,732	-
Population aged 15 and over median earnings \$, 2005	25,722	13,267	35,275	9,675	10,112	11,616	8,096	10,400
Avg. total income \$ (2000)				-	14,922	15,622	11,381	-
Average earnings (2000)	31,544	-	27,869	-	14,127	16,782	11,963	-
Earnings as % of income	75.8	-	78.4	-	74	66	66	-
Gov't transfer as % of income	11.8	-	13.6	-	26	30	32	-
Other money as % of income	12.4	-	8.0	-	1	4	2	-
Avg. total income \$ (2005)		-		13,937	15,124	14,480	9,741	13,333
Average earnings (2005)		-		15,645	15,398	15,702	14,816	17,671
Earnings as % of income	75.1	-	76.1	71	70	73	65	75
Gov't transfer as % of income	10.7	-	13.4	30	26	24	34	24
Other money as % of income	14.2	-	10.5	1	2	3	2	1

Table 6: Cariboo Chilcotin First Nation communities: Population and distance from service centres

Band	Other name	Tribal Council affiliation	Total registered population ⁸ 2011	Total registered population ⁹ Jan 2013	Nearest Service Centre ¹⁰ and distance from the main reserve ¹¹
?Esdilagh	Alexandria	TNG	179	191	Quesnel: 33.5 km
Esket'emc	Alkali Lake	Independent	824	892	Williams Lake: 50 km
Lhoosk'uz	Kluskus Band	CCTC	208	210	Quesnel: 160 km
Lhtako Dene	Red Bluff	CCTC	162	167	Quesnel: In town
Nazkot'en	Nazko	Independent	359	367	Quesnel: 100 km
Stswecem'c/Xgat'tem	Canoe Creek Band/Dog Creek Band	NSTQ	709	724	Williams Lake: 52 km
T'exelc	Williams Lake Band	NSTQ	683	733	Williams Lake: 7.5 km
Tl'etinqox-t'in	Anaham	TNG	1495	1537	Williams Lake: 102 km
Tl'esqox	Toosey	TNG/CCTC ¹²	305	317	Williams Lake: 47 km
Tsi Del Del	Alexis Creek	TNG ¹³	637	657	Williams Lake: 112 km
Tsq'escen'	Canim Lake Band	NSTQ ¹⁴	580	591	Williams Lake: 123 km
Ulkatchot'en	Ulkatcho	CCTC	988	1014	Williams Lake: 319 km
Xat'sull/Cm'etem	Soda Creek/ Deep Creek Band	NSTQ	390	409	Williams Lake: 34.4 km
Xeni Gwet'in	Nemiah	TNG	412	419	Williams Lake: 233 km
Yunesit'in	Stone	TNG	423	439	Williams Lake: 111 km
	Total	15	8354	8667	

⁸ 2011 These figures are constantly updated and were obtained in 2011 from the INAC 2011 website (now known as AANDC).

⁹ 2013 Population figure (AANDC 2013).

¹⁰ AANDC 2013.

¹¹ Distance using Google maps

¹² CCTC: Cariboo Chilcotin Tribal Council.

¹³ TNG: Tsilhqot'in National Government.

¹⁴ NSTQ: Northern Shuswap Tribal Council also known as Northern Secwepemc te Qelmuw.

3.5 Conclusion

Aboriginal communities are seeking self-determination and self-governance to free themselves from the constraints of the *Indian Act of 1876*. However, the tri-partite BC Treaty process is the only route available to achieving this and it requires relinquishing rights to over 90% of their traditional territory. Despite the fact that this process is costly and time consuming, three BC communities have signed treaties and are implementing them. This of course is a mere fraction of the 200 First Nations in BC. In addition, there is no recourse for communities that are unable to achieve their goals through this process.

Through self-determination and self-government, Aboriginal people hope to rid their communities of high unemployment and the low educational attainments that currently plague them. In addition, the people are seeking to create economic opportunities that will close the socio-economic gap between their communities and the mainstream society. Until that is achieved, the people will continue to depend on the Native Space for food security, their health, and continued wellbeing. In addition, these resource rich locations will remain subject to the dominant political and economic powers introduced by the settler society.

Chapter 4 Methodology and methods

This chapter introduces the hybrid methodology, Indigenous and Western, and the mixed methods used in this study. The first section provides essential context and background information for the Indigenous research methodology approach taken for this study. This methodology guided the data collection approach, the analysis, and theory development. Subsequent sections describe the data collection phases, which consisted of two teleconference calls, a field trip to visit sites with geothermal resource development, two focus group events, participation in a federal environmental assessment for a proposed mining development, review of court case document and transcripts from the Environmental Assessment Panel Hearings, participant observation, 'chats', and semi-structured interviews. Community participation and the ethics of working with Aboriginal communities are also discussed in this section.

4.1 Hybrid Indigenous research: Situating my Afrocentric position

The validity of research methods and methodologies in the social science field is an ongoing debate in academia. Some researchers have used hybrid or mixed approaches to accomplish Indigenous research (Botha 2011, Hoffman 2005, Ospina et al. 2008). Botha described his use of hybrid methods as mainstream accommodation of Indigenous knowledge on Western terms (2011). However, other researchers argued for decolonizing methodologies which can offer opportunities for cross-cultural exchange of knowledge within an Indigenous perspective and in context (Absolon and Willett 2005, Howitt 2002, Louis 2007, Swisher

1998, Tuhiwai Smith 1999, Wilson 1998 and 2001). Wilson argued that decolonizing methodologies are not effective for Indigenous research because they are attempts to insert Indigenous perspectives into the Western paradigm without removing the underlying epistemology and ontology within which the paradigm is built (2008, 39). Glaser and Strauss encouraged researchers to be creative in generating theory (2009, 8). Ospina et al. rejected the notion of a single universal set of procedures which is applicable to investigations of all kinds, irrespective of the subject matter or interests involved, and used hybrid designs that combined elements of action research and traditional interpretivist qualitative research (2008). They argued for methodological democracy (ibid).

While the decolonizing of methodologies debate is ongoing, Indigenous researchers are calling for a paradigm shift that recognizes and authenticates Indigenous epistemology, ontology, and axiology.¹⁵ The ongoing debate suggests that further work is required to define the epistemology, ontology, and axiology on which a decolonized methodology should be based. Absolon and Willett defined decolonizing methods as using research methods that better reflect Indigenous worldviews (2005, 122). Wilson further expanded on the importance of researchers developing alternative ways of answering questions (2008). He suggested that methods can be borrowed from other paradigms as long as they fit the ontology, epistemology, and axiology of the Indigenous paradigm (Wilson 2008, 39). Saavedra and Nymark urged researchers to step out of their Western frame of mind and into a hybrid and multidimensional mode of thinking (2008). In their works, Saavedra and Nymark used methods which allow epistemological mutations and gave them the ability to expand or fragment theoretical and methodological boundaries to fit their specific circumstances (ibid).

¹⁵ Axiology is used in the context as Indigenous ethics and relational accountability in research (Wilson 2008, 77).

Quayson argued for postcolonial methodologies which attempt to formulate non-Western modes of discourse without challenging the West (2000). Indeed postcolonial projects seek to alert and address imbalances and injustice around the world regardless of the location, i.e. the colonies or otherwise (ibid). The point of departure from colonization is uneven in countries around the world (Childs and Williams 1997). Furthermore, what do post-colonization methodologies look like with ongoing internal colonization? Anderson and McCann proposed a post-colonial feminist perspective as one which seeks to represent how race and the racialized 'other' are constructed within particular historical and colonial contexts (2007). Indigenous methodologies can be regarded as postcolonial as they provide systematic ways of examining historically situated social relations that have created oppression. However, some researchers are suspicious of postcolonial methodologies; they argued that it is another strategy to overlook important values such as spirituality, sovereignty, and Indigenous ways of knowing (Getty 2010). Grande pointed out that rendering the "choice" of whether to employ Western research methods in the process of defining Indigenous methodologies is essentially moot (2008). Grande also advocated for a less anthropocentric but revolutionary critical praxis that is participatory and creative, and articulates a view of land and natural resources (2008).

The work of Tuhiwai Smith emphasized the struggles faced by Indigenous peoples to have their voices heard and to be represented by their own (1999). However, defining Indigenous people can be problematic. The United Nations described Indigenous peoples as the descendants of those who inhabited a country or a geographical region at the time when people of different cultures or ethnic origins arrived (General Assembly of the United Nations 1995 – 2004). United Nations preferred not to define who Indigenous people are, but

rather for the people to self identify (ibid). The organization believed that this is the most fruitful approach because Indigenous people vary depending upon geographical and cultural location (General Assembly of the United Nations 1995 – 2004).

The term Indigenous is often used for the Aboriginal peoples in the Americas, New Zealand, and Australia. However, there are similarities between indigenous cultures both in the Americas and in Africa. The Yoruba tribe from West Africa, my ancestral homeland, has some similarities with the First Nation cultures in Canada (Kunkel 2008). Through my work with the Nazko and Esket'eme First Nations people between 2006 and 2008, I discovered that the oral traditions and cultures of the Yoruba people are similar to those of First Nations people (Kunkel 2008). Some of these similarities include belief systems, ways of knowing, and the transfer of culture from generation to generation through oral traditions and stories (ibid). In addition, the Yoruba elders pass down the customs and knowledge through poems, wise sayings, proverbs, folk tales, and riddles orally. These ways of transferring culture and traditions are similar to those of the First Nations people here in Canada. My African traditional upbringing was situated in the ancient 'omoluwabi' paradigm and social context. This Yoruba paradigm, 'omoluwabi,' seeks to create self-actualized beings, through oral teachings using stories, legends (mythologies), parables, proverbs, and sayings (Adeniji-Neill 2011). Through education and religious beliefs, I have become 'dis-located' from my ancestral culture. Furthermore, I am not situated within the geographic location or the social context of the Yoruba culture. The term 'Afrocentricity' was coined by Molefi Asante (2003). In his theory of social change, he used the term to describe Africans who are not situated in their place of origin (Asante 2003). He described these Africans as dis-located. He further stated that these people have lost their cultural footing and have become 'other than their political origins' hence 'dis-oriented' and 'de-centered'. However, working with the

Aboriginal people here in Canada and immersing myself in their cultures has created an 'awakening' of my own 'Indigenous' African upbringing. In addition, the Aboriginal people in the Cariboo Chilcotin acknowledge my African Indigeneity as a commonality and often enquire about the colonial experiences of Africans. The internal colonization of the Aboriginal people is still subject to the ongoing debate of the decolonized or post-colonial 'other'. With this in mind, I have conducted this research within an Afrocentered-Indigenous paradigm.

4.2 Critical race feminist, Black feminist and Indigenous research

In trying to situate a female Afrocentric position within existing research methodologies, I realize that my choices are postcolonial methodologies such as critical race feminist, Black feminist, or Indigenous feminist. It should be noted that male supremacy and capitalism are defined as the core relations determining the oppression of women today by the Feminist movement (Eisenstein 1979). Although feminism is diverse and multifaceted, some of the perspectives represented include Marxist, existentialist, liberal, radical, socialist perspectives (Eisenstein 1979, Hartstock 1979, Wendell 1987). Essentially, these perspectives profess to abstract subjugated knowledge and proceed from a point of the oppressed 'other'. However, critical methodologies seek forms of praxis and inquiry that are emancipatory and empowering (Brown and Strega 2005, Denzin and Lincoln 2008). Furthermore, feminist researchers generally seek to represent the lives and experiences of 'White' middle-class women (Collins 1986, Few 2007). Black intellectual women take this a step further by their creative use of marginality to produce 'Black feminist' thoughts that reflect a specific standpoint on self, family, and the society (ibid). Collins defined Black

feminist thoughts as consisting of ideas produced by Black women that clarify a standpoint of and for these women (1986). Few (2007), on the other hand, defined Black Feminism as a position of being Black and being a woman. Black feminists specifically speak to the experiences of African American women from a political standpoint (Collins 1986, Combahee River Collective 1979, Few 2007). Few (2007) argued that Black feminists are not 'White women with colour,' or 'Black men with gender,' rather they are activists raising consciousness about the lives of Black women and empowering them.

Indigenous feminists are seeking self-determination and emancipation from constraints such as colonization and neoliberalism (FIMI 2006, Huhndorf and Suzack 2010). However, critical race feminists contextualize the socio-historical experiences of any racial and/or ethnic group and tackle global legal and economic problems for those groups (Few 2007). The critical race feminist position, therefore, overlaps with that of Indigenous feminists. In addition, critical race feminists are interested in how domestic and international legal and social policies assist the oppressed racial and/or ethnic women and their families, and are also interested in conducting activist research that has a social justice agenda. Indigenous research, on the other hand, focuses on these same issues except within an Indigenous context, and its scope is not limited to gender issues. The focus of this research is that of understanding Indigenous values through an Afrocentric paradigm. This Afrocentric paradigm is consistent with other Indigenous views. Working with the First Nation communities situates this research within an Indigenous context; therefore, I am using a hybrid of Afrocentric, Indigenous research, and critical race feminist methodology rather than coming from a solely Black feminist position.

4.3 Using mixed methods and community participation

Corbin and Strauss stressed the need for researchers to use somewhat different sets of procedures to accomplish their different goals (1990). Charmaz suggested the use of mixed methods for data collection (2006, 134). Wilson combined different methods such as participant observation, interviews with individuals, and focus discussions within an Indigenous paradigm (2008). Kincheloe and Steinberg advocated for researchers to make sure that the interests of Indigenous people are served in knowledge creation (2008). Furthermore, they promoted the use of multi-logical epistemologies as an approach to Indigenous knowledge due to ambiguities and contextual embeddedness (ibid). Fixico proposed noting the sacredness and interconnection of everything (2003). In addition, Wilson described the process of doing research as sacred and as being a ceremony (2008).

My decision to use a hybrid methodology and mixed methods grew out of the need to make this study meaningful to First Nation communities, to address a regional need, and to satisfy academic requirements. Tuhiwai Smith claimed that the word research is perceived as the dirtiest word within Indigenous communities (1999). Furthermore, Aboriginal people in Canada believed that they have been researched 'to death,' and yet their communities have not made any progress (Kovach 2005, Kunkel 2008, Schnarch 2004). Subsequently, Aboriginal people are seeking to regain ownership, control, access, and possession of research and research outcomes within their communities (Schnarch 2004). This is part of their broader struggles for self-determination (Freire 1970, Kovach 2005, O'Faircheallaigh 1999, Schnarch 2004, Tuhiwai Smith 1999). The need to build capacity and address issues of importance within Aboriginal communities makes action research a perfect fit for these communities (Howitt 2002, Louis 2007, Tuhiwai Smith 1999, Wilson 2001). Indigenous

research does not seek to test hypotheses but, rather similar to grounded theory, it emphasizes the generation of theory which is grounded in the data (Corbin and Strauss 1990, Kovach 2005, Wilson 2001). This type of methodology proposes to represent Indigenous voices and to meet community needs.

There are few defined methods, processes, or approaches in place for doing Indigenous research. However, Indigenous peoples want the process of conducting the research to reflect their epistemology, ontology, and axiology (Fixico 1998, 2003; Fraser 2009; Howitt 2002; Louis 2007; Swisher 1998; Tuhiwai Smith 1999; Weber-Pillwax 2001; Wilson 2001 and 2008). The diversity in cultures further complicates how this can be achieved within communities. The worldviews, realities, and ways of knowing of the peoples are different. The epistemologies of the people are also linked to the unique conditions within which they live and learn. This requires that the researcher develop relationships with the people and involve them in the research process rather than treat the people as objects, subjects, and consumers of research. Socially constructing knowledge by using participatory action within an indigenous perspective can help make the process and outcomes more useful for the people. Greenwood and Levin believed that meanings constructed through action research process can lead to social actions (2007). As a result, I enlisted the support and cooperation of First Nations communities through the use of participatory action projects.

In order to include the people, this study used methods such as a geothermal development field trip and two energy development focus group forum events, extant data from court case documents, and the CEAA 2010 transcripts were also reviewed and analysed. My involvement in University-Community educational projects such as developing a language program, two culture courses, and a textbook, in conjunction with the Tsilhqot'in

National Government, a tribal council representing six of these communities, and subsequently teaching the culture course, further enhanced this research. In addition, participating in community events such as two annual gatherings provided opportunities for participant observation.

Figure 7 is an illustration of the application of Strauss and Corbin's grounded theory, providing a simplistic view of applying grounded theory (Heath and Cowley 2004). It shows theory generation as being the result of a seemingly linear process. However, the reality is that theory is being generated through the process - from data, through to analysis, review, evaluation, and community validation. Therefore, I adapted the application model shown in Figure 7 into a hybrid approach which I used for this study. Table 7 shows the hybrid approach, outlining the steps taken to achieve the overall objective of these projects which were to stimulate social action; to gain knowledge of the realities of the people, their values, and their development needs; to further contribute to First Nations energy resource dialogue within the region; and to find out if the development of geothermal resources is compatible with Aboriginal values.

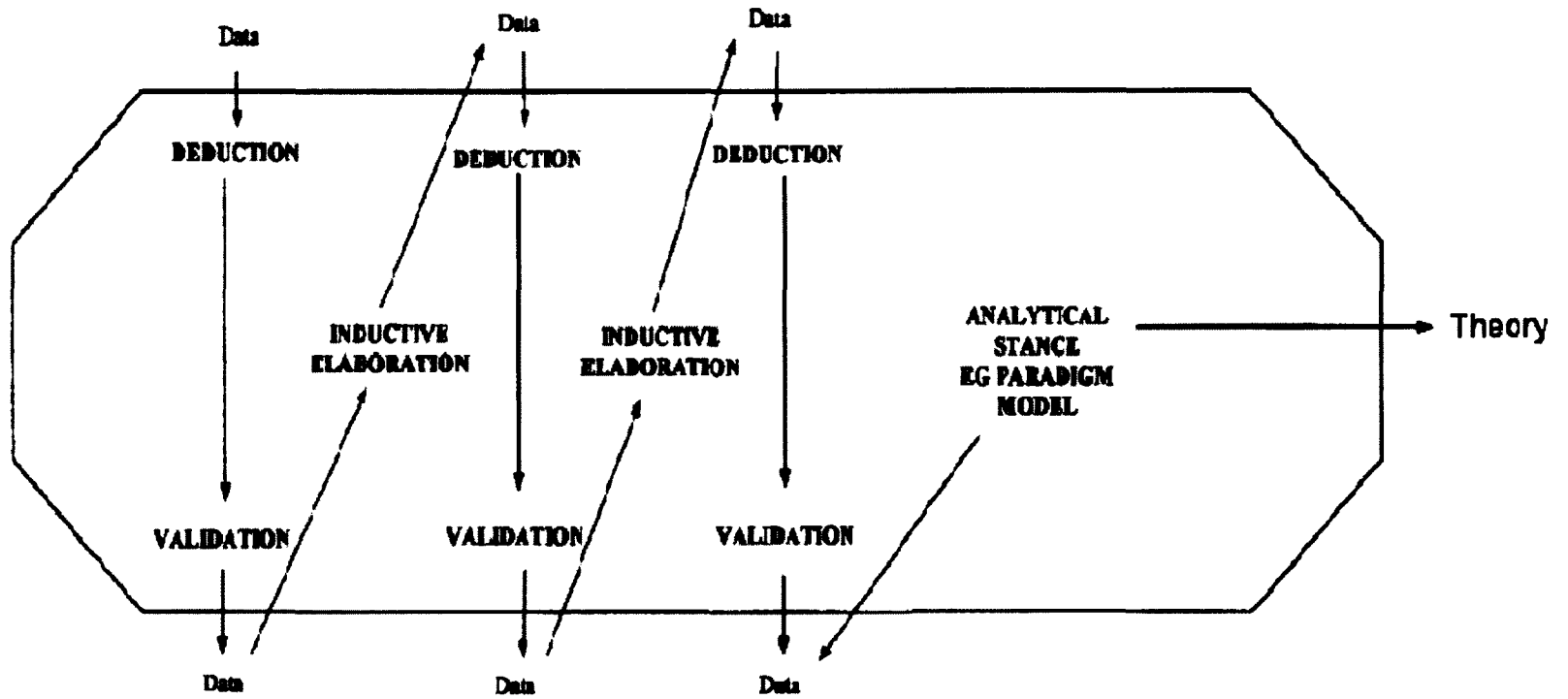


Figure 7: Grounded theory illustration by Strauss and Corbin
 (Source: Heath and Cowley 2004).

Table 7: Hybrid research method used in this study

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
	Deduction	Inductive elaboration	Inductive elaboration	Inductive elaboration	Analytical stance
Data	Two teleconference information-sharing sessions: January 2009	Focus group forum (June 2009), chats, discussions	Field trip to Nevada geothermal plant with some research participants (May 2010), chats, discussions	Review of community documents, ongoing chat with participants: 2011	Tsilhqot'in Culture course development 2012; Nazko's Community comprehensive plan documentation 2012
	Review, Evaluation and Validation	Review, Evaluation and Validation	Review, Evaluation and Validation; Theory generation	Review, Evaluation and Validation; Theory generation	Theory Generation
Data	First Nations Information-sharing session: Community sponsor, 2009	Participation in Environmental Assessment of a development project: May 2010	Focus group Forum (October 2010), chats, discussions	Discussions of analysis and interpretation with participating communities and research participants: 2011	Participation in community gatherings, semi-structured interviews; open-ended conversations: 2012
	Inductive elaboration	Inductive elaboration	Inductive elaboration; Theory generation	Validation and Feedback	Theory generation

4.4 Research ethics and community participation

This research study started with two teleconference information sharing sessions with Aboriginal communities in the region. The purpose of the session was to inform the communities about the study and to solicit their participation. Invitations were sent to all the Aboriginal communities in the region, followed by telephone calls to some key contacts, requesting their participation. The sessions were sponsored by the Ministry of Mines, Energy and Petroleum Resources (MEMPR) and the Western Economic Diversification Canada (WED). There were a total of eleven participants with representatives from four Aboriginal communities, two of which are not in the study area. Notes were taken during the sessions and distributed to participants and interested members of communities within the research area. The feedback from these sessions resulted in an invitation to present the research information to representatives from all the Cariboo Chilcotin Aboriginal communities at an Economic Development Regional Advisory and Update forum organized by Indian and Northern Affairs Canada (INAC), now known as Aboriginal Affairs and Northern Development Canada (AANDC), hosted by the Tsilhqot'in National Government (TNG) at Williams Lake. The communities that participated at these events supported the research idea and suggested focus group meetings and a geothermal field trip as research methods.

This study was conducted in a region with 15 diverse First Nation communities and other non-Indigenous communities. Relationships which had been built with key members of these communities from previous projects not related to this study were essential in starting the research process (Kunkel 2008, Kunkel et al. 2011). The First Nation communities are all at different stages of development and have different needs. These prior relationships and knowledge of community development projects were helpful in starting research

conversations. It was also necessary for the research approach to be fluid and to fit into community activities.

The University of Northern British Columbia (UNBC) Policy on Research Involving Human Participants requires prior review from the university's Research Ethics Board (REB). This policy is guided by the Canadian Tri-Council Policy Statement on the Ethical Conduct for Research involving Human Subjects and its application to Aboriginal peoples. Approval was received from the REB (see Appendix for UNBC's Ethics Approval and consent letters from the communities). All research was conducted under these ethical guidelines. All quotations attributed with people's names are from public documents or used with permission following the research ethics process. Informed consent was obtained from the communities prior to the field trip and my participation in community gatherings.

In addition to the field trip and the focus group events, data gathering methods included meetings with chief and council members of eight of the 15 communities, participation in community gatherings and events, chats and discussions with participants from communities, participation in the federal review of a proposed mining project in the region, a review of community documents, and semi-structured interviews with some women.

Due to the different stages of the communities' land claims, some communities consented to participating in general information sharing sessions. However, three communities consented to participating in the field trip and interviews. Two of these communities further consented to participant observation at their community events. In addition to obtaining informed consent and ethics approval, the approach taken also had to

respect and honour existing relationships between communities, funding and sponsoring organizations, and the university (Kovach 2005, Wilson 2001 and 2008). Furthermore, the process was also designed to build community research capacity and to contribute to the economic goals of the communities and the region (Halseth et al. 2006).

4.5 Research focus: Action and participation

Engaging community in research through Participatory Action Research (PAR) has been used successfully by academics in Indigenous communities (Bloggett et al. 2011, Fondahl et al. 2000). PAR re-situates Indigenous research in context (Louis 2007, Swantz 2008, Tuhiwai Smith 1999). Swantz claimed that participation and action interchanges the roles of the researchers and the researched in the development of knowledge (2008). The practice of action research also engages participants who might otherwise be subjects of research or recipients of interventions to a greater or lesser extent as inquiring co-researchers (Reason and Bradbury 2008). Participation means people are engaged as full persons rather than filtered through an outsider's perspective. Bloggett et al. found that when marginalized community members are able to claim a culturally safe space for their voices, they are able to explore issues affecting the community and offer possible strategies for community transformation through research (2011). In addition, Reason and Bradbury stated that a wider purpose of action research is to contribute to the increased economic, political, psychological, and spiritual well-being of communities (2008).

The focus group events and field trip engaged the communities directly. At the first focus group session, there were 46 participants, with representatives from most of the

communities, the tribal councils, and Aboriginal businesses and community service providers. In addition, there were representatives from provincial and federal agencies. The participants talked about the economic development needs of their communities. These participants, mainly Economic Development Officers (EDOs), also requested more information about different types of energy resource development. The second focus group session was organized to give feedback from the geothermal resources development field trip and also to provide more information about the other types of energy resource developments within the region. There were 44 participants at this forum event with the majority of the communities present, in addition to all the tribal councils. The information needs of the participants were addressed through the forum events. The participants also played important roles in addressing these information needs by organizing and facilitating forums and information-sharing events. Some participants shared information on important developments within their communities at these forums and provided answers to questions posed. Research questions asked at the second focus group meeting were the following:

- Do you see alternative energy as supporting the goals of your community?
- What are your communities' perspectives on alternative energy resources – biomass, solar, geothermal, run of the river, wind?
- What factors helped/will help communities in deciding how to go ahead?
- What do you think people would like to see as a next step from here?

The research outcomes were presented to the leaders of the communities as these became available. Some of the presentations were in formal settings; others were through telephone conversations; and through informal discussions and 'chats' at gatherings. These discussions and chats were essential for validation. The meetings also ensured accurate

representations of information and correct interpretations were made and kept the communities informed. At some of the meetings, my understandings were clarified by the participants.

4.6 Collaboration, support and cooperation

Collaboration is important when working with First Nations people (Wilson 2008). Collaborative research is described as working with community members to identify problems, answer developing questions, share knowledge and expertise, and address community priorities (Fondahl et al. 2009). Working collaboratively and defining community representation is not always easy to achieve. The question of who represents the communities and how often they are endorsed by the community within the First Nations context can be difficult. While getting the go ahead from the elected officials gives the researcher a formal authority to proceed, new officials can be elected within a two year period (Kunkel 2008, 104). It was, therefore, important to work with communities on projects which can be completed in a relatively short time frame.

Involving communities in different activities that formed part of this research can be termed 'inclusionary.' The idea of inclusionary research is used for decolonizing research aimed at helping empower subordinated, marginalized, and oppressed 'others,' and to provide training and tools they can use to 'overturn' their world (Howitt 2002, Howitt and Stevens 2008). Community-based research participatory methods have been used successfully in a number of research projects with First Nations and marginalized communities (Elliot 2008, Sherry 2002, T'lazt'en Nation and UNBC 2005, Yim 2009). Using inclusionary methods in this research had the added advantage of empowering key participants to seek out resources

required by their communities in order to move forward with development. Key participants, at forum discussions, obtained information from community representatives about what tools were lacking, such as necessary information and access to finance. In addition, the participants brainstormed on how these tools might be obtained. While these forums generated a great deal of information about what communities needed to 'overturn their worlds,' the people were still faced with significant barriers and challenges which were beyond the scope of the forums and the study. The active participation of these people in research activities was instrumental in keeping the research within an Indigenous paradigm, thus making the process of getting their support and cooperation in evaluating their alternatives easier.

4.7 Primary data collection: Immersion, chats, focus group meetings, and field trips

Spradley argued that the essential core of ethnography is to understand 'another' way from the native point of view (1979). He further stated that behaviour patterns, customs, and a people's way of life can all be defined, interpreted, and described from more than one perspective (ibid). Through work and study, I became immersed in the way of life of First Nations people. This immersion, as well as a good understanding of my African culture, gave me cultural proficiency which was required for this type of research. Fondahl et al. described cultural proficiency as a more developed state of inter-cultural understanding (2009, 7). Mills expressed that cross-cultural misunderstandings, difficulties in translating across languages, and colliding worldviews can create challenges in establishing meaningful discourse and interaction (2005, 28). Spradley explained that themes often emerge through immersion, by cutting off from other interests and concerns, by listening to the informants for hours on end,

by participating in the cultural scene, and by allowing one's mental life to be taken over by the new culture (1979). Hoffman immersed himself in the Cree way of life through participation in cultural activities (2005). Prior to this study, I worked for the Nazko First Nation as their Economic Development Manager. This employment with the Band gave me insights into the community that I would not have gained as an outsider. In order to get a better appreciation of the other First Nations' way of life, I participated in cultural activities, attended ceremonies, listened for hours to community members make presentations at the CEAA Panel Hearings, read and re-read transcripts from the Hearings, and journeyed with members of different communities on the field trip.

Indigenous ways of knowing are very fluid. Wilson, in his book, wrote about the different methods used by Indigenous researchers (2008). These include conversations or chats, talking, dreams, symbols, teachings, and traditional methods such as praying. He argued for data-gathering methods to be community driven (Wilson 2008, 110). Wilson further explained that data, knowledge, and relationships are based upon empirical data that is observable by the five senses and also includes non-empirical data, as in ceremony and flashes of inspiration (2008). Hoffman did not consider his relationship with key people, daily praying, experiential learning, and his participation in pipe, sweat lodge, and fasting ceremonies as research (2005). However, these activities were essential in his understanding and comprehension of what research participants shared with him. As an Indigenous person, my intuition and comprehension of some Indigenous ways was a major asset and contributed immensely to this study. My working relationships with key members of some First Nation communities, participation in culture camps, attending ceremonies, and social contacts has been beneficial to the research process. Furthermore, my residency within the traditional

territory of the Southern Carrier people has been instrumental in meeting some of these people in my daily life. Casual contact at grocery stores, public places, or at local or regional events helps me stay connected to the on-goings within these communities. While all these activities do not form part of the research, conversations had at these places all contribute to relationship building and to my understanding of Aboriginal issues and interests.

Through participant observation, I was able to watch and participate in resource development activities involving the Aboriginal communities in the Cariboo Chilcotin region. As a result, I became familiar with the issues of interest to the communities and key players within the communities. In addition, I engaged in informal conversation and chats with the people. Whenever I travel by any of the Band offices or the Tribal Councils, I always stopped to chat to whoever was around. The concept of using 'chats' as a data collection and verification method came about from the work of other Indigenous researchers. Wilson listed chat as an Aboriginal method (2008). Hoffman claimed that research participants often chatted with him to clarify information he had been previously given (2005). Frost chatted with the women of Nazko in Quesnel (2008, 126). Bhattacharyya obtained information pertinent to her research through chatting with people (2012). While many of these researchers did not use chat conversations as a formal method, it was a way of gathering pertinent information relating to their research work. Hoffman used 'research as chat' and 'research as conversation' to gather new data and for follow up information in his work (2005, 76). He described 'research as chat' as natural and said it can happen once the researcher has developed a relationship with the participant. Through chatting with the Carrier Chilcotin Chiefs at the Tribal Council Office, I was corrected on my usage of phrases such as "no man's land" and how the phrase is interpreted by the Aboriginal people. I learned

about cultural norms and protocols – what not to do when I visit their communities, such as “do not point at Mount Tatlow.”¹⁶ Through chat conversations, I was able to verify information and also able to triangulate data. In addition, I received enormous support from community members in informal chat conversations. People who are shy often felt more comfortable to chat rather than talking at community meetings or focus groups. I chatted with people as we travelled together and when I meet them in urban settings. Chat as a method became essential for me. Through chat conversations, I was given names of other pertinent people who further clarified information or had authority to talk about sensitive matters. I had several ‘ah-ha!’ moments during chat conversations. In addition, I had a lot of community nuances explained to me when I chatted with people. I made notes of chat information away from the conversation. These were often used to clarify or amend my interpretation of data. In addition, recorded chat conversations were treated as ‘personal communications’. Like all data gathered, chat information was kept confidential. To guide these conversations, I was always conscious of the Ownership Control Access and Possession (OCAP) Tri-council ethical principles to which my work is subject. Therefore, I treated chat data in the same manner as interviews and applied the OCAP principles to which my work is subject.

Studies showed that capacity building is very important for the development of First Nations communities (Calliou 2007, St. Germain and Sibbeston 2007, Minister of Indian Affairs 2009, Sherry 2002). Capacity building is also essential in conducting meaningful consultation and collaborative research with First Nations communities (Marsden 2005, Schnarch 2004, Sherry 2002). Elliot argued that the participatory process of collecting

¹⁶ Mount Tatlow was formed in legendary times and has remained a guardian on the Tsilhqot’in territory. It is considered to be disrespectful to point at the mountain. Violation typically results in bad weather for travelers.

knowledge creates other benefits for communities such as passing of knowledge from elders to youth, increasing understanding of traditional relationships to the land, and affirming the value of Traditional Ecological Knowledge (TEK) and its knowledge holders (2008).

Through participatory actions such as the field trip, information-sharing sessions, and focus group meetings, this study was instrumental in increasing regional knowledge of geothermal resources development and Aboriginal values. The number of group meetings, information sharing sessions, or interviews was not set beforehand. These events happened as required and continued until the point of saturation which is discussed in the data coding section below.

Rundstrom and Deur cautioned researchers working with Indigenous people about the existence of different factions within communities (1999). These factions exist because communities are still subject to outside controls (Haig-Brown and Dannenmann 2002). Governing bodies such as the AANDC (also known as INAC) imposed political systems on communities. As a result, information-sharing and release by some of these communities remained guarded (Fondahl et al. 2009, 5, 21). This was also evident as certain confidential information was disclosed away from the public at 'in camera' meetings during the CEEA Panel Hearings. The discussions and transcripts of such meetings were not made available to the public. It is uncertain if these different factions and conflicts will disappear if the communities were to be no longer constrained under the *Indian Act*.

Inclusionary and collaborative methods have been used successfully to gather data within Indigenous communities (Fondahl et al. 2009, Howitt and Stevens 2008, Sherry 2002, Sherry et al. 2005). Using non-intrusive methods, such as focus group meetings, teleconference calls, and community information-sharing sessions, was key in data gathering

and information dissemination in this study. Knowledge of community values and multiple views were gained without jeopardizing on-going land claims negotiations. Communities sent delegates to events they chose to participate in and contributed to discussions as appropriate. While this study seeks to represent the perspectives of the communities within an Indigenous paradigm, the use of Western methods was necessary in order to represent Indigenous voices to the mainstream industrial and academic worlds. First Nation leaders, who participated in the study, while emphasizing their research processes supported the use of Western methods to make their voices heard.

4.8 Primary data collection: Extant text

Charmaz described the use of publicly available documents in research as non-obtrusive and objective, and he stated that it can complement ethnographic and interview methods (2006, 37). In their collaborative CURA partnership research, Fondahl et al. used interviews previously completed for other purposes in addition to formal interviews (2009,31). In previous research with some of the communities, I was advised not to conduct interviews with elders due to unresolved traumas as a result of their residential school experiences (Kunkel 2008, 74). Therefore, I used less intrusive methods, such as reviewing transcripts from community presentations to the CEAA panel on resource development. In spite of the CEAA process and setting being quasi-judicial, community members came forward to provide in-depth information and rich descriptions through presentations and interviews conducted for Environmental Assessment (EA) purposes. The CEAA panel also had hearings within traditional settings, such as the reserves of all the affected communities and areas used by the people for cultural purposes which were being proposed for

development. Community members were motivated to come forward and share their stories as part of their 'Caretaker' duty and land stewardship in resistance to resource development within an area of cultural interest. While gathering data from a public process such as this made me 'invisible', I still needed to triangulate the data gathered.

The CEAA panel's assessment was timely and extremely beneficial for this study. It provided a setting within which both young and old people from First Nations communities in the study region could share their common values, oral histories, and significance of places within their territories and how these have been affected by resource development activities. Audio recordings and transcripts of all the public events were made available by the panel. These recordings provided an enormous amount of valuable data. In addition to Panel Hearings transcripts, other sources of data used in this study included the 'Final Argument of the Plaintiff' in the *Tsilhqot'in Nation v. British Columbia* 2007 court case.

4.8.1 Extant text: Content analysis of 2010 CEAA Panel Hearings

The Prosperity Mine Project was proposed by Taseko Mines at Fish Lake/Little Fish Lake watershed in BC in 1990 (Turkel 2007). The company started the environmental assessment of the project in 1993 (CEAA 2010b). This was transferred to the newly enacted *BC Environmental Assessment Act* in 1995. By then, the company had spent more than \$40m on exploration (Turkel 2007, 68). The multimillion dollar project is located 25 km from Xenigwet'in, which is a Tsilhqot'in community at Nemiah Valley. Nemiah Valley and its surrounds is the heart of the ancestral lands of the Tsilhqot'in people. With clear glacial fed pristine lakes and outstanding natural beauty, the BC government set aside 233,000 hectares

of land as a provincial park in that region in 1994 in addition to over 779,000 hectares of wilderness preserves and protected areas (BC Parks 2011). This remote area forms part of a region in which the Tsilhqot'in people have proven Aboriginal rights and also have asserted Aboriginal title (*Tsilhqot'in Nation 2007*). The environmental assessment under the *Canadian Environmental Assessment Act* started as a comprehensive study in 1997 (CEAA 2010b, Turkel 2007). The project was put on pause by the proponent due to weak market prices and then re-visited again in 2002. At that time the Department of Fisheries and Oceans Canada was the Responsible Authority (RA) of the federal government. The project was referred to the Minister of Environment by the RA along with support from two other federal agencies, Transport Canada and Natural Resources Canada. This was due to the potential of the development to cause significant adverse environmental effects that could not be readily mitigated and also the loss of Fish Lake which is an important First Nations resource (CEAA 2010b). In 2008, the provincial government proceeded with its own independent assessment of the project and issued a license to the proponent. The Federal Review Panel (also known as CEEA Panel), however, was appointed in January of 2009.

The CEEA Panel Hearings of 2010 provided in-depth information and rich description through presentations and interviews with members of First Nations communities in the Cariboo Chilcotin region. The mandate of the Panel was to conduct an assessment of the effects of the proposed Prosperity Mine within the traditional territories of some Southern Carrier, Shuswap and Tsilhqot'in people (CEAA 2010b). The assessment included the potential impacts on the current and traditional land used by the Aboriginal people (ibid). This assessment provided opportunities for First Nations people from the affected

communities to talk about their values, the effects of ongoing resource developments, and how the proposed mine would impact them.

Testimonies of participants at the Federal Environmental Assessment panel for the Prosperity Mine provided new insights into Aboriginal values of the First Nations people in the Cariboo Chilcotin communities. The Panel members travelled to the First Nations communities who would be impacted by the development of the proposed gold mine to conduct some of the hearings. At these communities, hundreds of people both young and old testified of their connections and usage of the lands. There were testimonies from Aboriginal and non-Aboriginal peoples, interest groups, municipalities, along with scientists and government agencies. It is important to note that the mine project proposed to provide employment for the Aboriginal people in addition to revenue sharing with their communities; however, the Nemiah people already have a declaration in place which states that there will be no mining within their traditional territory. It is with this view in mind that the Tsilhqot'in people shared information which would not typically have been made available for public consumption or put into text.

I participated at some of the public hearings and presented the socio-economic data of the First Nation communities affected by the proposed development. These hearings were very informative as the views of the public, the mine proponent, and interested parties were diverse. The review consists of 37 transcript volumes. Content analysis in this study is from quotes of 101 First Nations participants from 16 transcript volumes. The participants ranged in ages, consisting of community elders, adults, and youth and were all from the Cariboo Chilcotin Aboriginal communities. The Panel Hearings were taped and transcribed by

Mainland Reporting Services Inc. as part of the process, and these transcripts were made publicly available.

4.8.2 Extant text: Court case document, *Tsilhqot'in v. British Columbia*

In an unprecedented move, Chief Roger William of the Xeni Gwet'in First Nation took court action against the provincial and federal governments to seek declaration of Tsilhqot'in Aboriginal title in the Brittany Triangle, which is a part of the Cariboo Chilcotin region, and the Aboriginal right to hunt and trap in the same area (*Tsilhqot'in Nation 2007*). This case commenced in the Supreme Court of BC in 2002 as an amalgamation of other court actions against forestry activities, first started in 1989, which then led to the "Nemiah Trapline Action" of 1990 and the "Brittany Triangle Action" of 1998 (*ibid*). An enormous amount of oral history and traditional evidence as well as a number of historical documents were presented at the trial which lasted 339 days (*Tsilhqot'in Nation 2007*). Some of these documents are available publicly and provide a rich history and context for this study.

The following documents were reviewed as part of this study:

- Argument of the plaintiff, 979 pages;
- Reasons for judgment, 485 pages;
- Argument of the plaintiff: Appendix 1: Overview of plaintiff's testimony, select Tsilhqot'in genealogies, and trapline summaries, 157 pages;
- Argument of the plaintiff: Appendix 1A; Plaintiff's response to the defendants submissions on definite tracts of land, 161 pages;
- Argument of the plaintiff: Appendix 2: Select Tsilhqot'in villages, dwellings and burial grounds in the claim area, 69 pages;

- Argument of the Plaintiff: Appendix 3: Tsilhqot'in Pattern of Claim Area Occupation, 124 pages; and
- Factum of the respondent, Roger William, 71 pages.

A review of these documents yielded patterns and trends which were affirmed by other data sources. These documents also provided information about historical and current lands and resource usage by the Tsilhqot'in people within the region.

4.8.3 Extant data: Learning from the Tsilhqot'in Language Group members

In the spring of 2012, I worked on a Tsilhqot'in language project which was a partnership between UNBC and the Tsilhqot'in National Government as part of my ongoing professional work. This project was not set up as part of my research study but as a community project. The task was to develop a certificate program for the Tsilhqot'in language teachers as part of their teaching diploma. During the project, I spent a period of six weeks working with eight members of the Tsilhqot'in Language Group (TLG) as a team to develop two culture course curricula and a textbook.

The TLG is a focus group which consists of members of the six Tsilhqot'in communities. This group includes some community members who currently teach Tsilhqot'in language in the region. The project team gathered information from different family members within their community, and we met weekly throughout the summer. During that period, I learned some of the contemporary culture of the people and I was able to tease out critical Tsilhqot'in Aboriginal values. This community project helped shape my understanding of the oral traditions of the people.

4.9 Participant observation and semi structured interviews with Tsilhqot'in women

The CEAA Panel focused on how Tsilhqot'in people use the land surrounding the proposed mine site. The testimonies of hundreds of people at the Hearings show that there are socio-economic values associated with the land. In an attempt to further understand these values, I attended two community events, Fish Lake Gathering and Brittany Gathering, in the autumn of 2012. Prior to attending the events, I met with the Chief and Council of the Xeni Gwet'in community at their reserve. The purpose of the study was explained and informed consent was obtained at the meeting.

Both events were held at different locations within the Tsilhqot'in territory. The locations are sites of historical and contemporary significance to the people. Community members and guests camped at these locations for the duration of the events. While attending the events, I experienced the contemporary culture of the people and met members of the communities who live on their ancestral lands along with those who live in urban areas. At the events, I had numerous conversations with Tsilhqot'in people and listened to speeches made by various community members and leaders. During the events, I also interviewed five Tsilhqot'in people as part of this study.

I conducted three interviews at the Fish Lake Gathering. Of the women at the Fish Lake Gathering, I asked the following questions: How do Tsilhqot'in women utilize their ancestral lands? How much moose, fish, berries, and medicinal plants do families need for food and for other purposes? How do the women preserve and use their harvests? The answers supplemented what was presented at the CEAA Panel Hearings where Tsilhqot'in people presented information about how they actively engage in teaching and learning on the

land. The people's testimonies show that knowledge of the land is very important to the survival of their culture. The Hearings also show that knowledge is passed down from generation to generation.

At the Brittany Gathering I interviewed two women in order to understand their perspectives of teaching and learning on the land. I asked the following questions: How do Tsilhqot'in people get their knowledge of the land? How do the people know what they know? During the interviews, I took notes as the participants spoke. At the end of the interviews, these notes were reviewed with individual participants. Data was manually managed and analyzed to identify critical Tsilhqot'in values. Data coding and analysis are further explained in the section below.

4.10 Data coding and analysis

The quantity of information from the data and the diversity of themes that were expressed were enormous. Coding and content analysis of data was done using the grounded theory approach (Strauss and Corbin 1998, Elos and Kyngash 2008). The software, QSR Nvivo9, was essential in processing and categorizing themes as they emerged in the data. These themes were explored in participant observation at community events and the semi-structured, in-depth interviews conducted with women and leaders from the participating communities. The final categories were established in a deductive fashion according to the responses of the participants.

Wilson described collaborative analysis within an Indigenous paradigm as listening, learning, and sharing (2008). Figure 8 is my flowchart illustration of how I applied this cycle of listening, learning, and sharing to gather data until I reached the point of saturation. The

point of saturation is when no new categories emerge (Bryant and Charmaz 2007, 611; Charmaz 2006, 110, 114, 189; Glaser and Strauss 2009, 74). There was continuous intermeshing of data collection, coding, and analysis throughout this study. The combination of these procedures was required for theory generation.

There was more data collection than coding and analysis at the beginning of the study which is similar to the experiences of other researchers using Grounded Theory (Glaser and Strauss 2009, 72). The data gathered at different stages in this study were reviewed for emerging cultural themes. Spradley defined cultural themes as any cognitive principle, tacit or explicit, recurrent in a number of domains and serving as a relationship among subsystems of cultural meaning (1979). The search for cultural themes was important as these were from individual cases which were necessary in creating categories. Through inductive elaboration, cultural themes were categorized using axial coding. Bryant and Charmaz explained inductive elaboration as a type of reasoning that begins with the study of a range of individual cases and extrapolates patterns from them to form a conceptual category ((2007, 607 - 608). This type of reasoning was required to move from cultural themes to the formation of core categories with which data collection was coded and analyzed. Through axial coding, categories were brought together to form a coherent whole.

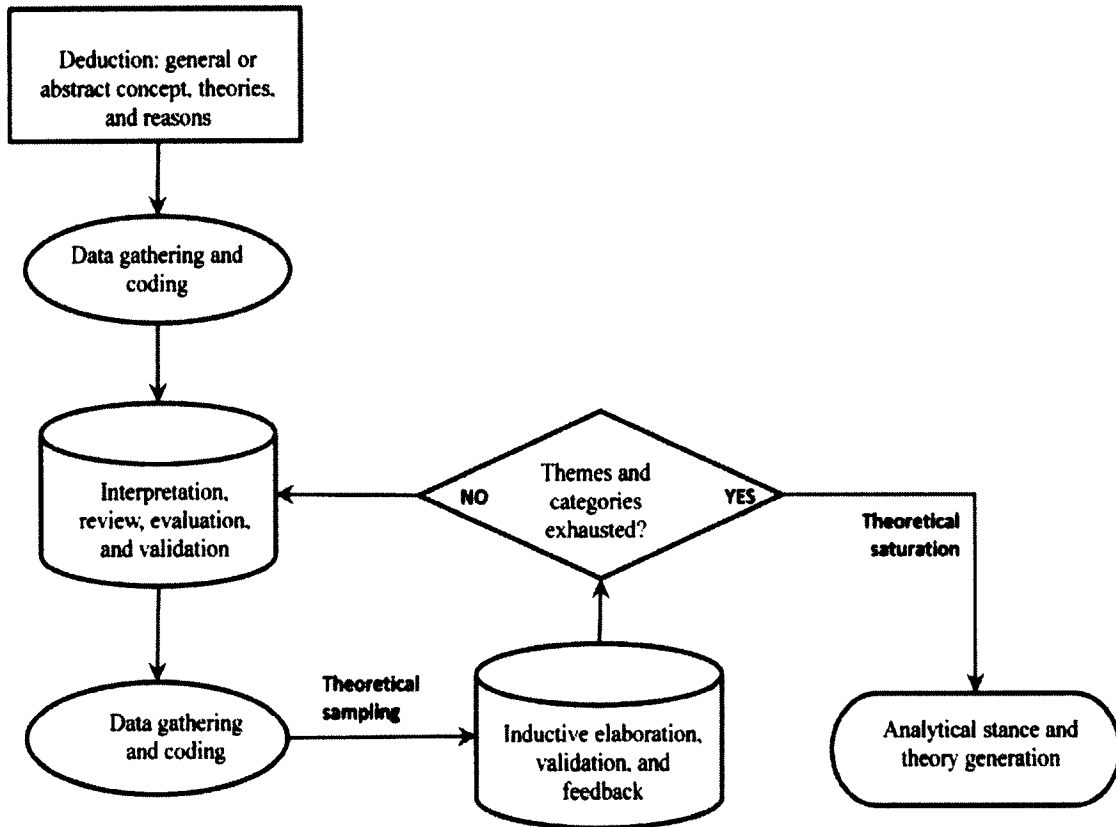


Figure 8: Flowchart illustration of data collection and analysis approach used in this study

Collaborative data analysis can be challenging. Involving community participants in analysis requires training. Although Fondahl et al. advocated for the inclusion of community participants at this analysis stage since they believe this would provide analytical filters informed by local values and Traditional Ecological Knowledge, the data coding and analysis of this study was carried out away from community participants due to lack of training funds (2009, 41). Time spent with participants in this study was useful for data collection and interpretations. Participants were paid employees of other organizations and First Nation Bands. Funds were available to cover the travel expenses for field trip participants, but not for wages. The employing organizations paid the participants their regular wages during the trip. Additional funds were not available to compensate them for prolonged time away from their regular duties either. This study had to depend on the goodwill of participants who gave their time to attend information-sharing sessions and focus group meetings. The lack of participation of the communities in data coding and analysis meant that outcomes may not have been informed by local values. It was therefore important to validate the data interpretations through various community presentations, discussions with community leaders, and through informal conversations and chats.

Different communities and their members participated in the data collection process. Community information from other sources was also used as part of the study. It was, therefore, necessary to provide feedback to all the communities. Wilson described this continuous feedback as relationship accountability (2008, 121). Through feedback to communities, ideas presented were reviewed and verified for correctness. It was essential to present findings from the study back to the communities for verification. The leaders were able to discuss the implications of the findings and articulate the usefulness for them.

Presenting information back to the communities also validates the findings and ensures correct representation of voices. This is essential in Indigenous grounded theory (Denzin 2007, 457). Wilson stated that it is necessary to have collaboration in the interpretation of knowledge (2008, 121). Involving all participants in the interpretation and validation of research was required to ensure that concepts were well understood and represented. The process of bringing together all these research relationships, i.e. researcher, participants, interpretations, and enriching the connections, is described by Wilson as ceremony (ibid). At one of the community presentations, a Southern Carrier chief described my work like a bridge — taking what the communities are saying and expressing it in a way that government agencies and industry representatives can understand.

The focus group forums, field trip, and content analysis of the CEEA 2010 Panel Hearings transcripts yielded 98 themes. These were then categorized into 28 core themes. The final categories (presented in Chapter Eight) were established in a deductive fashion according to the answers of the participants. These themes were presented to Chief and council members from eight of the fifteen communities to ‘chat’ and discuss the research outcomes at different meetings. These meetings were with the Esket’emc First Nation at Alkali Lake; ?Esdilagh First Nation at Alexandria; Nazko First Nation in Quesnel; Xeni Gwet’in First Nation at Williams Lake; and with The Toosey, Kluskus, Lhtako (Red Bluff) and Ulkatcho First Nations at The Carrier Chilcotin Tribal Council office at Williams Lake. These presentations were detailed, with lengthy conversations with the Chief and Council members. Some amendments were made to the themes based on the discussions. In addition, the Chiefs provided further clarification on the themes. A summary document of the

presentations was distributed to administrative staff at the Tsilhqot'in National Government, Carrier Chilcotin Tribal Council, and Northern Shuswap Tribal Council.

The 28 themes were shaped by the data gathered through participant observation, chats, and discussions with people at the community cultural events. These themes also provided guidance for the semi-structured in-depth interviews conducted with five Tsilhqot'in women at the cultural events. As stated above, during these interviews, notes were taken as the participants spoke. At the end of the interviews, these notes were reviewed with the individuals. This data was manually managed and analyzed to identify cultural themes which were then compared with the 28 major themes in order to tease out the critical Tsilhqot'in values.

4.11 Conclusion

Indigenous research methodologies offered the opportunity to work collaboratively with the First Nations communities in the Cariboo Chilcotin region using culturally appropriate methods. With the methodology I applied in this study, it was difficult for me to define the study boundary because the communities and the region are undergoing transition. However, using a grounded theory approach made the research process fluid which in turn provided the flexibility required to explore in more depth areas which were not apparent at the onset. Furthermore, the fluid nature of the research process enabled me to expand my research question to clarify my understandings and interpretations of data.

Using a hybrid approach in this research enabled me to mix methodologies -- Afrocentric, Indigenous research, and critical race feminist methodology. The Afrocentric methodology applied provided the cultural sensitivity required to work with research

participants and their communities seamlessly. My Afrocentricity also made it possible to build new relationships within the timeframe of this research. The geothermal field trip to Reno and interviews with Tsilhqot'in women necessitated the need to use critical race feminist methodology. Furthermore, relationship accountability is important in any Indigenous research methodology. I was able to maintain my relational accountability to the communities throughout the study through the community presentations. Indigenous researchers refer to this relational accountability as ceremony and sacred. Despite my participation in ceremonies at community gatherings, I limited my hybrid approach to the non-spiritual and the non-sacred aspects of research. This was a safer ground for me because of my limited knowledge of Indigenous spirituality. Regardless, the people still benefitted from the process. Hence, my work was described as a bridge by the Southern Carrier chief.

Chapter 5 Cariboo Chilcotin resource development and impacts

The main industries in the Cariboo Chilcotin region are forestry, construction, tourism, mining, and agriculture (Horne 2009, Kunkel 2008). These industries are well established. However, the region remains highly reliant and dependent on forest resources for its economic well-being; therefore, the wealth of the municipalities is closely linked to the forestry industry. These forests form part of the resource hinterlands of BC and are also the traditional territories of several First Nations communities. The lack of economic diversification of the communities within the region is a product of community-company relationships as reported by Martin (2012, 137). This complacency is now being challenged by the Mountain Pine Beetle (MPB) infestation of the forests in the region which started in the late 1990s, the effects of which are still ongoing. Using secondary data sources and knowledge from my professional work in the same region, this chapter reviews events following the MPB infestation and demonstrates how these have shaped resource development in the region and for the First Nations communities. This chapter focuses on resource development in the region from the year 2001 to date. This chapter also summarizes how the Cariboo Chilcotin First Nations communities have been impacted by economic changes, their plans for diversification, and their options and constraints.

5.1 Regional strategy development

The impetus for economic diversity in the region was sparked largely by the MPB infestation and the need to respond to the problem. The impact of the MPB infestation started becoming

problematic by the year 2000. The communities had hoped the winter weather would be cold enough to kill the beetles as in the past; therefore, no further action was taken. However, that was not to be the case. As a result of climate change, the winter temperatures did not drop low enough, between -40°C and -35°C for the required duration in the late 1990s to curtail the infestation. The beetles continued to spread and ravish the forests at an alarming rate. Table 8 is a summary of the actions taken in response to the MPB epidemic, including initiatives to diversify the regional and provincial economies. With economic recovery of marketable lumber no longer within sight, the pressure to diversify the local economies was a priority for the municipal governments in the region. However, the MPB infestation had a different type of impact on the First Nations communities. The accelerated harvesting of the forests, due to increased AAC in response to the MPB, was impacting the culture, traditional activities, and sustenance lifestyle of the people. In addition, remote communities were surrounded by dead trees. The fire hazard conditions in the forests were severe. Communities were threatened by wildfire and some had to be evacuated during the fire seasons of 2006, 2008, and 2010. Furthermore, First Nations communities who were in the treaty process were already witnessing resources being harvested from lands which they were negotiating as part of their settlement (Kunkel 2008).

Table 8: Timeline of Mountain Pine Beetle Response

2000	Mountain Pine Beetle (MPB) became problematic.
2001	Ministry of Forest and Range (MOFR) developed the 'Mountain Pine Beetle Action Plan 2001' which was supported by \$36m investment.
2003	Over 30% of the Cariboo Chilcotin forest was dead (Ministry of Forests 2012b).
2004	MOFR started curtailing the spread of MPB.
	Increased Allowable Annual Cut (AAC) for accelerated harvesting of forest began.
	Northern Development Initiative Trust (NDIT) established with an investment of \$185m from the province.
2005	BC government declared MPB was a cross-ministry and cross-government priority.
	MPB Emergency Response Team was created and new action plans were formulated.
	Joint bioenergy strategy was created by Ministry of Energy Mines and Petroleum Resources (MEMPR), MOFR, and Ministry of Agriculture and Lands (MOAL).
	BC First Nations Leadership Council appointed a working group to develop the 'BC First Nations MPB Action Plan'.
	BC government made available \$9m for regional strategy development through three newly formed Beetle Action Coalitions namely Cariboo-Chilcotin Beetle Action Coalition (CCBAC), Omineca Beetle Action Coalition, and Southern Interior Action Coalition.
	BC government provided \$161m for re-forestation of areas outside of industry obligations through the 'Forest for Tomorrow' program (Laaksonen-Craig 2012, Ministry of Forests 2012a).
	BC government provided \$25m grant to Geoscience BC to explore mineral potentials and encourage investment in the Central Interior region of BC.
	Geoscience BC initiated a 350 line-kilometer seismic survey of the Nechako Basin which is within the Nazko First Nation's territory.
2007	Federal government set up the Community Economic Diversification Initiative program as a component of its MPB response strategy with over \$34m allocated to projects that supported economic growth, job creation, and community sustainability. Programs concluded in 2011.
2008	Over 70% of forest had been impacted in the central interior of BC (Ministry of Forests 2012b).
	CCBAC invited Cariboo Chilcotin First Nations to participate in strategy development before final report was submitted to the BC government (CCBAC 2008).
	Industry led BC Bioenergy Network established through \$25m government grant.
2012	Cumulative percentage of pine volume affected by MPB was close to 100% (See Figure 9).

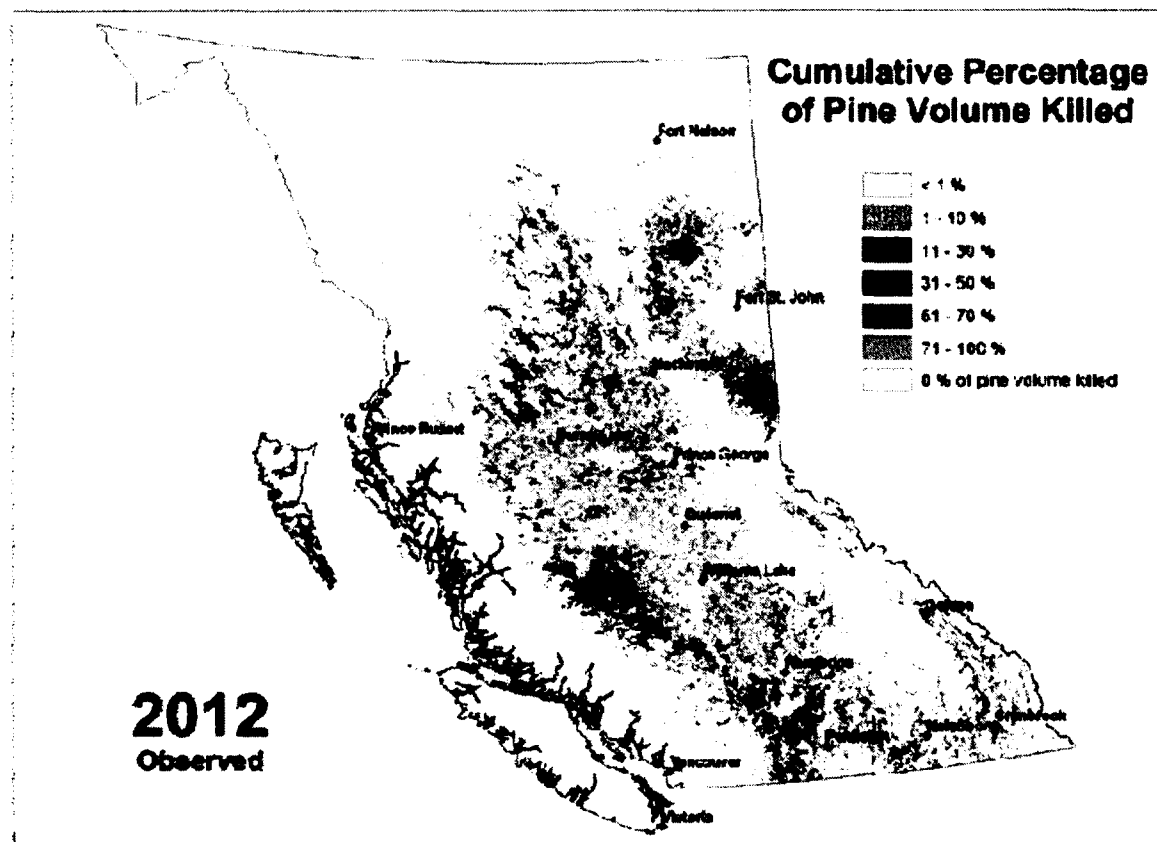


Figure 9: Observed MPB infestation in the region in 2012
(Ministry of Forest 2012b)

The Cariboo Chilcotin Beetle Action Coalition was formed in 2005 as a society to develop the regional economic strategy for the entire Cariboo Chilcotin region. Initially, the society was managed under the direction of a Board of Directors which consisted of representatives from the local governments: City of Quesnel, City of Williams Lake, 100 Mile House District, and the Cariboo Regional District. This did not lead to widespread First Nations participation, hence three Chiefs representing the Tsilhqot'in, the Northern Shuswap, and the Southern Carrier people were later included. In addition, there were representatives from the Cariboo Chilcotin Conservation Society and the Cariboo Licensee Land Use

Strategy Committee. Figure 10 is a map of the area covered by CCBAC. The organization received an initial \$800,000 from the provincial government to research and to prepare a regional comprehensive mitigation strategy for the MPB infestation (CCBAC 2008). Through the Mountain Pine Beetle Emergency Response team, the provincial government provided a further \$2.25 million to CCBAC to identify community impact and economic transition issues, to identify economic development opportunities, and to develop MPB socio-economic mitigation recommendations. The organization received an additional \$75,000 for a Forest Worker Coordinator from the federal government.

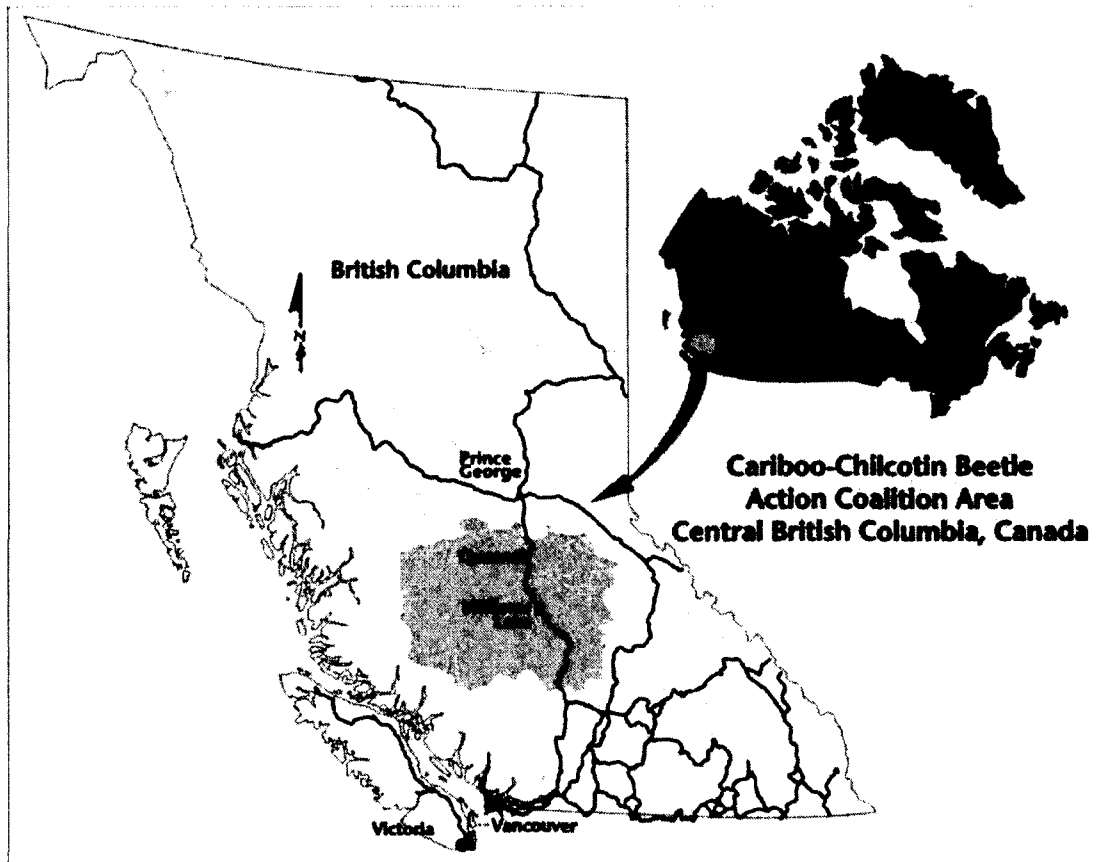


Figure 10: Map of the Cariboo Chilcotin Beetle Action Coalition region (CCBAC 2008)

Over a period of three years, CCBAC worked with the communities in the region to research and to develop the MPB mitigation strategy, engaging First Nation communities at different times. For some of the communities, the engagement was only in the months prior to the completion of the final report. The society worked with the First Nations communities through the three Tribal councils, NSTQ, CCTC, and TNG. However, the strategies were divided into language groups rather than the tribal communities. The final report was submitted to the provincial government in 2008.

The issues facing the Cariboo Chilcotin communities are quite complex. The forecasted closure of mills and associated services, and the impending job losses of mill workers and impacted service sector workers, has implications for the entire region. At the time of this writing, one of the mills has a scheduled closure date of March 2014. It is important to note that a significant proportion of the Regional District and municipal governments' budgets are derived from their industrial tax base, much of which comes from the mills and forest-related operations in the region (CCBAC 2008). In addition to these tax implications, CCBAC also reported that the labour market force in the Cariboo-Chilcotin would face challenges that are specific to the forest industry and to the region. These challenges included the adaptation of people, for example, the mill workers, who have spent their entire lives working in the forest industry with less than high school diplomas and very few transferrable skills (CCBAC 2008). CCBAC hypothesized that the economic impact of the MPB would be such that there would be an exodus of these people, the result of which could be devastating to the region (ibid). CCBAC also estimated that up to 4000 forest work jobs could be lost at an average wage of about \$60,000 per annum. It is believed that the 'baby boomers', i.e. people born between 1946 and 1964, were starting to retire and they

account for up to 40% of the workforce, approximately 10,650 people as reported in 2007 census. The job openings from these retirees could possibly offset the anticipated loss from forestry. However, the regional strategy included a review of the expected issues and impact of MPB epidemic on AACs, employment and economic activities, environmental stabilization, social fabric of the communities, First Nations interests, and effects on local governments' taxation system. The main thrust of the strategy developed was to maintain regional stabilization. These issues were not a priority for First Nations people. However, through the process, the communities articulated their economic development strategies and hoped to gain access to development funds.

5.2 Southern Carrier beetle action plan

CCBAC initiated the Southern Carrier Beetle Action plan as an economic diversification strategy in 2008 for the Southern Carrier communities namely the Ulkatcho (Anahim Lake), Lhtako Dene (Red Bluff), Lhoosk'uz Dene (Kluskus) Bands, and Nazko Bands. The Nazko Band, at this time, had embarked on a separate strategic plan so was not included with the Southern Carrier group. The Band had no affiliation with any Tribal Council and was pursuing other economic action plans. The Southern Carrier plan, which did not include a social development component, was put together in conjunction with the Carrier Chilcotin Tribal Council (CCTC). However, the CCTC represents the communities of the Tl'esqox¹⁷ (Toosey), Ulkatcho, Lhtako Dene, and Lhoosk'uz Dene Bands. The CCTC, therefore, submitted the economic diversification strategy for only three Southern Carrier Nation Bands.

¹⁷ Tl'esqox (Toosey) Band while administered by the CCTC was included in the TNG communities.

The Lhtako Dene Nation is an urban community located in the town of Quesnel, with its reserves both on the outskirts of the town and some bordering the City's subdivisions. The Nazko, Ulkatcho, and Lhoosk'uz Dene communities, however, are remote and isolated. Members of these communities are dependent upon wildlife, fish, berries, and other plants for their sustenance. The loss of wildlife habitat and the new logging roads into the forests were direct threats to the moose and deer population. Fish habitats were also under threat from the decreased forest cover and increase run-off leading to higher water temperatures. Limited access to spiritual sites due to increased logging activities and the inability to continue cultural practices at certain locations were of concern to the Southern Carrier communities (Leach 2008). The MPB had a direct impact on the hunting, fishing, and gathering lifestyle of the people. Furthermore, the people believed that the MPB, while creating short term opportunities for logging, will impact them for more than 80 years as the forest recovers (ibid). Additionally, the people also believed that the new forest, after recovery, will be different. Based on these beliefs, CCTC submitted a strategy for the economic survival of the Southern Carrier communities.

The CCTC strategy focused on key areas such as community wildfire protection and emergency response planning; tourism development for the Nuxalk-Carrier Grease Trail (also known as the Alexander Mackenzie Grease Trail); development of culture centres at different locations; fish camps and lodges both for subsistence and as tourist attractions; development of Non-Timber Forest Products (NTFP) including traditional foods, medicinal plants, and mushrooms; mitigation of forest hydrologic impact as a result of climate change, MPB outbreak, and timber salvage activities; and recovery of beetle killed forests through harvest design that emulates natural disturbances.

5.3 Tsilhqot'in Nation beetle action plan

In 2007, CCBAC established a Tsilhqot'in Economic Development Advisory Group to develop an action plan for the Tsilhqot'in-speaking nations, the ?Esdilagh (Alexandria), Tsi Del Del (Alexis Creek), Tl'esqox¹⁸ (Toosey), Tl'etinqox-t'in (Anaham), Xeni Gwet'in (Nemiah Valley), and Yunesit'in (Stone) Bands. Approximately 75% of their reserve lands were affected by the MPB epidemic (Tsilhqot'in Stewardship Department 2007).

Furthermore, the Tsilhqot'in reserves are isolated; some of them are rural and the others are remote, each with only one access road and surrounded by dead trees. Some of these communities had been evacuated due to wildfires in previous years. The further threat of forest fires and the need for community wildfire protection and emergency response plans was a priority for the TNG. In addition, the communities have limited capacity to adapt to the rapid changes in the forests and their environments and, therefore, remain vulnerable to the threats posed by the MPB epidemic (Tsilhqot'in Stewardship Department 2007).

The Tsilhqot'in people also rely on the forest resources for their subsistence, for their cultural and traditional activities, for the needs of their daily lives, and also for wage economy (Tsilhqot'in Stewardship Department 2007). The six communities are not negotiating their land claims through the treaty process but, rather, are jointly involved in the Tsilhqot'in rights and title case. These communities face similar challenges as the CCTC communities, which include the decreased wildlife habitats and forests cover; the impact on water temperature and fish habitats; decreased opportunities for hunting, fishing, and gathering of food and medicinal plants; and the impact of new logging roads within their

¹⁸ Tl'esqox is a Tsilhqot'in speaking community administered by the Carrier Chilcotin Tribal Council.

territory. In addition, spiritual places which are integral to the Tsilhqot'in culture were also impacted by the increased forest activities resulting from the MPB infestation.

The Advisory group operated through the TNG's Stewardship department. The group organized an economic development forum to generate community response through which baseline data was gathered. The group coordinated a number of community economic development visioning meetings with Tsilhqot'in community members and leaders. In addition to the on-going challenges faced by the First Nations communities, the Tsilhqot'in Stewardship Department identified other barriers to economic development (Tsilhqot'in Stewardship Department 2007). These barriers included lack of capital funding, fear of change, scarcity of human capital, and competition over available employment. Unique challenges faced by the Tsilhqot'in people included an on-going court case¹⁹ over land and resources disputes; the inability to access capital for development; low human capital; physical isolation due to remoteness of reserve locations; low educational attainment of community members on reserves; limited entrepreneurial skills due to insufficient business knowledge; shortage of people with drivers' licenses and lack of access to transportation; heavy reliance on the government by the communities; dependence on social assistance by the people; limited or no access to high speed internet; challenges with use of basic technology such as computers; and inadequate basic services such as water, housing, recreation, and electricity on the reserves (ibid).

The Tsilhqot'in communities' action plan was submitted to CCBAC as part of the regional strategy. The TNG submission was a Nation level strategy for the Tsilhqot'in-speaking communities but did not include information for the Tl'etinqox-t'in (Anaham)

¹⁹ At the time of this writing, the *Tsilhqot'in Nation v. British Columbia* court case is awaiting the ruling of the Supreme Court of Canada.

community. The TNG strategy focused on community wildfire protection and emergency response plans for five of the six Tsilhqot'in communities. In addition, the strategy proposed a joint venture bioenergy plant development to utilize beetle-kill wood for economic development. The proposed bioenergy development included the negotiation of more fiber supply from the MOFR and the major licensees in the area (Tsilhqot'in Stewardship Department 2007). The plan also included the development of a Tsilhqot'in cultural tourism market and products; the development of agriculture and agro-forestry advisory services; a call to increase research and development of culturally significant NTFP within the Tsilhqot'in territory and secure intellectual property rights over the use of these; a call to provide centralized support for communities to deal with increased exploration activities; and a call to develop identified critical community infrastructure (ibid).

5.4 Regional economic development plan

The tourism industry in the Cariboo Chilcotin region contributed \$80m to the GDP with over 2300 jobs in the year 2006 (CCBAC 2008). The Visitor Information Centres in the Cariboo Chilcotin Coast²⁰ region recorded a total of 39,459 visitors in the same year. In spite of this, CCBAC noted that the market had remained relatively unchanged by comparison to the 1996 and 2001 figures (ibid). Some identified strengths include several heritage and historical sites, parks, and family activities. In addition, there is an abundance of outdoor activities which included fishing, hunting, hiking, and water sports, some of which are seasonal. The region boasts of world famous sites such as the Bowron Lakes chain which is renowned for kayaking; the Blackwater for fly fishing; and the Barkerville and Cottonwood

²⁰ Cariboo Chilcotin Coast includes the coastal communities in the Bella Coola region. These communities are not included in this study area.

heritage and historical villages. The major disadvantages identified in the region include the lack of accessibility and the low quality of supporting infrastructure for these sites. CCBAC recommended that major investments in infrastructure including access, amenities, attractions, and accommodations be made. In addition, CCBAC also recommended increasing tourism products such as unique experiences at different locations, in addition to developing the workforce to ensure that demands can be satisfied (2008).

The agriculture sector in the Cariboo Chilcotin region contributed over \$66m to the GDP in the year 2006 (CCBAC 2008). Fifty-nine percent of this income was generated by beef cattle production (ibid). The region had approximately 1200 farms and ranches with long-term tenure. Farmers' markets were on the rise as consumer preferences were changing. Emerging sub-sectors included 'agritourism' and agro-forestry. New agro-forestry products, such as birch syrup, were being developed and were contributing to farming income. Ten working farms opened their gates to tourists in the region which also provided additional revenues for the sector. The beef cattle herd size increased from 53,500 in 1998 to 78,500 in 2008. With the present multiuse of Crown land, CCBAC anticipated that the herd size would be maintained within 10% of the 2008 size if grain prices remained high and the farmers switched to forage feeding (ibid). Presumably, switching to forage-based beef would lead to an expansion in the sub-sector as farmers increase their herd size. The agriculture industry has been well established in the region and is expected to grow at a modest rate; however, CCBAC was not anticipating that jobs created in agriculture would mitigate losses from the forest industry.

The mining industry played an important role in the development of the Cariboo Chilcotin region and continues to contribute to the economic wealth of the region. There are

two main mines operating in the region, Gibraltar and Mount Polley. These two mines employed 350 and 230 people respectively in 2008. A third mine, QR Gold, opened in 2007 with a total employment of about 50 people (CCBAC 2008). In addition, there were numerous placer mines and exploration companies within the region. The region already has quality infrastructure in place to support this sector. Some believed that the proposed Prosperity Project had the potential to create up to 500 direct full-time jobs, 790 indirect jobs, and at least 300 indirect jobs and estimated that the project will generate up to \$200 million of spending to the region annually (CCBAC 2008, Legislative Assembly 2012a). In addition, Blackdome Gold Mine and Bonanza Ledge Gold Quartz Deposit are two other promising development projects within the region with over \$2B in proposed capital investments (Legislative Assembly 2012a). It was anticipated that the Bonanza Ledge would provide up to 50 jobs, while the Blackdome project would provide an additional 100 jobs (ibid). Local municipalities and various business groups considered these projects as lynchpins and essential elements in the economic stability of the region (CCBAC 2008).

There were several sawmills in the region which processed logs for export to other markets. In addition, there were two pellet plants, both of which supplied international markets. The log homes sector was also growing but subject to pressures from the US housing market. There were 50 firms engaged in secondary wood products manufacturing in the region (CCBAC 2008). These firms provided direct employment to 722 people and an additional 450 indirect jobs (ibid). The lack of proximity to markets and competition from China and India were limiting factors in the growth of this sector. However, in 2013, Northern Development Initiative Trust (NDIT) stated that there were over 900 businesses which manufactured products such as treated lumber, engineered wood products, shakes and

shingles, poles, log and timber-frame homes, mouldings, and other finished or semi-finished goods in the region²¹ (2013b).

There are potentials for developing the Non Timber Forest Product (NTFP). Powell identified over 60 plants used locally by First Nations people for food, medicine, and crafts (2005). The reported annual harvest of 3,000 to 14,000 kg of pine mushrooms and morels were a mere fraction of the potential opportunities in this sector (Powell 2005). He further stated that the annual harvest of a variety of berries, plants for herbal medicine, and cosmetic products are at a minimum (ibid). Furthermore, there are strong demands for birch syrup products, arts and crafts, and for ecotourism. Lack of support for product development, marketing, and competing uses of land were the main barriers for the economic growth of this sector. Hence the opportunities in this sector remained largely untapped.

5.5 Regional energy sector

In 2008, BC Hydro invited proposals for the supply of electrical energy generated from forest-based biomass with a target to procure approximately 1,000 GWh/year of firm energy (BC Hydro 2009). This call for proposals, called Phase I, was in line with the BC Bioenergy Strategy released by the provincial government, “Growing Our Natural Energy Advantage,” which was released in the same year (PBC 2013b). Also in 2008, BC Hydro made another call for clean energy. Several companies participated in the call, which included some wind projects in the Cariboo Chilcotin region, but none of these projects was successful.

²¹ This number includes businesses in BC's Central Coast region. This region is remote and encompasses the communities of Bella Bella, Bella Coola, Denny Island, Ocean Falls and Oweekeno. The region is a total of 25,000 square kilometers of land with population of 4,000 people (Northern Development 2013a)

In May 2010, BC Hydro issued a Phase II call for clean or renewable biomass power development, still towards the procurement of the approximately 1,000 GWh/year of biomass energy. The designated area for both the Phase I and Phase II calls included the Cariboo Chilcotin region. Proposals were received from five companies in the Cariboo Chilcotin region which included one from the Tsilhqot'in communities, Tsilhqot'in Power Corporation (BC Hydro 2009). However, four companies in Castlegar, Prince George, and Kamloops were successful in the Phase I call, while companies in Chetwynd, Merrit, Fraser Lake, and Fort St. James were successful in the Phase II call.

Several remote communities in the Cariboo Chilcotin region are still powered by diesel generators, including the Ulkatcho communities at Nimpo Lake and Anahim Lake and the Kluskus community at Kluskus Lake. The diesel generator at Kluskus Lake is owned and operated by the Kluskus Band but maintained through funding from the AANDC. The Diesel Generating Station (DGS) which supplies electricity to the Ulkatcho communities at Anahim Lake and Nimpo Lake, conversely, is owned and operated by BC Hydro (BC Hydro 2010). This DGS system is not integrated into the grid system, hence managed by BC Hydro's Non-Integrated Area division. Non-integrated generating systems are typically remote and are at long distances from the integrated transmission and distribution system. Due to the relatively small electrical load of these systems, distribution interconnections are uneconomical. Nonetheless, transmission interconnections can be economically feasible based on the amount of power being generated or the local need. BC Hydro reported that a distribution connection linking Anahim Lake to Williams Lake was not technically feasible due to the limitations of the existing feeder capacity at Williams Lake and the insufficient load growth along Highway 20 (2010).

The DGS at Anahim Lake has six mobile generators with a capacity for 3.65 MW (2.65 MW firm); however, the station currently produces and supplies approximately 6,400 MWh of electricity annually with a peak winter load of 1.4 MW to residential and commercial customers but not to industrial users (BC Hydro 2010). As a result, West Chilcotin Forest Product (WCFP), a sawmill wholly owned by the Ulkatcho Band at Anahim Lake, has its own generator to supply all its industrial needs. The cost of operating WCFP's diesel generator acts as a competitive disadvantage for the sawmill.

The goals of the province include reducing greenhouse gas emissions as stated in the *BC Clean Energy Act*. Seeing that DGS systems emit greenhouse gases, BC Hydro's strategy includes replacing these with renewable sources. In addition, the cost of diesel and any associated spill cleanup is high. As such, BC Hydro was seeking "an alternate firm source or high penetration system (60% to 100% renewable fraction) with a relatively stable output (such as small-hydro)" to replace the DGS at Anahim Lake (BC Hydro 2010, 17). The alternative source of energy will reduce or eliminate the reliance on diesel and lower the fuel cost over 25 years. The net present value of the fuel-only cost for Anahim Lake was calculated to be a total of \$25.6 million for 25 years by BC Hydro (ibid). In addition, this electricity is currently sold to the customers at subsidized rates, thus creating further losses. BC Hydro reported that the Anahim Lake DGS consumes between 120,000 and 250,000 litres of diesel fuel each month in order to produce approximately 500 MWhr/month or 6,400 MWhr/year. This DGS produces approximately 5,000 metric tons of CO₂ emissions per annum. An increase in the industrial energy needs of the region is anticipated; therefore, BC Hydro was examining a grid connection linking Anahim Lake to Williams Lake via Highway 20. The cited industrial projects which would need energy included mine projects such as the

Prosperity Mine development, expansion of Gibraltar Copper mine, the Bella Coola²² Rock project, and other developments such as the Williams Lake Arena and Events Centre. A distribution grid connection via Vanderhoof, which would incorporate the mines in the Blackwater Gold District area, was not considered an option due to the cost of infrastructure, intensive consultation, and the regulatory requirements; in addition, it could take up to ten years to implement such a grid connection. With the anticipated need for industrial electricity and the availability of MPB fiber, BC Hydro made a call for an independent Community-Based Biomass Power proposal in April 2010. The electricity generation options were limited to biomass, small run-of-the-river, wind, and a worst case of replacing the existing DGS with one with more load capacity (ibid). Yun Ka Whu'ten Holdings Ltd., a development corporation wholly owned by the Ulkatcho Band, was selected to proceed to the next step in this Community-Based Biomass Power call. The industrial energy needs, including three-phase power supply for the isolated rural and remote First Nations communities, remains important for community and economic development in the region.

5.6 Options and constraints for First Nations communities

The impact of the MPB epidemic is ongoing. The implication for remote First Nations communities is twofold. First, these communities suffer from high unemployment due to their locations. As reported, the Aboriginal communities in the region are less adaptive to change as a result of the low levels of skills within the communities; the social problems resulting from the residential school experience; the lack of adequate infrastructure such as housing shortages, access to technology and the internet; and the inability to raise capital for

²² Bella Coola is situated at the terminating end of the Highway, hence included by BC Hydro in its regional planning.

economic development (Leach 2008, Kunkel 2008, Tsilhqot'in Stewardship Department 2007). Second, the land and space within which the First Nations communities sustain themselves are now under intense pressure from resource development. In addition to the effects of the MPB on wildlife and ecosystems, the accelerated harvesting of marketable timber has increased access to areas typically used by communities for traditional and subsistence purposes. Areas of spiritual and cultural significance are also being impacted by increased forestry activities. Community members report increased predators, like wolves, in their hunting areas which are reducing the number of big game available for hunters (Alec 2013). Furthermore, changes in hydrology as a result of dead trees are causing increased runoff in creeks and rivers, hence some areas are now subject to flooding.

The participation of rural and remote First Nations communities in the economic boom caused by the AAC uplifts was limited due to the inadequate community and economic infrastructure. The communities which already have forestry businesses were able to take advantage of the forest licenses issued through the provincial FRA and FRO agreements, although these were short-lived due to the non-renewable nature of the licences. The lack of three-phase power supply and access to capital for investment in logging equipment hindered the ability of some communities from participating in this economic opportunity. Through the Forest for Tomorrow program, some communities participated in silviculture activities, replanting trees within their traditional territories.

There were several major project investment opportunities in the Cariboo Chilcotin region as reported by NDI (Northern Development 2013b). These included Cariboo Mining properties at 100 Mile House; Elizabeth Gold Property and Blackdome Gold Mine in the Blackdome area; several mining projects at the Blackwater Gold District; the North Cariboo

Multi-Centre, and Cariboo Pulp and Paper upgrades in the Quesnel area; the Nazko Gateway project proposed by the Nazko Nation; Spanish Mountain Gold Mine project at Spanish Mountain in the Likely area; three gold mine projects at Wells; and the New Prosperity project, Gibraltar Mine expansion, and a Prosperity Ridge Shopping Centre in the Williams Lake area. The majority of the mining projects are situated within areas used by First Nations people. Development plans are being made for the mine projects; however, these plans do not include infrastructure investments for the First Nations communities. While mine project proposals such as the proposed Prosperity and Newgold projects planned to bring a three-phase power supply to mine sites within close proximity to reserve lands, there were no plans for distribution connections to any of these communities. The distribution interconnection to the New Prosperity project site, for example, proposed transmission lines pass through the Esket'emc and Canoe Creek communities; yet, these communities will remain without this important infrastructure. Other communities at close proximity to the proposed New Prosperity²³ mine site, such as Yunesit'in and Xeni Gwet'in, also would remain without three-phase power supply yet could potentially benefit from this infrastructure if made available.

The opportunities for First Nations communities to participate in eco-tourism or Aboriginal tourism are immense; however, the constraints of developing this sector include the costs of improving access to remote areas and of improving amenities. Furthermore, other uses of land such as mining and forestry have visual impacts which affect the viewsapes and landscapes, thus reducing tourist attraction to certain areas of the region. Negotiating development activities in these areas is therefore vital for these communities and the region

²³ The Prosperity mine is a precursor to the New Prosperity mine. Both projects refer to the same gold deposit and development at the same location.

as a whole. The viewsapes and landscapes in and around the Cariboo Chilcotin region present numerous opportunities for growth in the tourism sector. Aboriginal communities expressed their interests in participating in eco-tourism and Aboriginal tourism developments. The skills and resources required for participation currently exist within their communities. The people have knowledge of their traditional territories and local histories. In addition, communities have stories and oral traditions unique to their traditional territories. The Southern Carrier, for example, proposed a tourism strategy which included the development of an interpretive centre along the Nazko Highway at a site with known archeological artifacts (Kunkel 2007, Leach 2008). In addition, the Southern Carrier people also proposed the development and management of the Nuxalk-Carrier Grease Trail popularly known as the Alexander Mackenzie Heritage Trail (ibid). Furthermore, the Tsilhqot'in territory has numerous tourism assets which include lakes, provincial parks; wildlife, including wild horses and grizzly bears; and hot springs (Tsilhqot'in Stewardship Department 2007). The people are open to sharing their territory with tourists, provided published protocols are adhered to as indicated on the Xeni Gwet'in's website. In addition, the Tsilhqot'in people have annual traditional gatherings and celebrations (Tsilhqot'in Language Group 2012). These events draw people both from local communities and from afar.

The provincial parks and protected areas are close to some reserve communities. For example, the Ts'yl'os Provincial park is close to the Xeni Gwet'in community, the Itcha Ilgachuz and Tweedsmuir parks are close to the Ulkatcho community, the Wells Grey park is close to the Canim Lake community. These, in addition to other parks, such as the Bowron Lake provincial park, provide space for seasonal recreational activities within the region. The

activities include sightseeing, wildlife viewing, horseback riding, rodeos, hunting, fishing, water sports, camping, skidoo-ing, skiing, and snowshoeing. Some First Nations communities are developing heritage sites close to these parks for tourism. An example of such is the Xeni Gwet'in's development of a traditional village at a site on Chilko Lake which is within the protected area of the Ts'yl'os Provincial park.

The opportunities for the development of tourism products along with Aboriginal crafts are immense. The arts and crafts made by local First Nations people include beadwork and hide products. Hide products range from little decorative ornaments to full regalia, which are the traditional outfits worn for pow-wow events. Several First Nations women and elders make these products, the majority of which are not for sale, although some Friendship Centres and Band Offices in urban areas market a limited amount of these products. There are existing skills, language, and cultural activities within communities which are associated with tanning and working with hides. All these will be lost if the people do not hunt or are unable to. Community Futures Development Corporation of the North Cariboo worked on a project, in the summer of 2013, to help develop the market for Aboriginal crafters in the Quesnel area. A number of crafters from the Nazko community participated and sold a substantial amount of their work at the Quesnel Farmers' market. The project demonstrated that there is a market for these local crafts. Developing new markets, local or international, for the craft products will ensure continuity of cultural practices and enable these to be transferred to the next generation.

5.7 Conclusion

The injection of significant amounts of money in the Cariboo Chilcotin region as a response to the MPB epidemic has been the driver of the flurry of resource development activities over the past 12 years. There are indeed numerous opportunities for development; however, the resource producing lands are also areas within which First Nations communities continue to sustain themselves. Their limited ability to participate fully in development activities further perpetuates the position of marginality experienced by these Aboriginal communities. Furthermore, these development activities restrict access to areas used for their traditional purposes and cultural activities. The communities are, therefore, in limbo, unable to modernize due to lack of development infrastructure, and to fully practise their traditional ways. In a sense, they have to remain dependent on the lands within their traditional territory in order to survive. Hence, these Aboriginal communities remain within the economic margins of Euro-Canadian society. The development of an economic base, that is a major industry that provides local employment opportunities, is essential to support and sustain development in First Nation communities which are currently on the fringe of resource producing areas.

Chapter 6 The ongoing negotiation and renewal stage: Community case studies

The resource development events in the past decade have had a tremendous impact on Aboriginal communities in the region. The degree of participation of the communities varies across the province. The Aboriginal communities in the Cariboo Chilcotin region are bearing the impact of unprecedented exploitation of their forests as a result of the MPB epidemic. Some of the communities have outlined their strategy to develop and diversify their communities within the regional strategic plan submitted to the provincial government. This chapter describes the negotiation and renewal stage of two Cariboo Chilcotin Aboriginal communities: the Nazko First Nation and the Xenigwet'in First Nation. Both communities have been impacted by resource exploitation within their traditional territories and have already embarked on their development activities. Each community is unique in its approach to development, with each exploring their different options. This chapter further examines the impact of resource development activities, logging in particular, on the two communities and the efforts being made to develop sustainable economies.

The Nazko and the Xenigwet'in people are two Indigenous groups whose communities are situated geographically within the resource rich hinterlands of BC. The Aboriginal cultures and languages of the communities are indigenous to their traditional territories, and are intrinsically linked to these locations. Furthermore, the languages and cultures of the Nazko and the Xenigwet'in First Nations are different from each other, although the languages of both are part of the same Dene or Northern Athabaskan language family. The two communities have been impacted by the MPB epidemic and by the logging activities within their territories. However, parts of the Xenigwet'in territory remains relatively untouched by resource development activities while the Nazko territory is actively

being logged. Neither of the two communities has ceded their lands to the government, and their Aboriginal rights and title have not been extinguished. Both communities are seeking self-determination and self-government and are negotiating their lands through different processes. The Xenigwet'in people are going through the court system while the Nazko Band is going through the Treaty system. This chapter captures how the Nazko people are negotiating their lands and their community planning process. The information presented in this chapter also captures the struggles of the Xenigwet'in people as they fight to keep their land from mining development in order to continue practising their traditional ways.

6.1 The Nazko people: An introduction

My work with the Nazko First Nation people started in 2006. Through UNBC's First Nations Studies program, I worked with the Band as an Intern student. This subsequently led me to work with the Band in a professional capacity as the Economic Development Officer. In that time, I also conducted my research for the Master's in Natural Resources and Environmental Studies degree. The position, Economic Development Officer, for the Band was concluded in 2008 when I joined UNBC's Regional Services to deliver the Aboriginal Business Program for the region. However, I have continued to maintain my work and research connections with the people, providing them with support in their economic and community development initiatives. In 2012, I was appointed a member of the Board of Directors for the newly formed Nazko Development Corporation. Through this position, I have remained directly involved in the economic development of the community.

The Southern Carrier name 'Nazko' means 'the river flowing from the south'. The Band consists of people from the Southern Carrier ancestry in the Nazko Valley and the

descendants of the Blackwater and Euchinico Bands (BC Treaty Commission 2009b). The main reserve of the Nazko people is located 100 km west of the City of Quesnel. Furniss stated that the people historically occupied an area spanning more than 500 km² west of Quesnel (1993a). However, the August/September 1976 *Nesika* Newspaper reported that the Southern Carrier people including the Nazko people, occupied 3,200 square miles (8,288 km²) along the Blackwater River watershed west of Quesnel. Other reports showed that the Nazko people and other Southern Carrier communities had occupied and used areas east of the Fraser River, extending to the Bowron Lakes and Barkerville area (Careless 1975, Kew 1974). The traditional territory of the people spans the entirety of the Quesnel Timber Supply Area (TSA) and some parts of the Williams Lake, Prince George, and Vanderhoof TSAs. The community, with a total population of 367 people, now has 19 reserves on 1,848.40 hectares of land which is spread out around the North Cariboo (Statistics Canada 2007, Aboriginal Affairs 2013). Of the 367 Nazko Band members, only 150 live in the 43 habitable dwellings on three reserves, IR#20, #17, and #26 (Chantyman and Kunkel 2012, 10). The majority of these 150 people live on the main reserve, IR#20, which consists of 463.80 hectares of land in the Nazko Valley and is located approximately 100 km west of the city of Quesnel. Due to lack of adequate housing, many registered Band members do not live on-reserve. In addition to a housing shortage, there are few local jobs, and the provision of essential services is also limited. The educational attainment of Band members is quite low. The District owned and operated elementary school, Nazko Valley Elementary School, is located just outside the reserve with classes from kindergarten through to Grade Seven. The children living on reserves attend the school but have to commute over 100 km to Quesnel for their education from Grade Eight upwards.

6.1.1 Nazko community and logging activities

The Nazko valley is an area rich in natural resources. The valley contains several lakes, rivers, and some provincial parks. The area is served by some guide outfitters and attracts tourists annually. There are established ranches and farms in the valley, with hay meadows and grazing lands. Logging is active year round in the region and supports the mills located in Quesnel. The Nazko valley is a known volcanic area. The Nazko Cone, which is believed to be the easternmost expression of the Anahim hot spot that stretches across central British Columbia from Nazko to the Pacific Ocean (Natural Resources Canada 2013), is at close proximity to the main Nazko reserve, IR#20. The last eruption of the volcano was estimated to be about 7200 radiocarbon years old (Natural Resources Canada 2013). The cinder cone at Nazko, which is currently mined by a company, is a valuable resource known as lava rock. This is used for light-weight aggregate, landscaping and groundcover, and in agricultural and horticultural applications.



Figure 11: Lava rock mine at the Nazko cone, 2013



Figure 12: Lava rock mine at the Nazko cone, 2013

Economic activities started in the Nazko valley and its surrounds circa 1971. Professor Micheal Kew, from the Department of Anthropology and Sociology at the University of British Columbia (UBC), spent the summer of 1972 and the winter of 1973-74 at Nazko with the Southern Carrier people. His ethnographic report captured this crucial stage in the development of the region and the way of life of the Nazko people at that time. In 1972, there was no investment in development infrastructure within the Nazko and Kluskus communities as reported in a letter from Mr. Brendan Kennedy to the *Nesika* Newsletter of October that year. Mr. Kennedy was employed by the Union of BC Indian Chiefs (UBCIC) as a Community Development worker for Nazko and Kluskus communities. The *Nesika* editor commented that communication infrastructure was limited in the Nazko and Kluskus region, with horseback as the only mode of transportation; there were no telephones; postal service was inadequate as it took a long time for mail to get in and out of the region; and to contact Mr. Kennedy, the radio station in Quesnel had to broadcast messages, some of which

did not get through if the signal was poor or batteries were weak. Meanwhile, the town of Quesnel was undergoing rapid economic development as a result of the forestry and the mining industries.

Kew noted that the Nazko people had remained subsistence hunters and fishermen, and trapped fur-bearing animals for cash income and or trade for goods as late as 1954-55 (1974, 53). He also noted that the community had become highly dependent on welfare as a result of unemployment during his stay. The 1974 population census showed that 20% of the Nazko people lived off-reserve during that time and about 50% of the population was under the age of 15 (Kew 1974). Of the employable males both on and off-reserve, Kew counted 16 unemployed and eight employed during what was the peak employment season, i.e. July in 1974. Most of the employment for the Band members was public sector work which included Band Administration and government funded programs. At that time, guiding employed 14 men and between four and five women in the two months of autumn, which was the norm. Trapping was another source of employment. Kew estimated that 20 to 24 people trapped during the winter of 1973-74. It is uncertain if Kew's estimate included the Kluskus people; however, he noted that the decline in fur trade coincided with the beginning of a rapid increase in population of the Southern Carrier people (1974, 53). Hence, more people became dependent on the shrinking trapping income. Transfer and welfare payments were higher than trapping income, thus becoming attractive to the Nazko people, not as a supplement but as a replacement income. Kew noted that trapping had become an activity which was carried out for cash in ways that did not interfere with welfare payments (1974, 55). Traditional schooling for the young children, under the guidance of fathers and uncles during trapping camps, was no longer being practised as reported by Kew (ibid).

The work of Ric Careless, from the Resource Planning Unit of the Environment and Land Use Committee (ELUC) Secretariat, also provided some government perspectives of the situation at Nazko. Careless' understanding of the concept of Land Claims by the people did not indicate a Nazko kingdom, but one that provided a way for the people to come off welfare and enable them to return to their traditional lifestyle; hence, their fight was seen not against logging but rather against the indirect effects of the logging, particularly the destruction of moose and wildlife habitat, increased access by non-Natives leading to a reduction in game population, and the destruction of traplines and berry patches (Careless 1975). The building of logging roads to access timber west of the Fraser River, in areas traditionally used by the Nazko and Kluskus people, led to protests and the blockade of Michelle Creek Road within the Nazko territory by the people in 1974. At the time, the Ministry of Forests, known as the Forest Service, stated that access to a logging area which was known as 'Narcoslie' was required for the continued sustainability of Quesnel's economy. The harvesting of the timber in the area was regarded as the lynchpin for the sustainability of three mills and 500 direct jobs in Quesnel. Up until that time, the Southern Carrier people maintained full control of the territory, west of the Fraser River (Kew 1974, 56). Servicemen such as resident priests, Indian agents, or policemen were never located at any of the Nazko reserves. Game wardens or fisheries officers did not interfere with the people. It was believed that this was partly as a result of the remoteness of the area and the small size of the population (Kew 1974, 11). In addition, Kew attributed the geographic isolation of Nazko, Kluskus, and Ulkatcho communities to their increasing population, good health, and the better standards of living by comparison to their kinfolks, the Lhtako and Alexandria people, who lived in close proximity to towns and were facing a declining population (1975, 26). Furthermore, these remote and isolated communities were less

exposed to disease epidemics and the debilitating and disruptive effects of alcohol during this period (ibid). Until about the mid 1900s, the Nazko people relied on fish retrieved from many lakes and streams within their territory, game hunted throughout the year, and berries and edible bulbs harvested in season (Careless 1975, Kew 1974). Mining and other resource development activities had encroached on several rivers and creeks east of the Fraser River, disturbing salmon fishing and spawning sites within the Southern Carrier territory. The west of the Fraser River was left relatively undisturbed by resource development activities (Kew 1974, 55). The proposed logging development was a direct threat to the way of life of the Nazko and Kluskus people; nevertheless, the two bands decided to go through the proper government channels to seek a five year moratorium on forestry development in this area, thus giving them time to cooperate with Forest Service and to determine how logging should happen within their territory for the mutual benefit of all (Zimhelt 1976).

The rapid growth of the forestry industry in Quesnel started in 1948 (Careless 1975, Kew 1974). The forest district was divided into five Public Sustained Yield Units (PSYU) and one tree farm license. By 1952, the number of mills in the district had grown from 33 to 180, with the addition of a plywood plant (Kew 1974, 57). As the size of the mills increased, companies consolidated and the numbers decreased (ibid). By 1966 the number of mills was down to 70 sawmills and 13 planer mills in the area (Careless 1975; Kew 1974, 57). These employed 2,350 people. By 1971, there was a pulp mill in the area. There were several harvesting permits from surrounding units east of the Fraser River which supplied timber to the mills in Quesnel. The impacts of logging within the Southern Carrier territory was such that thousands of miles of new road construction opened up remote and untouched areas in an unprecedented manner. The population explosion in Quesnel that came with logging was ten-fold in three decades (Kew 1974, 59). Housing developments intruded in areas used as

fishing camps by the Southern Carrier people in west Quesnel, and there was increased competition for big game as a result of new logging roads. Very few Natives participated in employment activities afforded by the industry.

The Narcoslie PSYU, west of the Fraser River, had remained untouched. That particular area was considered a retreat and refuge by the Nazko and Kluskus people during the gold rush and well into the development of the logging industry (Careless 1975, Kew 1974). The sudden change, as a result of timber harvesting in the region, left Nazko valley and Blackwater River drainage as the only intact areas in the vast territory of the Nazko and Kluskus people. In 1973, this area was threatened by the encroaching development activities as a result of the booming logging industry. The *Nesika* Newspaper of September 1973, a journal devoted to the Native land claim movement, reported that the Nazko and Kluskus people were not consulted on the proposed activities which included new road constructions, logging activities, and residential accommodation for forestry workers about two miles from the main Nazko reserve. However, it is uncertain if the intention was to have permanent dwellings or campsites as stated in the different newspapers and other reports. The Nazko and Kluskus people read about the plans for the Narcoslie PSYU and the residential development in the local newspaper. The impact of residential accommodation for 100 people at close proximity to the reserve was a major concern for the two bands. The *Coyoti Prints* of September 20 1976, a Cariboo Tribal Council Newsletter, provided a full, 12 page newsprint of the situation, reporting from the perspectives of the Nazko and Kluskus people. Lena Patrick was quoted saying, "Probably they don't even know we lived here all our lives and to us the land is OURS. Why don't they give us time to think over what we want to do with our land?" (*Coyoti Prints* 1976). The Nazko people were vocal about their opposition to the development activities which did not include or involve them.

Everyone should know, how much the wild game and other animals mean to the Indian, and especially as the Indians have been making their living on hunting, trapping and fishing all their lives. And I know we want to keep on living like that, we don't want to change our lives, and we certainly don't want to go to the Whiteman's meat market to buy our meat and fish. The prices are way too high, and we Indians can't afford to live on high-price meat and fish for the rest of our lives. We can very well hunt get our own bear, deer and moose meat and fish for our own fish to eat. Violet Boyd. (*Coyoti Prints* 1976)

The *Nesika* Newspaper of August/September 1976 and the *Coyoti Prints* of

September 20 1976 provided a chronology of events between 1973 and 1976, detailing the communications between the Bands and various government departments including ministers and the Department of Indian Affairs. The result of the Nazko Kluskus protest and the road blockade was a three month moratorium on road construction and a halt on residential development in the Nazko valley. The Cariboo Observer of October 6, 1976 featured the peaceful demonstration of Nazko and Kluskus people on the streets in Quesnel following the beginning of the road construction. The 1977 Spring Issue of the *Nesika* Newspaper reported that at the Bands' meeting with the Provincial Labour Minister at that time, Minister Allan Williams, it was admitted that there was no immediate need for the timber in the area. However, the road building and timber cutting plans were already laid out, and these were not going to change. The paper also reported that the Minister offered to train Band members in timber harvesting work and to allow one representative from the two bands to sit at the informal advisory committee with representatives from the Forest Service and Fish and Wildlife branch. This was deemed as a way of accommodating the Nazko and Kluskus people. However, this offer was rejected by the Bands. In the spring 1977 issue of the *Nesika* Newspaper, Stanley Boyd, a former Kluskus Chief, stated, "participating with the Forest Service on an Advisory Committee would be like planning our own destruction."

The response from some of the forestry companies in the area was more sympathetic to the plight of the Nazko and Kluskus people. The companies were prepared to provide the Nazko and Kluskus people with training, some supervision, and some wood for the communities to start their own logging operation if they are able to secure logging equipment (Careless 1975). The Nazko and Kluskus Bands went through three and a half years of “red-tape” trying to be a part of logging development on the west of Fraser River. The communities put together a Nazko Kluskus Study Team to investigate and report the concerns of the people. This report stated, in detail, the concerns of the people, including the impacts of the proposed logging activities within their territory and its effects on their ability to meet the needs of their daily lives. In addition, the concerns of the Nazko and Kluskus people emphasized the impacts of intrusion of another culture on their Aboriginal rights and values. Careless interpreted the concerns of the Nazko and Kluskus people as wanting a form of economic development that is in keeping with their values and lifestyle (1975). Careless argued that the report published by the Study Team, whom he referred to as ‘White’ advisors, was confusing and contradictory, and claimed that these advisors believed the return to the old ways was more satisfying for the Natives while at the same time they were condemning the lack of amenities such as better housing and healthcare facilities (ibid). As a result of Careless’ report, the proposal made by the Nazko and Kluskus people for the management of the Blackwater River Watershed was ignored. However, Careless recognized the need for some cash economic base for the people rather than welfare:

To deal with the Nazko-Kluskus situation requires that one be able to differentiate between the true concerns of the natives and those concerns which white advisors – working altruistically for the natives – have themselves identified and decreed to be the true concerns. For if an enduring solution is to be reached at Nazko-Kluskus (or in any other similar situation) Government must be certain that it is dealing with the real native problems, not the ones which have been alleged to be real by non-natives. (1975, 1)

As a result of Careless' report, no changes were made to the logging plans for the Blackwater River watershed. The development plans for the area did not accommodate or mitigate the cultural practices of the people, neither was economic infrastructure put in place to enable the community to benefit from the resource exploitation activities. In March of 1975, the Nazko and Kluskus people made a public declaration as follows:

1. That we hold the Aboriginal title to the lands on which our ancestors dwelt and from which they gained their living;
2. That no further encroachment of any kind by outsiders shall be permitted on the remaining unspoiled portions of our Aboriginal territory, namely the watersheds of the Nazko and Blackwater rivers west of the Nazko River to the Ulgatcho Mountains;
3. That we shall take what steps are within our power to protect and keep for ourselves and our children the right to continued and undiminished use of those remaining unspoiled portions of our land and resources;
4. That we are prepared to meet with the proper authorities of provincial and federal governments to discuss our land claim and to establish joint means of protecting our separate mutual interests. (*Coyoti Prints 1976, Nesika 1976*)

Logging proceeded as planned by the Forest Service in the Narcoslie PSYU, east of the Fraser River. The statement from Chief Philip Patrick of the Nazko in 1976 showed that the people wanted to be a part of the economy but were marginalized:

Everyone in Nazko had cattle. White ranchers came in and took grazing lands and places where people make hay. So, Nazko people had to sell all the cattle. Now it's the trees and what's next. Chief Philip Patrick, Nazko. (*Coyoti Prints 1976*)

The people were no longer in control of the land within which they used to be free to practise their culture, neither were they able to participate in the economic development activities.

Kew noted that the Indigenous culture of the Nazko people had not been eroded during that time. The people spoke their language, maintained their cultural practices and ceremonies, had a "large fund of knowledge about the physical environment, its resources, the life-ways of animals, birds, and fish, and a technical know-how for effective fishing, hunting, and

trapping,” and retained some ideas and beliefs underlying their traditional worldview and mythology (Kew 1974, 64). Furthermore, Kew argued that ‘Indians’ were locked into the state of being ‘Indian’ because of the attachment to the land itself at a particular space or geographic location (1974, 65). In the case of the Southern Carrier people’s experience, this space was shrinking. However, the shrinking space in the Cariboo Chilcotin region was not confined to the Southern Carrier territory. The intrusion of forestry was having similar effects within the territories of other First Nations people. Zirnelt reported that the Nazko Kluskus road blockade had set the precedence for civil disobedience by other Natives in the Cariboo region (1976). The Esket’emc people followed suit with similar actions against logging within its territory (Zirnelt 1976, 57) and the Tsilhqot’in people similarly did the same as discussed in Xenigwet’in case study below.

6.1.2 Nazko economic development activities: From 2002 to date

The Nazko Logging Partnership was formed in 1984 with help from the Cariboo Indian Enterprises (CIE) (Cassidy and Dale 1988, 102). The CIE, a logging company which was jointly owned by the 15 First Nation Bands in the region, was created in 1971 with loans from seven of the Bands to utilize some of the facilities of a former INAC forest training centre (Cassidy and Dale 1988, 102; and Zirnelt 1976, 28). The CIE had a 32,000 m³ AAC to harvest logs from federal military lands at Riske Creek which were sold to sawmills in the Williams Lake area (Cassidy and Dale 1988, 102). The Nazko and Kluskus Bands worked with the CIE through the Nazko Logging Partnership, using a timber license acquired in 1974 for an area designated as “special native block” (ibid). This license was presumably as a result of the blockade. The Nazko Logging had one piece of logging equipment and a

contract operator and provided employment opportunities for members of the communities. In the same year, 1984, Nazko's reserve, IR#20, was connected to the electrical grid (Chantyman and Kunkel 2012, 10). The distribution interconnection from Quesnel supplied the community with only one-phase power supply. This power supply met the residential needs of people on IR#20 and the farms nearby; however, the supply is not capable of meeting the needs of industrial users. The highway leading to the main reserve from Quesnel was paved in 1985. Telephone and internet services became available at this reserve in 1999. This reserve also houses the only Health Centre facility that was built in the valley in 1972 (Kew 1974). A new facility was opened in September 2013 and will be in operation in 2014. Other Nazko reserves still lack essential services such as running water, electricity, or internet services.

Delores Alec became the Chief of the Nazko Band from 2002 until 2012. At the time Alec became the Chief, the Band had a debt load of \$2.8m from the previous administration as reported in the local newspaper at the time (Gallant 2004). The deficit was the result of the Band's attempt to operate a sawmill on-reserve and another one in Quesnel. While these operations provided employment for Band members, the costs of operating the two sawmills were uneconomical due to the diesel generator and the high finance cost of equipment. The focus of the Chief and her administration, for the first few years of being in office, was firstly to restore financial stability at the Band office and, secondly, to improve the quality of life for the members. The logging business continued to provide some employment for Band members and provided additional income for community development. Through the logging business, the Band was able to participate in economic opportunities provided by the MOFR. These economic opportunities were provided by the Province to all First Nations communities through FRA and FRO agreements. The Nazko Band signed its FRA and FRO

agreement in 2004 and a MPB Agreement was signed in 2007, both with the MOFR. These agreements provided the logging business with guaranteed timber for a limited period of time. At this time, the Band was embarking on its Comprehensive Community Plan (CCP) and also making progress with the Treaty. The Band received funding from WED's MPB Initiative program to develop its economic diversification strategy and also for a pre-feasibility study of its geothermal resources. The aim of the pre-feasibility study was to assess the potential of the resource to generate power for economic development within the Nazko Valley.

In 2007, the Band started investigating the geothermal resources within its territory with the hope of utilizing this to further develop tourism and agriculture in addition to meeting its energy needs. At the same time, the community was also investigating the feasibility of a biomass energy plant or alternative energy sources to power a pellet plant, intended to create employment for Band members living on-reserve. A pre-feasibility study was conducted to determine if there were enough resources available, within economical distance from existing power infrastructure, to make a case for electricity generation. Coincidentally, in October of the same year, there were renewed signs of volcano activities. There were earthquakes recorded by Natural Resource Canada (NRCan) 20 km from the cone. These earthquakes were about two to three in Richter magnitude, and were accompanied by hundreds of tremors (Natural Resources Canada 2013). The seismic activities were monitored by NRCan for several months and it was determined that an eruption was not imminent; however, the lava flow was at a 25 km depth beneath the earth surface. This was promising news for the Band. I started the study with discussions with Band members to obtain information about locations of known physical manifestations of geothermal resources. This was followed by a field trip, in the winter of 2008, to some sites

within the Nazko territory with properties similar to physical manifestation of geothermal resources. A Band Councillor, the Treaty Coordinator, community members, Dr. Mory Ghomshei, and I made the trip to Crater Lake which does not freeze in winter months, and to the site of a carbonated spring, which has a slightly elevated temperature. There have been subsequent trips to other locations, including a visit to the site of a well drilled by a company called Canadian Hunter in the 1980s during their investigation of the presence of oil and gas in the region. Data from the MEMPR showed higher than normal temperature recordings from this well at a shallow depth. Community members mentioned that there were a number of such wells drilled in the area. The locations of these wells and the recorded temperatures are on the Geothermal Resources of BC map (Fairbank and Faulkner 1992). The most recent field trip to other geothermal manifestation sites in the region was in the summer of 2012. During this trip, I travelled to other locations with the Nazko Band's Lands and Resources Officer and two employees of Alterra Power, a Canadian owned geothermal power company. The 2012 trip included sites such as Brown Lake, Fish Pot Lake, and other un-named lakes in the region.

In March of 2012, the Executive Director of the Nazko Band Administration announced the Nazko Gateway Project. This project was proposing to develop 100 MGW of electricity using geothermal resources which would supply energy to various mine sites in areas on the periphery of the Nazko Band's asserted territory. The proposed project will require the upgrade of the existing transmission line from Quesnel to Nazko. This project was presented to the Quesnel and District Chamber of Commerce, the Cariboo Regional District, and the City of Quesnel. There was support from all these organizations for the project. However, my work with the Band up until that time had not indicated that the community was interested in a project of that magnitude. The challenges associated with such a

development include the capital investment for upgrading the existing transmission line from Quesnel, in addition to building hundreds of kilometers of new transmission lines in areas where the Nazko territory overlaps with that of other First Nation communities. Furthermore, the environmental impacts of such a development had not been fully considered. This Executive Director moved on from the Band within a few weeks of the announcement. Conversations with the Lands and Resources Officer revealed that the community members were not in favour of such a large development, but rather one which is much smaller in scale and can grow with their needs. As the Band continues to investigate the development of its geothermal resources, the Targeting Resources for Exploration and Knowledge (TREK) project announced by Geoscience BC in March 2013 was well received. The project area is 20,000 km² in the northern interior plateau which extends west from Quesnel and south from Vanderhoof and Fraser Lake, covering a significant area of the Nazko territory (Geoscience BC 2013). The TREK project consists of collecting data on mineral and geothermal resources using airborne geophysics and sampling streams, lakes, and soil (ibid). The outcome of this \$3.9m project will be new geological mapping of mineral deposits and geothermal resources within an area the Nazko Band is targeting for economic development.

The Nazko Development Corporation²⁴ was formed as a Limited Liability Partnership (LLP) wholly owned by the Band in 2011. This corporation became the holding company for Nazko's logging business and now manages and operates all economic ventures for the Band. Currently business portfolios, in addition to Nazko Logging business, include the Blackwater Camp Services and the Baezekoh Fuel Services. The camp and fuel services were started in 2012. These businesses provide some employment opportunities for Band members and provide services to forestry companies operating in the Nazko valley.

²⁴ I am currently a member of the Board of Directors for the Nazko Economic Development Corporation.

In 2012, Chief Alec signed the Incremental Treaty Agreement with the province. This agreement was a transfer of lands from the province to the band for community economic development. In the same year, the Nazko Band made a presentation to the Province's Special Committee on Timber Supply. The presentation gave a clear indication of the economic development plans and work of the Band. The Chief's presentation, read by Mr. Gerry Power, the Manager of the Nazko Development Corporation stated:

Our plan is to create a hub for development in the Nazko Valley, not only for forestry but for power production, mining, geothermal and other emerging opportunities. If the province is serious about timber supply and how to maximize benefit from the forests, it will support initiatives like ours and extend the life of the resource and bring benefits to the local communities. (Legislative Assembly 2012b, 508)

Mr. Powell further stated that "higher-capacity three-phase power is required. Developing three-phase power infrastructure in the Nazko Valley would require construction of an approximately 107-kilometre-long 69-kV transmission line" at an estimated capital cost of about \$25 million (Legislative Assembly 2012b, 509). Presentations from the Mayor of Quesnel, Mary Sjostrom, and a city Councilor, Ed Coleman, confirmed that the development of the three-phase power supply will not only benefit the Nazko Valley, but the region as a whole (Legislative Assembly 2012b, 504, 506). However, the Band election of 2013 resulted in the election of a new Chief and Council. The election of new officials has the potential to stall the progress made with regards to the development of power infrastructure in the Nazko valley. The good news with these new elected officials is the election of the Lands and Resource Officer as a council member. This is positive because this Councilor will provide some continuity for ongoing development projects. This election also resulted in some changes to the Nazko Band administration; however, the structure of the Nazko Development Corporation has remained the same. The community is still making progress with the Treaty

and it is hoped that the progress in community and economic development by the nation will continue. Furthermore, the stated mandate of the new Chief and Council remains that of creating employment for the Band members and increasing their quality of life and wellbeing.

6.1.3 The Nazko people: History of community planning

Mr. Kennedy started the work of community planning for the Nazko and Kluskus Bands in 1972. His initial tenure was to deliver social service programs for the communities; however, logging expansion in the region changed the focus of community development. At that time, the objective of community planning was to articulate how the Nazko people wanted their lands managed. Through Mr. Kennedy's efforts, the Band received provincial funding to complete a study in response to their opposition to logging activities at the Narcoslie PSYU. Using the funds received, Mr. Kennedy employed a Study Team to report on 'how things are' at the Band. The team was led by Mr Walt Taylor, a native rights advocate, along with Professor Kew. The key questions that the Study Team was trying to answer were "how can we overcome serious conflicts between resource development and human development in the Blackwater River watershed? How can we create a planning process which will increase mutual understanding and appreciation between Indian and non-Indian people and lead to new plans which use the best of both heritages?" (Nazko-Kluskus Study Team 1974, 2). At the time, one of the major issues faced by the Study Team was the question of whether Aboriginal people had rights to the land. To the Nazko and Kluskus people, the notion of occupying and using the land implied ownership. The planning preference of the Nazko people was to have resource development that benefited both the

Natives and non-Natives. The community members worked with the Study Team to put forward a development plan and recommendations for the Blackwater River watershed area. The resulting plan called for the preservation of the watershed and its ecosystem; selective logging practices, not clearcuts as was the case on the east of the Fraser River; and economic development initiatives which were in line with the traditional ways of the people (ibid). This plan, along with the recommendations, was submitted to the provincial government; however, only the economic development component of the plan was noted but was not acted on. Careless summarized these economic development components as a logging business for the Band, hay farming, cattle ranching, and fur farming (1975).

In 1994, the Nazko community embarked in the tri-partite BC Treaty Commission process. The objective was to establish self-government and to implement traditional laws and governing policies which reflect the culture and traditions of the people (Chantyman and Kunkel 2012, 11). In 1999, formal community planning began with the help of a team of consultants. The process included five days of Band and community consultation. The outcome was a one-time document, which is not available for public consumption, but which provided good insight into what the people would like to see within their community.

In 2006, the Nazko community, led by Dr. Theresa Healy, developed a planning model which incorporated priority areas identified by the people. This planning model was the outcome of community visioning exercises and interactive sessions during which the long term community goals were identified. The community goals and identified priority areas were incorporated into the Band's Comprehensive Community Planning (CCP) document. The 2006 sessions were attended by several community members, ranging from elders to the youth. The community adopted the facilitation model called 'Open Café,' used by Dr. Healy,

for subsequent planning sessions. The outcome report became an internal document for the Band administration departments.

Following the success of the planning session in 2006, the Treaty department of the Band redefined and re-prioritized its process. In addition, the planning process evolved from a one-time document to a way of Band governance. Terrence Paul, the community's former Chief Treaty Negotiator, formed an 'Elders Advisory' committee to honor the traditional knowledge of the elders and their wisdom. He hoped the elders would play an integral part in the Treaty process as part of their community planning. This advisory committee was open to all Band members who were aged 55 and above. In addition, the Chief and Council at the time appointed 15 people to represent the families that make up the Nazko Band, forming a 'Family Representatives' committee. The committee members appointed were to participate at Treaty meetings and provide feedback to the other family members. However, following the outcry from other community members, about their inability to appoint their own representatives, the committee's name was changed to 'Community Representatives.'

Through the Elders Advisory and Community Representatives committees, Nazko Band members became more engaged in Treaty making and in the community planning process. To this day, members of these two committees continue to attend Treaty meetings and provide feedback to the community at large.

In 2007, the community received multi-year funding from the federal government to complete its CCP. The CCP process followed the framework recommended by AANDC, the end result of which was meant to be a roadmap to community sustainability. However, by 2008 the administrative staff at the Band office had changed so many times that the knowledge of the plan had faded. In 2012, the new General Manager appointed Ms. Racheal

Chantyman as the Community Planning Coordinator. During this period, I was working with the Band on my research. I was asked by the Chief to work with Racheal to review the CCP document and update it. Racheal is a Nazko community member and had worked in various administrative departments at the Band office. In addition, the Band hired a facilitator to conduct another community visioning session called Challenge Wall. My role was to assist Racheal in collating and reviewing community information from previous planning sessions and from the Challenge Wall. As a result, I attended the community visioning camp (See Figure 13). I worked with Racheal for several weeks, reviewing and collating information, and together we produced a draft CCP document. Racheal and I made two presentations of this draft document; the first was presented to the community members at Nazko valley, and the second to Band members who live in Quesnel. Using an evaluation form which we designed, we compiled feedback information from all the people who attended the presentations. This feedback, along with recommendations for the next CCP step, was presented to the Chief and Council in August of 2012. The draft CCP document produced became an internal management document for the Band Administrators.



Figure 13: Challenge wall at Nazko Community Visioning Gathering, August 2012

Racheal subsequently went back to continue her education in September 2012. A new Chief and Council was appointed in December of the same year and in the winter of 2013, the General Manager left the Band for employment elsewhere. At present, it is uncertain how the new Band Manager will interpret and apply the outcomes of the community planning.

My involvement in reviewing, updating, and documenting the CCP process for the Nazko Band was very useful for this research because it provided more opportunities for Participant Observation. I was able to gain insights into the lived experience of the people, have informal chats with Band members, and listen to their visions and aspirations for their future. In addition, I had chat conversations with some Band members and elders who were in leadership during the 1974 Michelle Creek Road protest and blockade. These conversations were useful in a paradigm shift for me because these elders had a wealth of knowledge and their lived experiences have been on both sides of the community -- without logging activities and with logging development. These conversations made me realize how recent the Nazko history is. After this, I made two presentations of the outcomes of this research to the community in September 2013 to members on-reserve at Nazko and in November 2013 to the Board of the Nazko Development Corporation at the Band Office.

6.2 The Xeni Gwet'in people: An introduction

The Xeni Gwet'in First Nation is part of the Tsilhqot'in Nation. 'Tsilhqot'in' means 'people of the Chilko River' or 'people of the river' and Xeni Gwet'in refers to the Nemiah people (Glavin and The people of Nemiah 1992, Smith 2011). The community has eight reserves on approximately 1,260.50 hectares of land (Aboriginal Affairs 2013). The main

reserve, Chilco Lake 1A, is about 554 hectares of land and is located approximately 145 miles northwest of the City of Williams Lake at Nemiah Valley. The community has a registered population of 419 people of which 160 live on the community's reserve lands. Fifty per cent of the Xeni Gwet'in reserve population are aged between 20 and 64 years with a median age of 35.7 years (Aboriginal Affairs 2013). The labour force participation rate in the community is 69.9%, with a 31% unemployment rate (Statistics Canada 2007). The education attainment of the people is very low. Only 25 people living within the community have completed high school or equivalent, and another 20 have trade skills (Aboriginal Affairs 2013).

Resource development activities continue to threaten First Nation languages and cultures in the Cariboo Chilcotin region. Over 51% of the Xeni Gwet'in population are fluent in Tsilhqot'in language due to the isolation of their community. The people continue to practise their culture within their traditional territory. The sustainability of the language and culture of the Xeni Gwet'in people has been directly attributed to the remoteness and isolation of the community as expressed in Court documents:

This remoteness has afforded their culture an almost unique opportunity to breathe. The Xeni Gwet'in have actively maintained their Tsilhqot'in language and culture. Most members of the Xeni Gwet'in speak Tsilhqot'in as their first language. Many of the elders speak *only* Tsilhqot'in. Like the heartlands of their traditional territory, Tsilhqot'in culture remains remarkably intact.

This Honourable Court has witnessed this fact firsthand. Numerous Tsilhqot'in witnesses described for this Honourable Court the history of their people, their laws and legends, their ancestral lands, their distinctive way of life and world-view. Some elders were compelled to schedule their testimony around their traditional activities, as they still fish and trap on the land. Some left their traditional territory for the first time to testify before this Honourable Court. The Tsilhqot'in, and its Xeni Gwet'in sub-group, can only be described as exceptional in their commitment to maintaining a traditional way of life, in their determination to follow in the footsteps of their ancestors even as they face the challenges of a rapidly changing world. (*Tsilhqot'in Nation 2006, 12-13*)

Nemiah valley is set in a remote location surrounded by rolling hills, pine forests and the breathtaking Mount Tatlow, and the foothills of the coastal mountains. The natural beauty of the landscapes and viewscapes in the valley is outstanding. There are several lakes within the Tsilhqot'in territory; however, the main ones in the Nemiah Valley are Konni Lake, Nemiah Lake, and Chilko Lake:

There are three lakes in the Nemiah Valley. The first lake when driving into the Valley is Konni Lake. Konni Lake is approximately five miles long. The second lake is Xexti (Nemiah Lake) which is approximately one mile long. At the end of the Nemiah Valley is the third lake, Chilko Lake, the largest lake in the valley, approximately 50 miles long. Chilko Lake is breathtaking with exquisite views from all angles. The area is a home for black bears and also is known as grizzly bear habitat. The area is pristine and rich with wildlife and breathtaking views. It is crossed with creeks and streams of glacial waters flowing from the mountains and feeding the ecology of the watershed. In addition to this the area features a unique resource - wild horses, some of only a few in North America. (Tsilhqot'in Stewardship Department 2007)

Konni Lake, shown in Figure 14, is adjacent to one of the Xenigwet'in reserves. This lake is about 565.4 ha with a mean depth of 17.2 meters and is stocked with rainbow trout (BC Adventure Network 2013). Chilko Lake, shown in Figure 15, is the largest lake in the region. The lake is over 20,000 hectares in size with a mean depth of 107.9 meters (ibid). With glacial fed water, Chilko Lake is replete with rainbow and bull trout. Set at the foot of glacial mountains, Chilko Lake is greenish blue in colour. The lake offers some campgrounds with one boat launch and picture-perfect views of the mountain. Tourist attractions include wild horse tours, fishing tours, and wildlife viewing tours.



Figure 14: Konni Lake, Nemiah Valley 2013



Figure 15: Grizzly bear sow and her cubs at Chilko Lake, September 2012

In addition to tourist camping in the valley, some movie directors are taking advantage of the picturesque views of the region. Notable movies set within the Chilcotin region include some by local Tsilhqot'in members such as *'The Blanketing'* by Trevor Mack and *?E?ANX (The Cave)* by Helen Haig-Brown. Trevor Mack is an award winning filmmaker from one of the Tsilhqot'in communities. His movie, *The Blanketing*, depicts a confrontation between some Aboriginal people and road builders and is set in the mid-1800s within the Chilcotin region. Helen Haig-Brown is also an award-winning Tsilhqot'in film director and cinematographer. Her movie, *?E?ANX (The Cave)*, narrates the experience of a Tsilhqot'in hunter who discovers a portal into another world. This movie was set in 1961 and filmed within the Chilcotin territory. These two movies are some examples of how the local people use the viewscapes to tell their stories.

The Xení Gwet'in community, like other remote and isolated communities in BC, have limited development infrastructure. The only road connecting the Xení Gwet'in people who live in the valley to the outside world was built in 1973 (*Tsilhqot'in Nation 2006, 12*). The first telephone system was installed in 2000 (*ibid*). The community remains unconnected to hydroelectricity but has recently embarked on its own electricity mini-grid system which consists of solar and wind energy with diesel generators as backup. The identified development infrastructure includes a rodeo ground with an open-air dance hall, a water treatment plant, a digital microwave phone line, broadband internet access, a gas station with convenience store and a laundromat, and its own solar and wind energy mini-grids for electricity in some subdivisions. Services available include a church, fire hall, a home and community care service, and the ?Eniyud Health Services. The community has its own daycare which offers a Tsilhqot'in Immersion program. The local school is managed by the provincial School District 27. This school only caters to children from Kindergarten to Grade

Nine. The Band owns and operates a business called Xeni Gwet'in Enterprise which manages the community assets and infrastructures. The Enterprise is responsible for the maintenance and operation of the water and sewage system, the roads and highways, the mini-electricity grid, the gas station and laundromat, vehicle maintenance, firefighting, and environmental monitoring (Xeni Gwet'in 2013).

With the natural beauty of the landscape, the Provincial Park, campgrounds, recreation campsites, and lakes, the goal of the community is to make Nemiah Valley a tourist destination. The community hosts annual events which draw people from all over the world to the valley. These events include competitive pow-wows, a two-day rodeo in August, a week-long elders gathering in July, Ts'utanchuy Dadabeni annual traditional healing camp, and the weekend Brittany Gathering. The community's vision is to develop a tourism destination which shares the land and culture while preserving the natural beauty and maintaining their stewardship responsibilities (Tsilhqot'in Stewardship Department 2007). It is believed that this development will create an economic base for the community with spin-off opportunities locally.

6.2.1 Xeni Gwet'in community and logging activities

The Tsilhqot'in people organized their territory by trapline areas under the Tsilhqot'in law (*Tsilhqot'in Nation 2006, 30*). These areas are known as Trapline Territory and are recognized as 'Caretaker' areas for each of the Tsilhqot'in communities (ibid). However, the resources within these Caretaker areas are used communally by all Tsilhqot'in people. The Caretaker area for the Xeni Gwet'in people came under threat in 1983 when the MOFR granted forest licences authorizing a forestry company, Carrier Lumber Ltd., to carry

out logging activities within the Trapline Territory (*Tsilhqot'in Nation* 2006, 36; *Tsilhqot'in Nation* 2007, 18). However, the Xenigwet'in people issued a declaration of rights in the area on August 23, 1989 called the Nemiah Declaration. This declaration boldly prohibits commercial logging, mining, commercial road building, and dam construction within the area and sets out a vision of what the people want for their lands, including how the land would be governed and used (*Tsilhqot'in Nation* 2006, 36). The declaration also set out as follows:

NEMIAH ABORIGINAL WILDERNESS PRESERVE

Let it be known that:

Within the Nemiah Aboriginal Wilderness Preserve:

- There shall be no commercial logging. Only local cutting of trees for our own needs. i.e. firewood, housing, fencing, native uses, etc.
- There shall be no mining or mining explorations.
- There shall be no commercial road building.
- All terrain vehicles and skidoos shall only be permitted for trapping purposes.
- There shall be no flooding or dam construction on Chilko, Taseko, and Tatlayoko Lakes.
- This is the spiritual and economic homeland of our people. We will continue in perpetuity:
 - To have and exercise our traditional rights of hunting, fishing, trapping, gathering, and natural resources.
 - To carry on our traditional ranching way of life.
 - To practice our traditional native medicine, religion, sacred, and spiritual ways.
- That we are prepared to SHARE our Nemiah Aboriginal Wilderness Preserve with non-natives in the following ways:
 - With our permission visitors may come and view and photograph our beautiful land.
 - We will issue permits, subject to our conservation rules, for hunting and fishing within our Preserve.
 - The respectful use of our Preserve by canoeists, hikers, light campers, and other visitors is encouraged subject to our system of permits.
- We are prepared to enforce and defend our Aboriginal rights in any way we are able.

Declared August 23, 1989 (Xeni Gwet'in 2013)

This vision and land ethics governs how the Tsilhqot'in people view, use, and manage their resources and lands for traditional purposes or otherwise.

In the same year, 1989, Carrier Lumber submitted its Forest Development Plan which was approved and was set to start logging within the Trapline Territory in 1990. The Xenigwet'in people commenced court action against the Regional Manager of the Cariboo Forest District, Carrier Lumber, and other forest companies in 1990. By this time, thousands of hectares of land within the Tsilhqot'in territory had been impacted by industrial logging and its associated activities. The Tsilhqot'in people believed that further impacts of logging, within the Trapline Territory, would cause irreparable damage to their traditional way of life. Therefore, the court case was initiated in an attempt to protect the 'Claim Area' which is the Tsilhqot'in's "last sanctuary" within the Xenigwet'in's Caretaker area (*Tsilhqot'in 2006*, 534). This Claim Area has been described as a wildlife refuge and crucial to the sustainability of the Tsilhqot'in culture. Many Tsilhqot'in members from other communities also use this area to practise their traditional activities. The Xenigwet'in people dropped their initial court proceedings against the forest companies with the exception of Carrier Lumber (*Tsilhqot'in Nation 2007*, 19). Furthermore, the community sought a court injunction, in 1991, to prevent Carrier Lumber from clear-cut logging within the Trapline Territory and to stop the company from applying for further timber cutting permits (*ibid*).

The Xenigwet'in people had "taken the lead on behalf of the Tsilhqot'in on articulating and implementing a sustainable vision" for the Claim Area, which was called the Tsilhqot'in National Forest Use in the Chilcotin Region (*Tsilhqot'in 2006*, 537). As such, the long range management plan for resource exploitation within their territory had to be sustainable and compatible with the Tsilhqot'in way of life. Chief Roger William eloquently

expressed the impacts of logging in excess of what was considered the sustainable yield of the land as follows:

Well, for us the problem of logging over the sustained yield is that we have to live with it, that the environment is going to be affected, our aboriginal rights and title is going to be affected, our traditional activities in the area is going to be affected a great deal and our way of life is going to be affected. So we had a lot of concerns about taking out resources way over and above the sustainable yield, because we – we are there. We live with the damage. A lot of our people are unemployed, and I said in the past that we -- we have to hunt, we have to fish, we have to do traditional activities to survive, because you can't really do it on welfare. So yes, we were really concerned that if that happened – and that's why we wrote it -- we're going to be devastated. We are already having problems with our people because of the European contact let alone if they weren't able to do their traditional activities that they've been doing that has been passed down from their ancestors; then things are going to get worse. Roger William. (*Tsilhqot'in Nation 2006, 538*)

The court action was amended to include the claims for Aboriginal title, infringement of Aboriginal rights and title, and compensation for a breach in fiduciary duties of the government. As a response, Carrier Lumber and the Regional Manager of the Cariboo Forest District decided to look to the Brittany Triangle area for timber supply instead. This area is also of cultural significance to the Tsilhqot'in people, with evidence of historical and current occupation (*Tsilhqot'in Nation 2006, 39*). In order to log this area, the bridge across the Chilko River at Henry's Crossing required an upgrade. In 1992, the Tsilhqot'in people blockaded the road at Henry's Crossing to prevent access. Between 1994 and 1997, the Xenigwet'in people voted against logging plans in the area and wanted the right of first refusal which would continue to give the assurance of maintaining their traditional way of life (*Tsilhqot'in Nation 2007, 20*). However, Ministry officials argued that there was no legislative authority to grant the people such a right. This dispute led to the creation of the Ts'yl'os Provincial Park by Order-in-Council, as a Class A park, under the *Park Act of 1979* (*ibid*). Thirty-nine percent of the claim area was designated as the park with Mount Tatlow in

the middle. This legendary mountain is known in Tsilhqot'in language as Ts'yl'os. The mountain is a prominent landscape feature in the Tsilhqot'in mythology. Undeniably, the Xenigwet'in people have used that area for millennia. The provincial government confirmed that the people hold the Aboriginal rights to hunt and trap for subsistence and ceremonial use throughout the park.

The Ministry issued several forest licenses to companies within the Trapline Territory between January 1, 1997 and November 1, 1998 (*Tsilhqot'in Nation 2006*, 39-40; *Tsilhqot'in Nation 2007*, 21). The Xenigwet'in people followed with court action against the forestry companies in the Brittany Triangle area in 1998. This was subsequently followed by a series of consolidated and fresh claims between 2001 and 2003. On November 2, 2000, the Government of Canada was included as a defendant in the court action. Some of the court actions did not proceed. However, the consolidated action, the Brittany Triangle Action and the Nemiah Trapline Action, proceeded in 2002. The trial of this consolidated action started on November 18, 2002 and lasted 339 days over a five-year period (*Tsilhqot'in Nation 2006*, 43). There were 24 Tsilhqot'in witnesses who testified in addition to five sworn affidavits (*William 2012*). There were also several expert witnesses from a wide range of disciplines including anthropology, biology, and archeology. At the end of the trial, the Trial Judge, the late Justice Vickers, offered the following opinion:

*The Court is not able, in the context of these proceedings, to make a declaration of Tsilhqot'in Aboriginal Title. The Court offers the opinion that Tsilhqot'in Aboriginal title does exist inside and outside the Claim Area ... Aboriginal title land is not "Crown land" as defined by provincial forestry legislation. The provincial **Forest Act** does not apply to Aboriginal title land. The jurisdiction to legislate with respect to Aboriginal title land lies with the Federal government pursuant to s. 91(24) of the **Constitution Act, 1967**. The Province has no jurisdiction to extinguish Aboriginal title and such title has not been extinguished by a conveyance of fee simple title. Tsilhqot'in people have an Aboriginal right to hunt and trap birds and animals throughout the Claim Area for the purposes of securing animals for work and transportation, food, clothing, shelter, mats, blankets and crafts, as well as for*

spiritual, ceremonial, and cultural uses. This right is inclusive of a right to capture and use horses for transportation and work. Tsilhqot'in people have an Aboriginal right to trade in skins and pelts as a means of securing a moderate livelihood. These rights have been continuous since pre-contact time which the Court determines was 1793. Land use planning and forestry activities have unjustifiably infringed Tsilhqot'in Aboriginal title and Tsilhqot'in Aboriginal rights. The plaintiff's claim for damages is dismissed without prejudice to a renewal of such claims as they may pertain to Tsilhqot'in Aboriginal title land. (*Tsilhqot'in Nation 2007*, 4-5)

The result of this court action effectively halted logging activities within the Claim Area temporarily. For the Tsilhqot'in people, the battle continues as the Ministry of Forests officially stated during the trial that "logging and road building in the Claim Area were inevitable" because the decision to permit harvesting has already been made (*Tsilhqot'in Nation 2010*, 2). While clearcut logging can boost wildlife and the growth of berries at those locations, the Ministry of Forests does not manage lands for these values (*Careless 1975*, *Tsilhqot'in Nation 2010*). In addition, the obligation of companies engaging in logging activities is limited to silvaculture and reforestation; hence there is no ecosystems management in place for the subsistence activities which Aboriginal people engage in. This situation is similar to that of the Nazko people in the Blackwater River watershed as previously discussed.

The victory over who controls Tsilhqot'in land was very short lived. The people continued to come under pressure for the development of resources within their traditional land. Taseko Mine's proposed Prosperity Gold²⁵ and Copper mine project was situated within the Trapline Territory. This mine project was approved by the BC Environmental Assessment Office in 2009 but rejected in 2010 by the Federal Minister of the Environment. In an unprecedented move, the mine project was allowed a re-submission as the New Prosperity mine and the EA process was repeated in July and August of 2013. In addition, the

²⁵ The Prosperity Gold and Copper mine is also referred to as Prosperity mine in this document.

Tsilhqot'in people appealed the BC Supreme Court decision at the Supreme Court of Canada. The case was heard on November 7, 2013. The Supreme Court decision is still to be released. However, the Tsilhqot'in people were relieved on February 26, 2014 when the New Prosperity mine project was rejected by the Federal Minister of the Environment and Minister responsible for the Canadian Environmental Assessment Agency. The Minister, Honourable Leona Aglukkaq, stated that the mine is likely to cause significant adverse environmental effects that cannot be mitigated and the effects cannot be justified (CEAA 2014).

6.2.2 Xenigwet'in community and mining development

The Prosperity project was proposed by Taseko Mines at Fish Lake/Little Fish Lake watershed (Fish Creek) in BC, 25 km from one of Xenigwet'in's reserves. The proposed mine site would cover a 35 square km area within the Fish Creek watershed (CEAA 2010b). The geographic location of the development is remote, within an area where the Tsilhqot'in people have proven Aboriginal rights and also have asserted Aboriginal title (*Tsilhqot'in Nation 2006*, CEAA 2010b). The mine project would involve an open-pit mine that would produce gold and copper over a 20 year operating life with a production capacity of approximately 70,000 tonnes per day (CEAA 2010b, 11). In addition, the project proposed to bury acid rocks in Fish Lake and to create a new lake, Prosperity Lake, as fish compensation. Fish Lake and its surrounding area are of cultural and spiritual significance to the community. With reclamation, the mine site and the surrounding area would not be available for community use until after the open-pit is filled with water which could take up to 24 years, thus making the area unavailable for other uses for a total of 44 years (CEAA 2010b,

16). Furthermore, a 125 km of transmission line with a 3 km wide corridor is being proposed for the Prosperity project. The transmission line would pass through the Tsilhqot'in territory around the Toosey communities, including the Northern Shuswap territory in areas used by the Esket'emc and Canoe Creek people. Neither the Tsilhqot'in people nor the Northern Shuswap communities have ceded their Aboriginal title to the lands through which the development of the transmission line corridor is proposed. This region has not been subject to heavy mining or logging and forestry activities, as experienced in other areas of the Cariboo Chilcotin region. The proposed transmission line corridor will by-pass reserves; however, the lines will be crossing the Fraser River at fishing sites used by the Esket'emc and Canoe Creek people. Furthermore, access roads will be built for the transmission line corridor, all of which will be decommissioned at the end of the mine life. The transmission line, with poles and lines, will also be decommissioned and the corridor reclaimed at the closure of the mine.

The Federal Review Panel of 2010 invited submissions and presentations on the current use of the project area from various stakeholders, including people from the affected Aboriginal communities, government agencies, and other interested parties. The Panel travelled to the communities of the Tsilhqot'in and Northern Shuswap people, listening to stories of how the people use the land. In addition, the Panel visited the proposed development site. Following the review, the Panel rejected the project based on its findings (CEAA 2010b). These findings concluded that the compensation plan for the destruction of approximately 90,000 rainbow trout in Fish Lake and Little Fish Lake was inadequate. In addition, the Panel concluded that the mine project at that geographic location will have significant adverse cumulative effects on the current use of lands and resources for traditional purposes by the Tsilhqot'in people. I reviewed the testimony of First Nations people at the Panel Hearings of 2010. This review is discussed in Chapter Eight. Recommendations from

the review were presented at the 2013 World Mining Congress as a poster with the paper published in the congress proceedings (see Kunkel et al. 2013).

In an unprecedented move, Taseko Mine resubmitted one of the options rejected in the proposal as a new project called the 'New Prosperity Mine.' This New Prosperity project will not use Fish Lake as a tailings pond; however, it proposed to permanently alter the Fish Creek watershed with the creation of a 12 km² tailings storage facility immediately upstream of Fish Lake (CEAA 2013, Knight 2010, Taseko 2013). The tailing facility will consist of 7.8 km of earth-rock-filled dams creating a retaining wall which would be approximately 115 m high. Furthermore, to maintain the Fish Lake ecosystem, the company proposed to cut off the natural creeks that flow into or out of the lake and to re-circulate the water already within the lake using water pumps (ibid). This re-circulation of water would be maintained during the mine operation and post closure. This new project went through a Review Panel and a process similar to the 2010 project. The Panel submitted their findings and recommendations to the Federal Minister of the Environment. The Panel made several conclusions and recommendations. These included the following: the project would result in significant adverse effects on fish and fish habitat which cannot be mitigated; the project would result in significant adverse effects on the Tsilhqot'in current use of lands and resources for traditional purposes which also cannot be mitigated; the project would result in significant adverse cumulative effects on the South Chilcotin grizzly bear, mule deer, and regional moose population; the effects of the project on Tsilhqot'in cultural heritage cannot be mitigated; the fish in Fish Lake including the wetlands and riparian ecosystems near Fish Lake might not meet the needs of future generations of Tsilhqot'in people; and two of the three panel members found that the development of the proposed transmission line will not have significant adverse effects on the Secwepemc communities (CEAA 2013, 251-256).

However, the Minister made the decision not to proceed with the development of the New Prosperity mine. In a presentation to the Federal Panel, Professor John Meech of the University of British Columbia's School of Mining stated that "with New Prosperity being one of the top-ten unexploited copper-gold deposits in the world in terms of size and values, the question is not 'Should we mine?', rather it is 'When will it be mined?'" (CEAA 2013, 28). While the Minister's decision provided some assurance for the Tsilhqot'in people, Professor Meech's statement suggested that a mine at the location is still a future possibility.

6.2.3 Xenigwet'in community and tourism development

The Xenigwet'in people, like many other First Nation communities, continue to depend on the land within their traditional territory for sustenance and for meeting their daily needs. The people have a responsibility towards their land which transcends generations and they continue to maintain their caretaker role which includes management responsibilities.

This was expressed as follows within the Court case document:

As caretakers of lands including the Claim Area, the Xenigwet'in are responsible for the land and must ensure that it is used and managed in a way that does not destroy its ability to sustain future generations. **Sustainability is paramount.**²⁶ Economic development is always secondary to this duty. (*Tsilhqot'in 2006*, 535)

The Prosperity mine project had created tensions between Aboriginal people and non-Natives in the Williams Lake area of the region. The non-Natives generally believed that the First Nations people oppose the development of the mine because they are anti-development. The Xenigwet'in people stated on numerous occasions during the Court case and at the Panel Hearings that they are not anti-development. The people want sustainable development

²⁶ Emphasis is from the original text.

which will continue to safeguard the Tsilhqot'in way of life. Chief Roger William expressed his vision to live off the land forever and has the same aspirations for his community:

My vision for the people is for our people to be able to be educated not only in the western – what I call the western culture, the European contact, the BC/Canadian system, but to be educated in our – in our cultural traditional ways and rituals, our legends and stories, which is to me our law of the land, and be able to know both of those worlds. And in our – in our court case area, **able to make decisions and putting plans in place, whether it's economic or recreation, things like that, that it doesn't affect our aboriginal rights, our traditional way – our traditional use on the land, that it works hand in hand.**²⁷

So, you know, my goal would be to – to forever live off this land sustainably and for future generations. (*Tsilhqot'in Nation 2006, 536-537*)

The viewsapes and timeless beauty of Nemiah Valley lends themselves to tourism.

The Xeni Gwet'in people recognize this and believe that responsible tourism can be compatible with how they utilize their lands. To this end, the community and the surrounding non-Aboriginal tourism operators have signed a Sustainable Tourism Protocol (Cadence Strategies 2013, 43). The community has spent a considerable amount of time and money developing a tourism plan along with products within Nemiah Valley. Some of the tourism initiatives include building a traditional village on the shores of Chilko Lake. At this village, visitors can experience the Xeni Gwet'in culture, including traditional foods, ceremonies, medicines, arts, and crafts (Xeni 2013). In addition, the community has developed a website, www.xeni.ca, to promote tourism and the tour operators in the region. There are strict protocols for visitors to adhere to as the community shares its territory and traditions with guests. Tourism products in the valley include wildlife viewing such as grizzly bears, wild roaming horses, black bears, big horn sheep and mountain goats, wolves, mule deer, eagles, and other varieties of birds and animals. Adventure in the valley includes a cultural

²⁷ Emphasis is from the original text.

immersion fishing tour. During this tour, the visitors camp with Xeni Gwet'in people and participate in the traditional fishing and preserving of food for winter subsistence.

Access to Nemiah Valley is by the one road, charter float plane, or private plane. Flight time is about an hour from Whistler, Vancouver, or Campbell River. The road access to Nemiah Valley is long and can be tedious. It is common for travelers to experience flat tires due to the nature of the gravel road. I once had this experience on my first visit. This experience is not unique to Nemiah Valley. I had similar experiences within the Nazko Valley. This can be a downside for road travelers looking for the authentic Aboriginal cultural experience. From my experiences, access to some communities is typically on gravel roads and oftentimes forestry roads. The use of radio communication is often advised which can be problematic for the unsuspecting tourist. However, the Xeni Gwet'in people prefer minimal development of roads into their territory and the associated low public use (Cadence Strategies 2013, 90). Therefore, the improvement of two existing airstrips within the valley is considered essential. The community has partnerships with the Cariboo Chilcotin Coast Tourism Association, Aboriginal Tourism BC, Canadian Tourism Commission, and Destination BC. From my visits to the community and my participation at some of their summer gatherings, I noted that the Xeni Gwet'in people continue to have some success in their tourism endeavors. At the events I attended, there were participants from all over the country, including international guests. In addition, I met other tourists camping and lodging in other parts of the valley. The Xeni Gwet'in people continue to work on their tourism development and submitted an economic development strategy to CCBAC to this end. The plan submitted included building a Visitor Information Centre as an addition to their existing Band office and building a Qwen Yex Earth Lodge as a year-round resort to accommodate up to 20 guests (Tsilhqot'in Stewardship Department 2007).

6.2.4 Xeni Gwet'in energy development

During the geothermal field trip to Reno, Nevada in May 2010 described in Chapter Seven, I learned about the solar development and the mini-grid system at Nemiah Valley. The geothermal field trip was followed by an Energy Forum at Williams Lake in October 2010 during which George Colgate, a past Xeni Gwet'in employee who was involved in the development of the solar grid system, presented some information about the electrification project. This project was started in the year 2000 when the Xeni Gwet'in community collaborated with the David Suzuki foundation to develop a sustainability plan which included a Community Energy Plan. The Xeni Gwet'in people started discussions with BC Hydro in 2006. The Community Energy Plan, a five to 20 year energy use and supply plan, made it possible to access funds from the Fraser Basin Council's Remote Community Implementation Program. The program, while managed by the Fraser Basin Council, is funded by a \$1.65m grant from the provincial government. The objective of this program was to help remote communities reduce their dependency on diesel generators for electricity (Fraser Basin Council 2013, Hebron 2010). This was part of the community's plan to reduce their reliance on diesel generators and to meet the needs of the people.

The Xeni Gwet'in community installed the first individual solar and propane hybrid systems on one of its reserves in the year 2006. This system served individual residences. A mini-grid tie was installed on one of its reserves in 2007. By 2008, the hybrid solar and propane system was installed. A solar hot water system was later introduced with installations in six of the homes in 2010 (Fraser Basin Council 2013). By 2010, the community had developed solar systems which were a combination of solar and diesel, and

solar and propane hybrid systems. Due to the distances between houses on the Xeni Gwet'in reserves, these systems were designed as decentralized clusters. Some homes have individual systems while others have grid ties. The solar grid ties were used where there were clusters of homes within reasonable distances. These systems were used to provide electricity and hot water for some of their homes; however, other residential houses are still reliant on diesel. The electricity system is owned by the Band government, and all the homes supplied use 'pay-as-you-go' meters. Band members were trained to install solar panels, thus creating some employment opportunities. The community gained experience with solar systems and are yet to determine the level of maintenance required for upkeep. There were houses that were neither connected to the grid system nor fitted with solar panels due to their proximity to the grid. Connecting these houses was part of phase two of the electrification project. In addition, fitting all the homes with solar hot water heating systems was part of the plan.

During my visit to the community in July 2013, I stayed at a bed and breakfast facility on-reserve. My host and hostess described how the solar mini-grid has been quieter and cheaper than the diesel systems they had been on. They were very pleased with the conversion of their home. The community had added wind turbines to the solar systems by 2013 (see Figure 16). They had considered using geothermal resources for electricity and for heating the homes as an option; however, the distance between the houses and the cost of drilling for the amount of energy required rendered this option not economically viable.



Figure 16: Solar and wind energy installation at Xeni Gwet'in, 2013

6.3 Conclusion

The cumulative impacts of residential schools, gold mining, the decline in the fur trade industry, and the expansion of the forestry industry into areas of cultural significance have taken their toll on the ability of the Nazko people to continue to practise their culture and language at certain locations. All these resource development activities were not designed to build infrastructure or to create an economic base for the people. In addition, the people were excluded from resource exploitation activities and were not consulted or given any voice in development plans. The long term effect of this resulted in the marginalization of the community. The Nazko people were left behind, unable to participate fully in resource exploitation within its traditional territory until the creation of the Nazko Logging

Partnership ten years later. While some Nazko elders still speak their language and know their culture, their ability to practise these and to pass them on to the younger generation is critical to the survival of the Southern Carrier dialect. Unlike immigrant cultures, the Nazko Valley is the only location where these people can re-establish their dialect and culture. The complete loss in the Nazko Valley could be irreversible.

The Xeni Gwet'in people still practise their culture at the indigenous locations in contemporary forms. The ability to continue these practices is the result of their resistance to road building and to resource exploitation within certain parts of their traditional territory. However, due to the endowment of natural resources within their traditional territory, the people have continually had to fight off developers and public pressure to develop forestry and mines at culturally significant locations. The uniqueness of their geographic location, the impressive viewscapes, the wilderness experience, and the authentic cultural experience at its indigenous location is a major asset for the community. Notwithstanding, the people are seeking other sustainable development opportunities which have low impact on their ecosystems and are compatible with their current traditional use of the lands as part of their self-determination.

Chapter 7 Results: Geothermal field trip report

As part of this study, a group of representatives from some of the Aboriginal communities and I travelled to Nevada in the United States on a geothermal field trip. The purpose of the trip was to broaden our knowledge of the resource. The field trip to Reno Nevada took place in May of 2010 and was funded in part by a Geoscience BC scholarship. Nevada State is rich in geothermal resources and has been referred to as the 'geothermal capital' of the US. The planned field trip for the journey was to Magma Energy Corporation at Soda Lake and to Nevada Geothermal Power at Blue Mountain. Both companies are Canadian owned, with their headquarters located in Vancouver, BC. Magma Energy Corporation has since changed its name after our visit to Alterra Power.

The group of five women on the field trip consisted of one Southern Carrier Chilcotin woman from the Ulkatcho Band, a Tsilhqot'in woman from the Xenigwet'in Band, another Carrier from Nak'azdli Band, the Economic Development Officer of the Xenigwet'in Band, and me. The timing of the field trip was unfortunate as the requirement for a valid Canadian passport for border crossings had just come into effect. With this requirement, a number of interested people from other communities were then unable to travel. The trip lasted for four days and provided not only the opportunity to increase our knowledge but also the opportunity to see first-hand the applications of geothermal resources and to ask questions of power plant operators. Furthermore, as a group, we wanted to understand if the development of geothermal resources was compatible with Aboriginal values. The trip provided the opportunity to attempt to answer this question. This chapter is a report of the field trip, some of the discussions, and the conclusions that were reached as a result of the journey.

7.1 Day one: Geothermal 101

The trip started with all five participants arriving at Vancouver airport. At the airport, all the participants met each other, some for the first time. We had breakfast and boarded our flight to Reno, Nevada. On arrival at our destination several hours later, I facilitated a 'Geothermal 101' workshop session with the group. This session was based on my literature review of the resource and the investigative study I had conducted while working with the Nazko First Nation (see Kunkel et al. 2012). I explained to the group what geothermal resources are, the applications of the resource, its benefits, and its potential impacts. The Xeni Gwet'in representatives were interested in increasing their understanding of the applications of geothermal resources and also wanted to find out if applications of the resource were indeed compatible with the current use of land by the Tsilhqot'in people. The Xeni Gwet'in representatives had been working on the community's tourism strategy, and it was important to ensure that further resource development within their territory would not compromise the local visual qualities and viewsapes which they are promoting. The Ulkatcho representative was interested in resource development that could create meaningful employment for her community members; reduce the reliance on diesel for power production, especially at the Band-owned sawmill; and as a development which is not subject to the 'boom and burst' cycle to which the community has become accustomed. The Nak'azdli representative participated to provide some insights from the Carrier culture as Nazko Band representatives were unable to travel due to the passport situation.

During the facilitation session, the group of women had the opportunity to ask questions and clarify their understanding of geothermal resources and the potential impact on

traditional land use. In addition to the development conflicts arising from land uses which are inconsistent with Aboriginal traditional land use, the group also talked about the human development challenges faced by the communities represented. These challenges include the ability to gain employment where educational attainment is low and the limited access to skills training in order to participate in meaningful employment opportunities. The women stated that the types of jobs offered to Aboriginal people, in most projects, are not meaningful. For example, Aboriginal workers typically end up with jobs such as janitorial services and menial labour. The women were interested in finding out if geothermal jobs can accommodate people whose educational attainment is less than Grade 12. The group also expressed that the majority of unemployed people within their communities would like to work now rather than wait to complete a four year degree program. In a sense, what is required seems more akin to training on the job, for the job. One of the women mentioned that there had been community university programs which led to certification in the past. These types of programs had been successful in helping the people get back to work quicker. In addition, trades programs combined with work experience have also been successful. However, the majority of the six week programs which are now being offered are not adequate. The communities are interested in certificate or diploma programs which are tied to work placements. It was agreed that these types of programs will give people skills and the workplace experience needed to be successful.

In addition to the human development challenges, the group talked about the scale of a development project. It was generally agreed that small scale development projects made more sense to the communities because of the impact on the land and the ability of the people to continue practising their cultures. Large development projects were not encouraged as the

communities have experienced economic boom and bust cycles associated with these in the past and, therefore, the women did not believe that such projects are sustainable in the long term. Moreover, the women would like to see development projects which only use a fraction of the land, unlike forestry which uses 90% of the land base. Furthermore, the group was concerned about development which requires building new roads. It is believed that these tend to increase access into remote parts of their territory, thereby increasing competition for game which their people depend on. This was a major concern with developing geothermal resources. Such developments have the potential to open access into areas which are currently relatively undisturbed.

To put community energy needs into perspective, the Ulkatcho Band was used as an example for discussion. It is believed that a 5 MW plant will produce enough electricity to meet the needs of the Ulkatcho communities at Nimpo Lake, Anahim Lake, and the Band owned sawmill. This estimate is based on current use of 3.65 MW (2.65 MW firm) from the Diesel Generating System (DGS) which supplies the two communities and the independent 1.5MW generator which powers the sawmill. There were some conversations about development barriers. These barriers included raising exploration and development capital. There were also conversations about working with industry partners for expertise and to raise development capital, including the idea of forming an Aboriginal energy cluster. However, the lack of continuity in leadership as a result of the short election cycle further complicates working with industry partners. Most communities elect new Chief and Council members every two years. It was generally agreed that this time period was not long enough to develop good working relationships with industry partners and to provide the stability needed to see a development from initiation to implementation. However, the Xeni Gwet'in Chief and

Council elections uses a five-year election period, hence maintaining some level of stability. Other communities represented believed that the commitment of community leadership to a project which can take several years to implement is important; in addition, separating business from Band politics will be advantageous. The discussions lasted several hours. By the end of the session, as a group we had put together a guideline for questions to ask the power plant operators during our visits.

7.2 Day two: Geothermal power plant at Soda Lake

The trip to Magma Energy Corporation (Magma) on day two of the journey took several hours of highway driving. Magma's Soda Lake operation is approximately 115 km east of Reno. During this drive, we saw visible manifestation of geothermal resources in the form of steam rising from the ground at several locations. At some of these locations, there were pipelines transporting steam into industrial sites. The Soda Lake area was dry with a desert-like climate. Magma has been operating at this site for over 20 years. On arrival, a Magma employee welcomed us and gave us a 'Geothermal 102' session before giving us a guided tour of the facility. This Geothermal 102 session was very insightful. The employee explained the steps involved from the resource exploitation to power production. The company has two power plants at the site, the combined production of which was approximately 10 MW. These power plants had been in operation for about 20 years at the time of our visit. The company sells approximately 80% of its energy production directly to the grid. The remaining 20% was used internally for its operations.

The two power plants at Magma use a binary technology with two different cooling systems, an air-cooled condensing system, and a water-cooled condensing system. The Magma employee explained that with a binary system, the hot fluid from the geothermal source is used to heat a second liquid which boils at a lower temperature. This second liquid, typically pentane or iso-pentane, is converted to gas which then drives the turbine for electricity generation and then condensed back to fluid. Pentane or iso-pentane is preferred as a binary fluid because it is non-corrosive to metals. Magma, with its high temperature production well of 302 °C, uses the binary system so that power generation can take place efficiently at a lower temperature. At the Magma site, hot water is pumped from production wells and piped from an underground reservoir into a heat exchanger within which pentane is simultaneously piped. The two liquids are in closed systems and not in contact with each other. Heat is exchanged, with pentane becoming gaseous at a much lower temperature. The steam from the gaseous pentane is used to drive the turbine which generates electricity (see Figure 17). The geothermal fluid, once expended of its heat, is then fed back into the ground as water at different locations using re-injection wells. The re-injection wells are sited so the water can pass over hot rocks to be re-heated as it makes its way back into the reservoir. This reservoir feeds the production wells (see Figure 18). The production wells are over 700m deep. The system is a closed loop. In 20 years of operation, Magma's reservoir temperature has gone down by about 23°C. With the 302°C at the time of our visit, it has the potential to be sustainable for several more years.

The water cooling systems for pentane at Magma consist of huge water tanks. This system uses vast amounts of water at very cold temperatures. The Magma employee explained that the air cooling system, also used at the site, is not as efficient because of the

hot climate in the region. This air cooling system is better suited for cooler climates such as we have in the Cariboo Chilcotin region. The employee further explained that pentane is highly explosive in its gaseous state and that the site had recently experienced a fire in one of its turbines as a result of gas leakage. However, the site has good fire retardants and it is relatively close to a fire station; therefore, the fire was contained quickly. This was of some concern for the group due to the remoteness of the First Nation communities and the minimum infrastructure. However, the group of women believed that with such a development, it will be necessary to build reliable community infrastructure such as a fire hall. Furthermore, some of the communities already have trained fire fighters which is a bonus.

There were pipes from production wells to the turbines and back to re-injection wells. The Magma employee explained that these pipes often have build-up of calcium carbonate. As a result, they use additives to prevent scaling. The pipes were painted yellow to blend in with the desert environment surrounding the site. In addition, there were power transmission lines connecting to the grid. The overall footprint of the facility was about five hectares within 2,881 hectares of private and federal lease lands. In addition, the power plant uses low voltage power lines to connect to transmissions lines of which there are 120 kV, 230 kV, and 345 kV within close proximity. This was encouraging for the group to see because the nearest settlement, the town of Fallon which is only 11 km from the power plant, did not have medium and high voltage transmission lines passing through or near it. The issue of transmission lines cutting through remote areas and interfering with viewsapes had been discussed and was regarded as a setback for tourism opportunities.

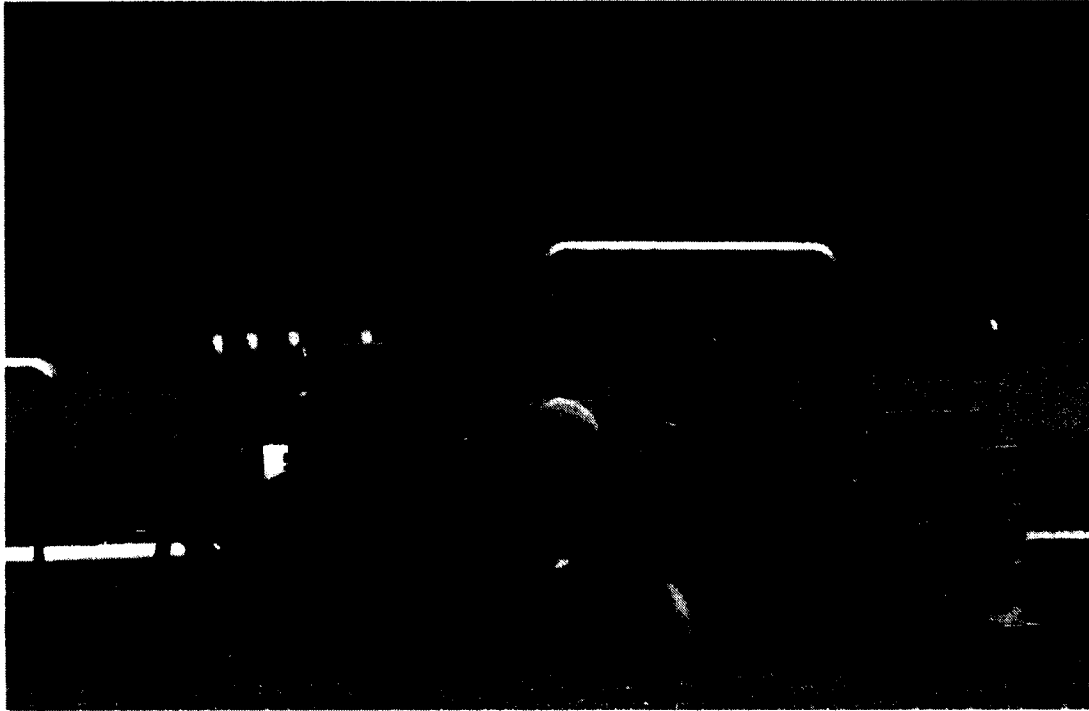


Figure 17: A geothermal energy turbine at the Magma Power site, May 2010

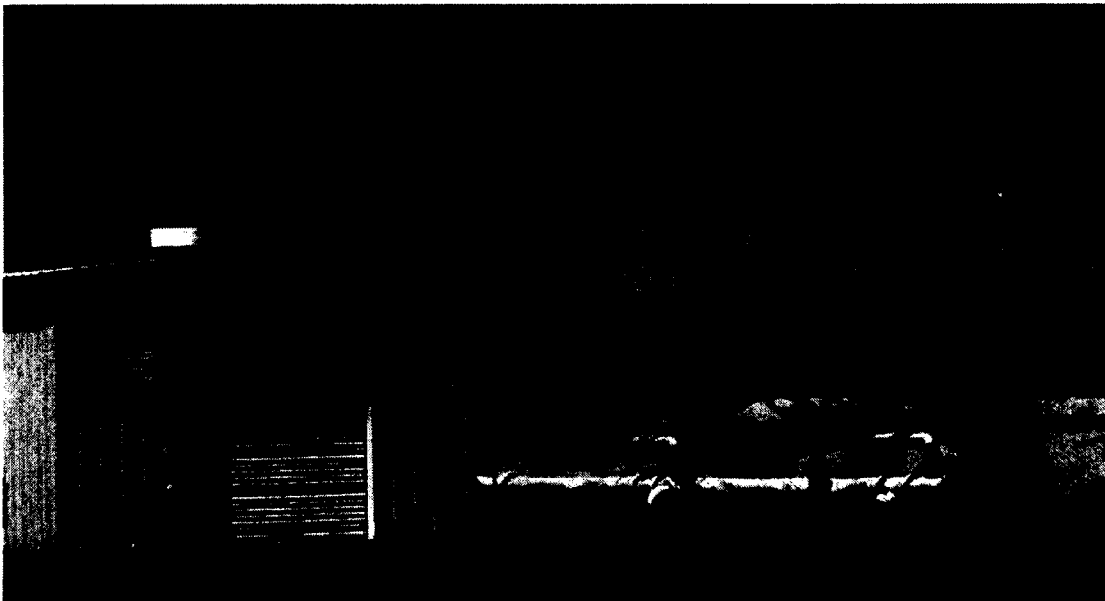


Figure 18: A water pump and production well at Magma site, May 2010

During the journey back to the hotel from Magma, we stopped at Soda Lake. This site was of interest to us because Soda Lake itself is close to the power plant. The Magma employee who gave us the guided tour had mentioned that there had been no physical manifestation of any geothermal resources at the site; however, oil and gas exploration data showed the elevated temperature of ground water in the region. This led to the acquisition of geothermal permits and the subsequent development. We were curious to see what Soda Lake was like since this was a remnant from past volcanic activities. We had no expectation of what the lake would look like but discovered that the water was clear and had alkali deposits around the edge. The water temperature felt normal and, to untrained eyes, there was no obvious sign or manifestation of geothermal resources.

The next stop after Soda Lake was at the Pyramid Lake Reservation. This Reservation belonged to the Paiute Tribe. The community had made significant investments in solar energy. We stopped at the community's museum. The curator explained that the community received grants from the US government to develop their solar power. Community infrastructures such as the school, health centre, and the museum have independent solar systems which supply most of the energy needs of these buildings. The curator further explained that the community's energy bill was reduced to a fraction of what it used to be as a result of the solar systems installed. The Paiute Nation had considered geothermal resources in addition to solar systems; however, developing solar power was much cheaper. The Paiute people had not completely ruled out developing their geothermal resources in the future.

7.3 Day three: Geothermal power plant at Blue Mountain

The planned field trip for day three of the journey was to Nevada Geothermal Power Incorporated (Nevada Geothermal Power) at Blue Mountain in the Winnemucca region of Nevada. During the drive to Winnemucca, we made an unplanned stop at a ConAgra site, called Gilroy Foods. At this site, vegetables are dehydrated using geothermal resources. This ConAgra site was situated by the highway and had pipelines leading into the industrial facility. We were unable to tour the interior of the facility as this was closed; however, we noticed that pipelines were used to transport water both into the interior of the facility and for open irrigation of vegetable fields. Some of my travel companions, who were familiar with the company, explained that the products are dehydrated vegetables such as garlic and onions.

Next we arrived at the Blue Mountain site of Nevada Geothermal Power Corporation. The company had been operating since October of 2009. The region looked dry and desert-like, with sage and rosemary shrubs scattered across the landscape. At the site, an employee of the company welcomed us and provided us with information before proceeding with a guided tour of the facility. The employee narrated the story of geothermal development within this dry and desert-like landscape. The story started with oil and gas exploration activities by Mr. Brian Fairbank, who is the Chief Executive Officer and Director. Mr. Fairbank discovered that data which had been collected for oil and gas revealed high temperature water reservoirs. Coincidentally, he is one of Canada's foremost geothermal experts with decades of engineering, exploration, and development experience. In addition, Mr. Fairbank worked on the maps of geothermal resources in BC in the early 1990s which

are still in use today (Fairbank Engineering Ltd. 1991, Fairbank and Faulkner 1992). With this knowledge, he acquired the property and proceeded with development.

At the time of our visit, Nevada Geothermal Power had only been in operation for 18 months. The company was producing about 50 MW with one production well but planned on expanding at a later date. The temperature of the production well, at the time of our visit, was 350 °C. The production well was 1000 meters deep. The power plant and equipment were very new and used the water-cooled condensing system. The cooling tanks were caked with ice as they cooled and condensed the pentane liquid used for generating electricity.



Figure 19: View of Nevada Power Inc. showing the water cooling tanks and the power plant facility, May 2010

The company was selling close to 40 MW of the power it produces to the grid using its 21-mile transmission interconnection lines. The remaining power produced was used at the facility; however, there was also a backup diesel generator. In addition, the company also built telecommunication towers for connectivity.

We walked around the immediate facility with our tour guide, and we were shown how the system was operated. We were able to ask new questions which arose following the tour of Magma's facilities. The questions included: what is the temperature of the pipelines carrying geothermal water from the production well to the turbines? Are these pipelines safe for wildlife to cross or to graze around? What are the impacts of drawing water from deep aquifers on the surrounding farm lands? How are re-injection wells sited? How do the geologists know that the re-injected water is going back to the hot water reservoirs? What chemicals are being used to de-scale the pipes? Are these chemicals safe for the environment? How many people are required to maintain a 50 MW power plant? And what types of jobs and skills level are required?

During our tour, we were able to touch the pipe lines which were well insulated to prevent heat loss. The pipelines had several bends and, at different points, these branched off into different directions. There are valves at the point of intersections. These valves were exposed in places and were extremely hot. We were warned not to touch these. However, these valves were inside the fenced area of the facility and were high above ground level. These valves were considered safe as it was unlikely that wildlife could wander into that part of the facility. The employee explained that the valves were needed to control the flow of geothermal fluid. The employee further explained that tracers are put into water to determine the direction of the flow and the rate of flow per hour. This was necessary in order to situate

a re-injection well for optimum reservoir productivity. Due to the newness of the facility, there was no scaling or buildup in the pipes; hence, no additives were needed. Furthermore, the employee believed that the use of water by Nevada Geothermal power has no direct impact on the neighbouring properties such as the hay fields. In addition, the geothermal fluid re-injected was guaranteed to flow back to the reservoir.

We drove on dirt roads which went over pipelines on our tour to visit the production well and its pump house. There were cattle grazing around the well and the hay meadows were green with irrigation pipes. The facility was bigger than what we saw at Magma the previous day. Furthermore, the lease on all adjacent lands was held by the company. This was to secure their production well. The total acreage, including the lease lands, was 640 acres (259 hectares). When asked about the wildlife, the Nevada Geothermal Power employee mentioned that they occasionally see mountain goats and deer in the distance. However, all we saw that day were some lizards as these are common in that region. As part of the development, the company was required to reclaim areas of land after disturbance. Hence areas surrounding the production and re-injection wells where ground cover had been removed were already being re-seeded. This was good to see because it showed that reclamation can be an ongoing process.

After the tour of Nevada Geothermal Power, we stopped at the Peppermill Resort Hotel in Reno for a visit. The resort is very popular for its casinos, spas, heated indoor and outdoor pools, health club, and restaurants. The prestigious resort utilizes geothermal resources for heating its 2.1 million square foot (approximately 195,096 square meters) interior and its spa facilities. The hot water and cooling systems at the Peppermill Hotel is from a geothermal aquifer which is situated at about 4,400 feet (1,341 meters) underground.

The resort uses a production well and two re-injection wells. The temperature of the production well was about 71 °C. The well temperature was able to generate 270 KW of electricity, which was not enough to completely power the resort.

7.4 Unexplored geothermal resources prospects within the Cariboo Chilcotin region

The prospect for developing agriculture further within the Cariboo Chilcotin region is immense, and includes utilizing geothermal energy in the region. The geothermal resources map of BC showed that direct-use resources are available at accessible depths within the region, especially in remote areas within the traditional territories of all the Cariboo Chilcotin First Nation people. Additionally, moderate to high potential geothermal resources are available in localized areas. The economic viability of these resources has not been determined because of the distance from market and the lack of infrastructure at some of these locations (Kimball 2010). Furthermore, the potential for geothermally heated greenhouses and open field irrigation with geothermal waters in the region have not yet been explored. La Maison Verte, in Ontario, experimented with a geothermally heated tomato greenhouse. The operators confirmed that the greenhouse has not been used to its full potential because of the low cost of natural gas; nonetheless, the system has been used to lower the humidity within the greenhouse, thus increasing the productivity (email exchange October 03, 2013). Geothermal resources have been used to heat greenhouses and to disinfect soil in Iceland since 1924 (Orkustofnun n.d.). Produce includes tomatoes, cucumbers, and strawberries (ibid). In addition, soil heating, using geothermal water, has enhanced outdoor growing and enables growers to bring their produce to market much earlier in Iceland. With the widespread availability of this resource in the Cariboo Chilcotin region, it is possible that

areas which are not critical to the culture of the Aboriginal people can be developed by these communities for agriculture. Similarly, geothermal resources can be developed for fish hatcheries as part of commercial agriculture or for local food security. Iceland has had some success with fish farming. In Iceland, geothermal water at temperatures ranging between 20⁰C and 50⁰C is used to heat water from 5⁰C to 12⁰C for fish farming. Species farmed include salmon, arctic char, and trout (Orkustofnun n.d.). It should be noted that the lakes in the Cariboo Chilcotin region have been synonymous to 'refrigerators' and store-houses for food for the Aboriginal people. These currently produce fish which are harvested during the winter season and have fed the people for generations. However, geothermal resources at moderate temperatures can be used for spas as part of an eco-tourism package. Significant capital investments will be required by the communities for the development of geothermal resources, the successful outcome of which could lead to long term economic development and community sustainability in the region.

7.5 Summary and lessons learned

The two plants visited had fewer than 20 employees each, which is very small by comparison to employment opportunities within the forestry industry. However, the jobs were gender neutral, and the skills can be attained in a relatively short period of time. The skills required for daily operation of the power plant can also be attained on the job if the people have mechanical aptitude or skills from trades training. Furthermore, there are people within communities who already have these skills and can be trained easily on what is required at a power plant. The main certification required to operate at the two plants visited

was in safety. The geologists for both companies were based in Vancouver and were only needed for planning and drilling new wells.

The footprint of the power plants visited were small enough that should such a development proceed within the traditional territory of a remote First Nation community, the members can continue with their traditional use of the land with minimum disturbance. The grazing and farm lands surrounding the Nevada Geothermal Power's facility were encouraging to see. This use of land provided some comfort that wildlife and people can still share surrounding lands if such a power plant is to be built in a remote area. With careful location, such a development will have minimum impact on ecosystems and wildlife corridors.

The development of alternative energy is gaining popularity within remote communities. The group felt comfortable with the idea that the resource is indigenous to the area and can be developed locally with no need for fuel or transportation elsewhere for development. In addition, the guaranteed base load of 24 hours a day and seven days a week also provided some certainty that the jobs created will not be subject to seasonal cycles.

On day four, we travelled back to Canada. During our journey, we summarized some of the lessons we learned and talked about the next steps. The next steps include the planning feedback meetings and a focus group forum at Williams Lake. During this journey, we also decided that it was best for each community to continue their independent research of geothermal resources within their traditional territories. Further studies to determine resource feasibility and impacts on ecosystems are required. These are beyond the scope of this study. However, as a group we concluded that geothermal energy has the potential to create

sustainable economic development for the remote First Nation communities in the Cariboo Chilcotin region. The focus group forum took place at Williams Lake on October 25, 2010 with participation from the Cariboo Chilcotin First Nation communities and Tribal Councils, in addition to government and industry representatives.

Chapter 8 Results: Critical Cariboo-Chilcotin Aboriginal values

Human values are defined as a set of socially specific “beliefs and ideas which inform assessments or evaluations of worthiness” (Lee 2006, 886). Schwartz and Bilsky defined values as “desirable, trans-situational goals, varying in importance, that serve as guiding principles in people’s lives” and as incorporating five features which are: 1) concepts or beliefs; 2) pertaining to desirable end states or behaviors; 3) transcending specific situations; 4) guiding selection or evaluation of behavior and events; and 5) ordered by relative importance (1987). Hofstede, in his work on national cultures, warned against value differences at the individual level (2011). Hofstede’s model classified societal cultures in six dimensions: power distance related to human inequality; uncertainty avoidance in relation to the level of stress in a society in an unknown future; individualism versus collectivism in individual and group dynamics; masculinity versus femininity in the emotional roles of men and women; long term versus short term orientation in the choice of future, present or past for the focus of people’s effort; and indulgence versus restraint in gratification versus control of basic human desires (ibid). In the quest for universal values, Schwartz and Bilsky noted that it was impossible to determine universal values for all cultures; however, power, achievement, and tradition emerged in all the countries they studied (Schwartz 1992; Schwartz and Bilsky 1987). Other values they found pertinent were hedonism, self-direction, universalism, security, stimulation, benevolence, and conformity as shown in Figure 20 (ibid). Hofstede acknowledged that the work of Schwartz is an important alternative application of his dimensional paradigm (2011).

Currently, there are no guidelines for assessing the impact of resource development on Aboriginal values. This chapter describes the critical Cariboo-Chilcotin Aboriginal values that were articulated at the CEAA Panel Hearings and are important considerations for the First Nations people in managing their traditional territories. Furthermore, this chapter shows how Aboriginal values encompass more than cultural heritage sites and artifacts, which are protected under the *Heritage Conservation Act* in BC. This chapter concludes with an attempt to situate these Aboriginal values within Schwartz's model.

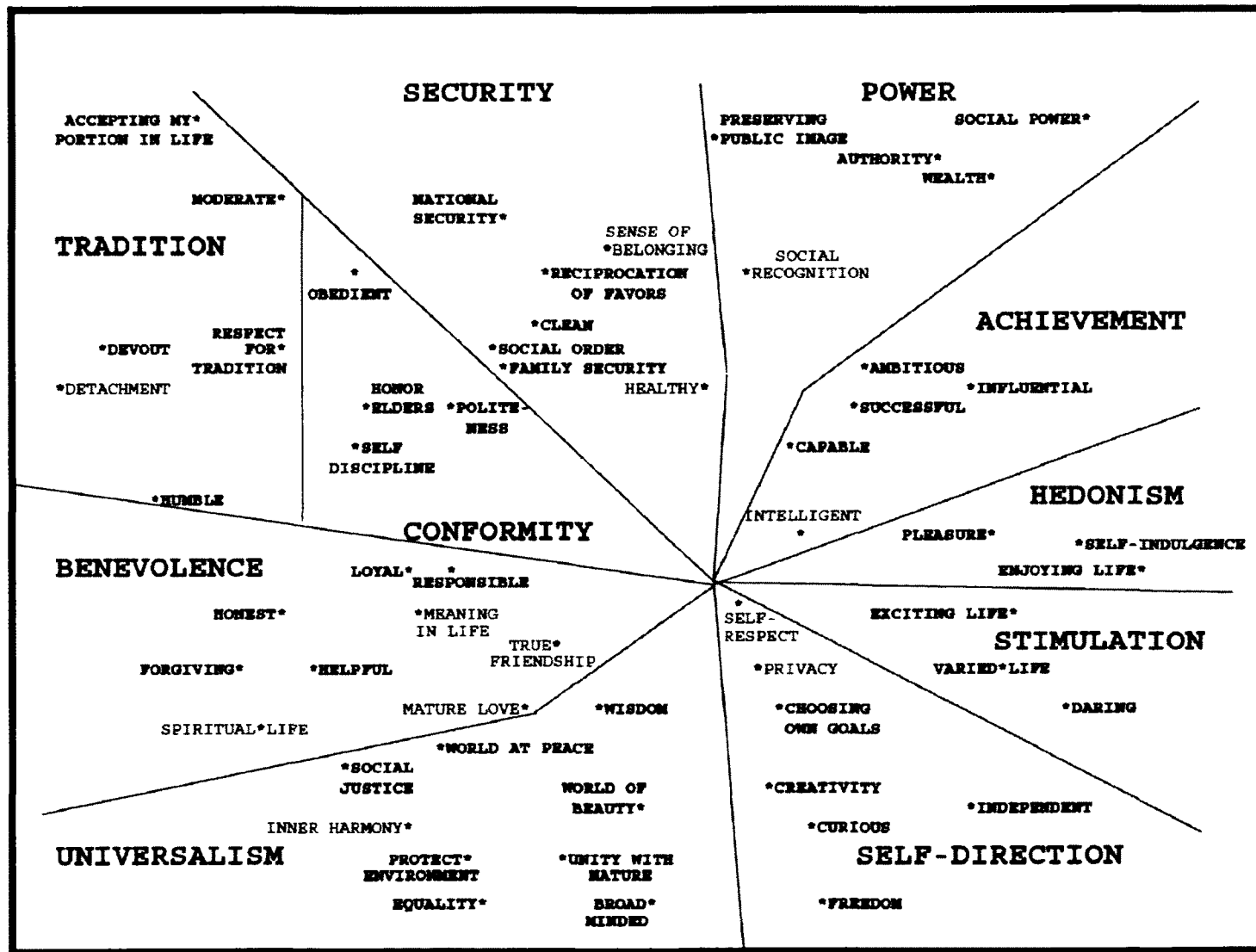


Figure 20: Schwartz's individual level value structure averaged across 68 countries (Schwartz 2009)

8.1 Critical Aboriginal values

A major finding of this study is that Aboriginal values are centered on activities which are connected to land, wildlife, water, air, and people. Trying to fit Aboriginal values into Schwartz's framework for universal values, shown in Figure 20, proved to be problematic. This is mainly due to the fact that the Aboriginal values that emerged in this study are collective values rather than those of individuals. The collective goals of the communities, in this study, are to achieve self-government and jurisdiction over their lands and resources. From Schwartz framework, the community values such as power, security, tradition, conformity, benevolence, and universalism were applicable. However, other communal values emerged which did not fit into Schwartz's framework. Values are trans-situational; however, the context within which data was gathered was situated within community resource usage. If the context was different, perhaps the study outcomes would have reflected those of individuals. However, Armstrong notes the importance of communal values in Indigenous cultures (2006). In the following sections, I describe the critical Aboriginal values that emerged in this study.

One of the findings of this study is that Aboriginal values are embedded in traditional activities relating to community usage of resources. Aboriginal values are connected with the subsistence values ascribed to wildlife, rivers, lakes, plants, and air at specific locations. These values are location specific and interconnected. Figure 21 shows the relationship in a circular diagram, reflecting the cyclical nature of activities and the worldviews of the people.

An analysis of the data shows that Aboriginal values are location specific within the ancestral lands of the people. These specific locations are seen by the people as local assets which are best defined as 'placed-based' (see Halseth et al. 2006, Reimer and Markey 2008, Markey et al. 2012). These place-based locations and assets are central to the values of the people, hence depicted as central in diagrams representing Aboriginal values in this study.

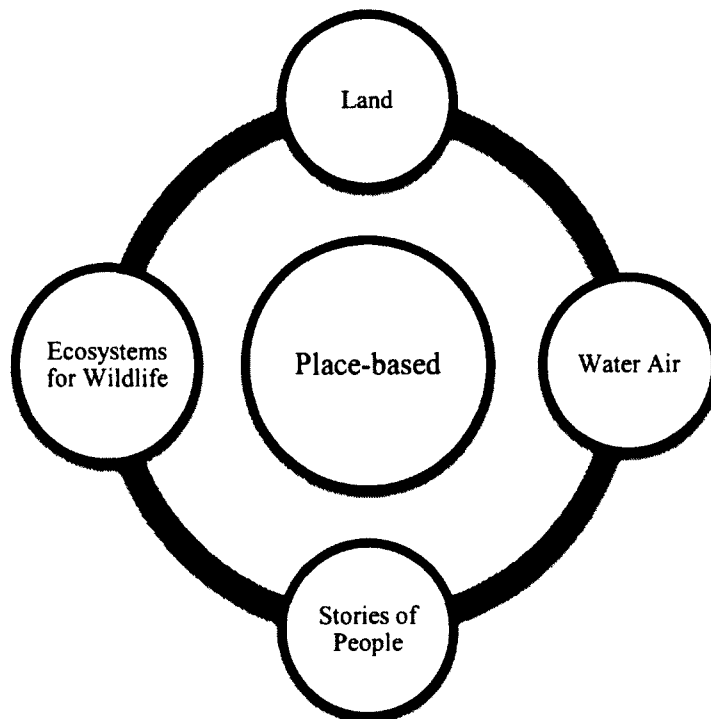


Figure 21: An illustration of place-based assets and traditional activities

Place-based assets provide the communities with a natural endowment of capital for which the people are stewards. This natural capital has both spatial and temporal dimensions. The spatial dimension relates to the extent or the geographic location of the asset. Examples include the high potency of some medicinal plants at certain locations as opposed to the same plant gathered at other locations:

When you make the medicines around here, they are kind of contaminated. But when you make the medicines up there in the mountains around Fish Lake and all that area, they have more strength in them. They give you that energy that you need. If you look at it today, you see the beetle kill down around here. But if you look around Fish Lake, look at the trees, there's hardly no beetle kill. Somehow it's been protected, because it's a sacred area for us. Agnes Haller, Yunesit'in. (CEAA 2010a, 2681)

Such statements affirm the spatial dimension of place-based assets. The wildlife, land and the ecosystem at these locations, the stories of the people at those places, the air and water are seen as community assets belonging to the particular Aboriginal groups within whose traditional territory it is, hence the claim to Aboriginal title. The use of resources at these locations for traditional purposes is limited to the particular Aboriginal group and characterized as their Aboriginal rights. For example, the Shuswap people will not hunt for wildlife within a Tsilhqot'in area unless it is within their overlap territory and vice versa. The people have mutual respect for each other's boundaries. The analysis of data gathered shows that Aboriginal values are linked to traditional activities in these particular locations. The spatial place-based assets are required by the people to carry out their traditional activities and maintain their lifestyle.

The temporal dimension of Aboriginal values relates to the proof of ancestral usage of certain locations. These values often relate to spirituality and the connection to their ancestors at these specific places. Maintaining these connections is intricately linked to their way of life (FIMI 2006, 11). A number of people expressed their connections to these locations at the Panel Hearings. Betty Lulua, expressed how certain activities only happen at certain places:

All areas surrounding Ts'yl'os, Mt. Tatlow area is our sacred ground, for all the communities that use that area. Ts'yl'os is the heartbeat of our land. Our First

Nations communities has [have] used all of these areas year-round, spring, summer, fall, and winter. Teztan Biny, Fish Lake, we do fishing, hunting, harvesting wild plants, medicines, tea leaves, berries, and it is very sacred ground with pit houses and burial grounds. Cattle and horses graze in the area. Non-natives use this area when fishing season is open for them. Little Fish Lake, our community members still use those areas for fishing, hunting, camping, hay meadows for horse and cattle, grazing and trapping in the winter. Red Mountain, hunting, wild game, meat, birds, not the birds you see flying around in the air today, it's like blue grouse and wild chicken. Harvesting wild berries, medicines. At Onion Lake, they have Elders' Gatherings, fishing, they do net fishing, harvesting wild berries, medicines, horseback riding. They have cultural camps there. Nabas area is a moose habitat area. Hunting, we still do hunting, camping, we harvest wild berries and medicines, horseback riding and fishing. Taylor Windfall area is a pristine mountain area for trail rides, hunting, harvesting wild berries, medicines, wild bird game. Anvil Mountain is a deer and moose habitat area, harvesting berries, medicines. Taseko Lake and rivers and the narrows is a good location for fishing, net fishing, hunting, harvesting berries, medicines, trail riding, camping, hiking, trails, salmon spawning area and many trout and it's also a deer and moose crossing. Chilko Lake, that's down in Xenigwet'in, Chilko Lake, we still do our fishing, net fishing, camping, hiking, trail rides on horseback, cultural camp sites, sweat lodge, camp, and Xenigwet'in have cultural camp gatherings there. Vick's Mountain, they still do hunting for moose, deer, wild groundhogs, wild birds, blue grouse, wild chicken, and to harvest medicines and berries, mountain goats and many other small wild animals. That's the area where we also pick wild potatoes. There's some good camping spots up there. Yohetta Wilderness area, is a guiding trail, riding. They have hunting trips and fishing, camping, boating, swimming, hiking, harvest berries and medicines area, wild moose and deer, goats, Bighorn sheep, mountain goats, and wild groundhogs live in that area. Or they migrate through that area. Our Tsilhqot'in People still use these lands areas year-round. Betty Lulua. (CEAA 2010a, 2735-2737)

It is clear that First Nations People living on Reserves face higher unemployment rates and earn far less than people living in urban communities (Stock 2008, BC Stats 2008). Despite their low income, these people continue to survive by relying on the land as expressed by Chief Joe Alphonse, of the Tl'etinqox (Anaham) Band:

The poverty level here and the members that live here, we're all proud Tsilhqot'in, and in large part, we can, our People can live that way, because they can still depend on running down to the river and that river can provide them whatever fish is necessary. We can still go upon our lands. Whether being the mountain directly behind this community we've referred to as Tsi bas, we can go directly behind that mountain, we can hunt deer, we can hunt moose. (CEAA 2010a, 3276)

Other people expressed how important the place-based assets are in meeting their daily needs. The use of these assets and its significance cannot be over-estimated. The remoteness of these communities necessitates their dependence on resources at these geographic locations to meet their daily needs. Below are some pertinent expressions:

Fish Lake and Nabas area may just seem like a place in the middle of nowhere. All some people see is the rough roads, no electricity, and no civilization. To us, the Tsilhqot'in, it is our home, it is our backyard. Loretta Williams, Xení Gwet'in. (CEAA 2010a, 1889)

This is our natural resources that we've always lived on. And I've always grew up doing this. Caught Chinook, Sockeye. This is my traditional rights. And I don't want to lose it ever. James Lulua Jr., Xení Gwet'in. (CEAA 2010a, 1804)

Sixty percent of my moose and deer come from the backyard. And we always fish, hunt where there is good area for moose, a good area for trout. In the wintertime, we ice fish, and we know which lakes to ice fish at. Joanna Haines, Yunésit'in (Stone). (CEAA 2010a, 2752-2753)

These place-based assets have sustained these people and their communities for millennia. Statements from over 101 people at the Panel Hearings show how these assets continue to be integral to how the people meet the needs of their daily lives.

8.2 Tsilhqot'in epistemology and place-based assets

The Tsilhqot'in worldview links their ancestors to the past, present, and the future. The court case document defined the different eras of the Tsilhqot'in people as ancient, the past, and the present. The ancient time, known as Sadanx, is a period of time from the creation till approximately between 1650 and 1700 (*Tsilhqot'in Nation 2006*, 271, 411). This period of time was legendary, described as the time when animals, people, and the land had mythical

powers and were able to transform (ibid). Tsilhqot'in legends are believed to have originated during this time period with place names and stories set within this era.

The past, known as Yedanx, is the period from Sadanx till about mid or late 1800s (*Tsilhqot'in Nation 2006, 271*). The Tsilhqot'in contact with Europeans and the war of 1864 are included in this time period. The Tsilhqot'in people today trace their genealogies back to people who lived in that era. The present, K'andzin, is the period of time from the late 1800s until the present (ibid). The history, knowledge, and culture which have been passed orally from generation to generation encompasses all these time periods. Furthermore, the Tsilhqot'in people today talk about passing on their knowledge to the future generations. These future generations are called 'Sech'iziqi'. Using this Tsilhqot'in epistemology 'Sadanx, Yedanx, K'andzin, Sech'iziqi' (ancient, past, present, future) as a framework, as I have illustrated in Figure 22, brings clarity and understanding to the present values of the people.

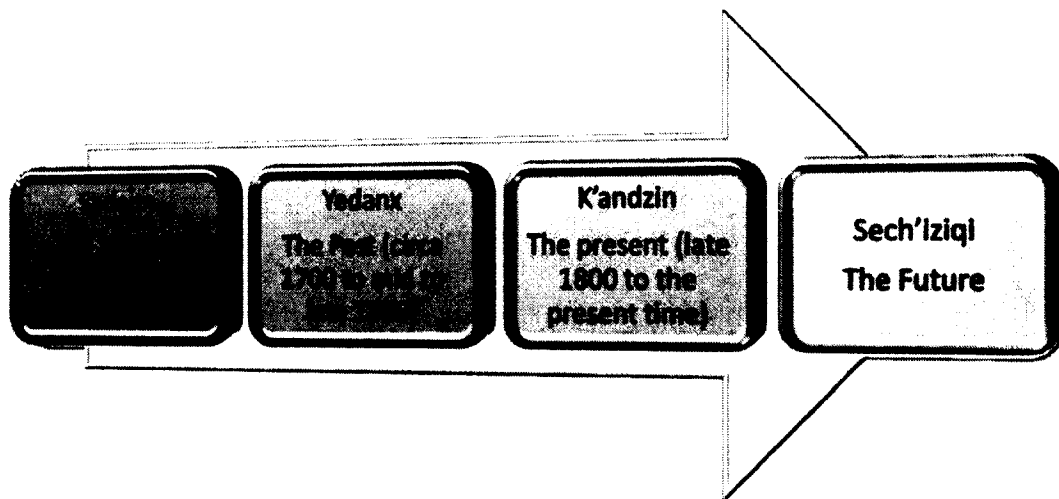


Figure 22: An illustration of Tsilhqot'in epistemology used as a framework

The concept of community connections to past and future generations has implications for the people. Indigenous people consider and plan for both their ancestors and the un-born generations as they do for the present generation. FIMI noted that the legal framework which deals with the present “cannot adequately protect the rights of ancestors or yet-to-be-born generations” as cultural frameworks that “situate individuals in historical context” (2006, 11). Throughout the Panel Hearings, the Aboriginal people continually stressed the need to protect sites for the future generations, particularly sites with ancestral connections.

Catherine Haller explained the significance of community gatherings at locations used by the Tsilhqot’in people in the past:

It is important to have the gatherings where the ancestors and Elders lived. We had our Elders' Gatherings in July on Jididzay, Onion Lake, and Teztan Biny, because those are some of our most traditional grounds. We get more help from our ancestors when we pray where they used to live and do our ceremonies there. We understand better where we, as Tsilhqot'in People, come from, our history, our situation, when we go to where our ancestors lived. We will lose all the gatherings there. What are we going to do? Who are we going to teach? The mine will take away the best of us. The best of us is what we have up there. The company thinks that they are going to get rich and us, we lose our health. We lose everything that we survive on and we lose everything - it's our culture, our lives. We are going to die off and they are not going to see us. Catherine Haller, Xení Gwet'in. (CEAA 2010a, 2637-2638)

These intergenerational connections continue to shape the lives and conversations of Tsilhqot’in people. Sherry Stump from Tl’etinqox-t’in (Anaham) described how her Yedanx and K’andzin ancestors lived at different locations throughout the year:

Throughout the fall and winter months, the family would move back to the cabin, moving cattle and harvesting hay, and that was in the Nabas area. During the summer months, the family camped out throughout the valley at Onion Lake and Taseko Lake. Traditional activities including fishing, hunting, trapping and berry picking. Fishing at the lakes and rivers were at Fish Lake, Onion Lake, Taseko River, Chilko River. Their hunting area was at Red Mountain, Nabas area, where they grew up, Onion Lake, at the mouth of Taseko River deer crossing. Sherry Stump, Tl’etinqox-t’in (Anaham). (CEAA 2010a, 3422)

It is important to note that agriculture is a K'andzin activity. This was introduced by the settlers following the pre-emption of land in the 1860s. Traditional activities prior to European settlement, however, did not cease. The K'andzin people maintained their connections to specific locations and their claims to the place-based assets. Maintaining these connections is important in keeping the identity of the people as expressed by Mr. Lulua Sr. in his statement against the destruction of Fish Lake (Teztan Biny) and its replacement with Prosperity Lake as part of the multibillion dollar mine project:

The Prosperity Lake [proposed compensation lake for the proposed Prosperity mine] they talk about is not going to replace the Teztan Biny and it is not going to be the same. You destroy the lake and the land, it will never be replaced. Mr. Lulua Sr. (CEAA 2010a, 2414)

Chief Percy Guichon from Tsi Del Del (Alexis Creek) expressed a very interesting aspect of the sustainability of the Tsilhqot'in culture. He expressed the cultural connections to the land and how this is an important 'mouthpiece' for the intergenerational transfer of knowledge:

I have been raised to show and practice mutual respect. I have also been raised to respect my cultural and spiritual values that have connections to the environment. Many of my Elders who are my connection to my culture and spiritual values are passing on. We as First Nations struggle every day to keep our identity and cultural values. In losing Elders, we lose important traditional knowledge about our culture and connection to the land. Once the last of our Elders has passed on, what do we have left to carry on our cultural beliefs? And more importantly, what do we have left to teach our children? What is left is the land itself, the water, the trees, the fish, the animals, and the stories that connect them. This is why we strongly oppose the destruction of important lakes such as Teztan Biny, as it represents our spiritual and cultural connection to our ancestors. Percy Guichon, Tsi Del Del (Alexis Creek) (CEAA 2010a, 164)

The land, the wildlife, the water, and all the stories that connect them are the place-based assets which have been instrumental in teaching and transmitting the Tsilhqot'in culture from the Sadanx people through to Yedanx, and now to the K'andzin people. These people are holding onto these assets at all costs as inheritance for the Sech'iziqi people.

8.3 Emerging themes in Aboriginal values

Dr. Nancy Turner expressed the opinion that when people first move to an area they are unfamiliar with the local resources (*Tsilhqot'in Nation 2007, 222*). She testified that it takes “a lot of time, generations of teaching and observation, to build up a really complex system of knowledge that leads to sustainable use of people's environment” (ibid). Chief Ivor Myers of Yunesit'in (Stone) expressed the ancestral use of place-based location by the longevity in place names. He stated that “wherever the place name exists, our People utilize the area” (CEAA 2010a, 2540). Chief Fred Robbin, in describing the Esket'emc people's connection to their land, said “we belong here. We're part of the land. We're – this is where we came from. This is where we've always been” (CEAA 2010a, 4114), emphasizing the inseparable relationship the people have with the land, that is, their place-based heritage as an essential asset. The longevity of the people at particular locations has resulted in values being developed which are location specific. The Tsilhqot'in ancestors moved around their territory and lived at different locations. Chief Joe Alphonse of Tl'etinqox-t'in (Anaham) stated:

When you live in the same place every year, when you live, say, at the mouth of Chilko River, and you live there at the same time every year, year after year from the moment you were born to the moment you died, and that at different points you will also reside in three, four, five, other locations every year, and every year it's a cycle, you keep going back to there. And that's not nomadic. (CEAA 2010a, 3314)

These values are linked to the activities carried out at these places. Core values around place-based assets are identified as being interwoven or embedded into traditional activities and the way of life of the people. Using the Tsilhqot'in epistemology, 'Sadanx, Yedanx, K'andzin, and Sech'iziqi' as a framework (see Figure 22), the re-occurring themes in Aboriginal values that emerged from content analysis are protection, knowledge, sustainability, kinship, sacredness, cultural identity and stability, self identity, interconnection, stewardship, spirituality, health, respect, security and benevolence. To help visualize these values, I created the multi-dimensional model in Figure 23.

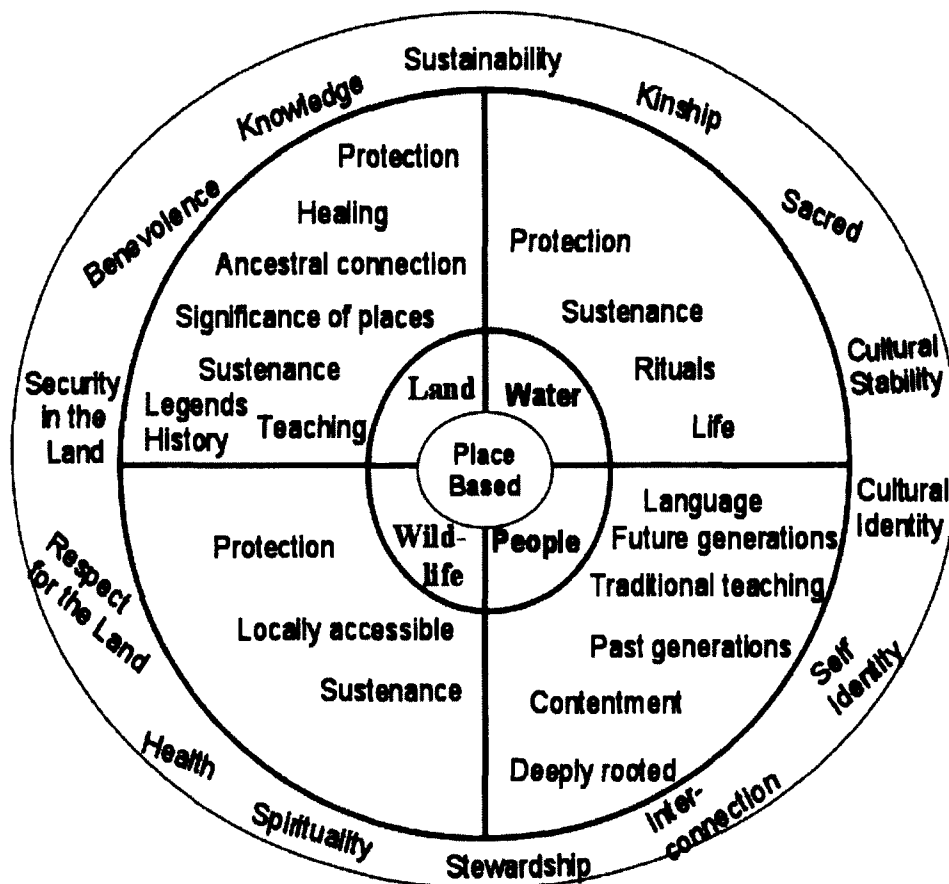


Figure 23: A summary of Aboriginal values which emerged in this study

The diagrammatic representation of Aboriginal values is best described using circles. These symbolize the cyclical worldviews and the seasonal cycles of resource usage patterns. The specific location, being the place-based asset, is at the centre of the circle as shown in Figure 23. The seasonal rounds of activities that take place at these locations typically are hunting, gathering, fishing, and ceremonial uses. The assets at each location are grouped based on the activities as land, water, wildlife, and people. Community members expressed different values for these place-based assets, some of which are shown in Figure 23. Furthermore, there are other values which are entrenched in the way of life of the people. These values guide not only traditional activities, but the communal actions of the people. These values, shown in the outer circle, are benevolence, knowledge, sustainability, kinship, sacredness, cultural stability and identity, inter-connection and inter-relationship with all, stewardship, spirituality, health, respect for the land, and security in the land. These values encompass all the other values expressed. These themes were categorized and are further explained below.

8.3.1 Place-based teachings and learning centres

Cultural teachings and learning is very important to the Aboriginal people in the Cariboo Chilcotin region. Traditional activities enable place-based teachings and learning. These traditional activities are the vehicles through which cultural education and knowledge are transmitted orally. The venues for the transmission of knowledge are at these place-based locations. Certain teachings and knowledge transfer only take place at specific locations and times. For example, the Tsilhqot'in people will only narrate their legends in the dark (Tsilhqot'in Language Group 2012). Roger William, Xenigwet'in' ex-chief and council member, in one of his presentations stated that "A lot of our process and history is through

rituals, through legends, through stories, around the campfire. And out there on the land doing traditional activities, that's how we work” (CEAA 2010a, 3172). Similarly, Gerald Duncan from Canoe Creek First Nation explained the significance of place-based teachings:

And where we go, we've always went. We've always went back to where we were taught. And these teachings come back way back not from just my brother but further back to his grandparents and probably so on. Isn't like we just came out and learned all this stuff ourselves. It's been passed down. And, you know, I'm happy to say that I'm still passing down that knowledge of what I learned. And Larry is still able to do it. And then next thing you're sitting here, these young people here, they are the next ones that are going to be passing down what they were taught about the land. So, anyway, that's, you know, what I'd like to share, you know. It's just that the land is very important and that where that line [proposed transmission line for Prosperity mine] is going to go is going to really impact our way of life. It may not seem much too some people, but it's something to us. And we value it. Gerald Duncan, Canoe Creek. (CEAA 2010a, 4199)

The teachings that happen at these locations are situated in context. This has been the case for generations. These locations are described as a ‘mouthpiece’ where the land speaks to the people. These places are natural classroom and library infrastructures used by elders and community members to transfer specific knowledge:

My schooling, my formal schooling was in the traditional way. I was brought up on the land. I was brought up on how to survive on the land. I know the history of the land by being brought up on the land. That was my schooling. My schooling was done on the land. Elder Minnie Charleyboy of Tsi Del Del (Alexis Creek) as translated by Mr. O. Charleyboy. (CEAA 2010a, 3779)

The intergenerational transfers of knowledge within the communities are similar from various accounts of Panel Hearings participants. The excerpts below are from participants from the Esket’emc and Canoe Creek communities:

I was taking two van loads of kids out, out into the land and showing them where to pick the Labrador tea, how to get the medicines, where to pick the berries, appropriate

times of the year and how to do that. And then the one-week camp-out came up. And all of a sudden before I knew it, I had 32 kids all signed up. But I wasn't allowed to take those 32. According to the contract that I had, I was only allowed 15. And I had to have one more chaperone with those 15 kids. So I talked with Larry and Phillip and Mildred and we had a great time out there. I mean, the kids were always running up to me, "what are we going to do next, what are we going to do next, what are we going to do next?" Chief Fred Robbins, Esket' emc. (CEAA 2010a, 4187)

When we went out there, there was fishing and there was medicines. There was foods that we collected. And also the men would show the younger guys, younger children, not only guys, but the younger girls, too, on how to skin and what they needed to do to gut and to prepare it for cooking or drying. And there's a lot. There's a lot with the, like, just everyday living out there, the camping and what we needed to do to survive. And I believe that our children learned a lot from that. And it's really important that we continue with that or else we're not going to have it. And we're not going to have the -- we're not going to be able to teach them, you know, here's how you prepare a moose or here's how you prepare a deer, or this is where you go look for your berries, this is where you go look for your medicines, we're not going to have that. And that's what I'm really afraid of. And it's already happening now, like you see all the ATVs and how it's affecting the wildlife and it's pushing some of our deer and that away, we don't have as many as we used to. And not only that, with our berries, a lot of that is being destroyed. And it's just something that can't continue happening. We need to do something to keep that, to keep that alive for our children. And it's really scary to think that might not be there. What are we going to do? Mildred Kalelest, Canoe Creek. (CEAA 2010a, 4189 - 4190)

When I got my first deer, I learned I had to give it to an elder, like, to show my respects and show that, like, I was -- I appreciated that I could do this now. Like, I could provide for my family in the future. Kelyn Paul, Canoe Creek. (CEAA 2010a, 4196)

These excerpts show the commonality of knowledge transfer within the different groups, the Shuswap and Tsilhqot'in Aboriginal groups. Furthermore, the impacts of development on teaching and learning on the land were explained by Dr. Andie Palmer, an expert witness for the Esket' emc people. Dr. Palmer explained that development activities can prevent the transfer of intergenerational place-based knowledge:

When roads are blocked for construction, people can't go down them and therefore they can't visit particular places. When young boys can't herd the horses up from

Wycott's Flat across the road because of construction, they don't get to hear the stories about that. Dr. Palmer. (CEAA 2010a, 4863)

The cross-examination of Orrie Charleyboy from Tsi Del Del (Alexis Creek) by the Panel member, Ms. Morin, clarified how development impacts can break the intergenerational transfer of knowledge:

MS. MORIN: Thank you. I just have two questions. Mr. Charleyboy, you had talked about teaching the Tsilhqot'in language. I have two questions. Is the landscape and its features important to teaching the language, the Tsilhqot'in language?

MR. O. CHARLEYBOY: Yes, it is. Without the land, you can't teach the language. Without the language, you don't have the land.

MS. MORIN: Thank you. My second question is, has resource development activities such as logging impacted teaching the Tsilhqot'in language?

MR. O. CHARLEYBOY: Yes, it has. In certain areas, such as berry picking, medicinal plant gathering, Labrador-tea gathering, you actually have to go out on to those sites and teach the children what you're picking. You can't do that in these areas anymore because of the devastation of logging practices. (CEAA 2010a, 3961)

Mr. Charleyboy's response to the Panel showed the impact of resource development on the ability of the people to continue their culture and to transfer place-based knowledge. The significance of place-based knowledge transfer was further expressed by Joyce Cooper of Tsi Del Del (Alexis Creek):

In our Tsilhqot'in tradition, everything has its place. We have legends on how the rainbow came to be and its purpose. The Denisiqi Service Society, as a child and family organization, teaches all Tsilhqot'in descendants about respecting their home and territorial lands. This allows our organization to keep the connection to our only means of survival in keeping family together. Our service begins by teaching the families our traditional ways, from when a child is born to adulthood. Keeping a child in a traditional willow baby basket teaches a child to have patience and assists in structuring their bones to endure all aspects of life. Traditional parenting is one of the many programs we offer to our People within our organization. Spending time on traditional lands teaches young and old to assist one another while harvesting for the winter months. Joyce Cooper. (CEAA 2010a, 3913)

The teachings and learning are activities based on the land. Teaching, learning, and passing knowledge from one generation to another are very important First Nation values. The locations where these take place are important assets for the communities. As expressed, going back to the same place over and over again keeps the cultural memory of the people alive. These locations also keep the intergenerational connections and epistemologies of the people alive.

8.3.2 Spirituality and sacredness of place-based assets

The landscape of the Cariboo Chilcotin region has many mountains, rivers, lakes, and rock formations which provide a rich context for histories, stories, oral traditions, and beliefs. Some of these landscapes provide visual evidence and consciousness of First Nations oral traditions and mythologies. These mythologies are often referred to as legends. The visual evidence includes rock formations shaped in the forms of people and animals. These are believed to have turned into stones in the legendary times. Turkel described these landscapes and landforms as natural archives of the place (2007). Furthermore, he stated that the Tsilhqot'in people have the knowledge to interpret the landforms (Turkel 2007, 75). These landscapes support the belief systems and are also sites of sacred teachings. These teachings provide lessons about nature, proper behaviour, morality, and the foundation for traditional beliefs. Turkel portrayed the landforms as "traces in the landscape" which prompt the memories of "the doings in myth time" and provide "evidence for the truth of the stories" (2007, 75). These memories and traditional beliefs are very much alive within the Tsilhqot'in communities today despite the influence of Christian missionaries. These beliefs are oral and are accessed by listening to the stories and legends told by the people. The legends teach the

listener how the land was formed; the need to respect the land and all it has to offer; the bond between plants, animals and people; the rules that must be followed and the consequences of failing to follow those rules; land stewardship principles; places and events that shape the lives of Tsilhqot'in people; and all those matters of importance that provide substance and meaning to the lives of the people. These landforms are essentially pilgrimage sites.

Community members visit these sites and landforms in order to re-connect with ancestral spirits, to pray, to make offerings, and to perform rituals and ceremonies. Turkel stated that "the material traces of past events are everywhere in the landscape, and because they are read differently by different people, it is inevitable that disagreements will arise about the nature and role of the past in present places" (2007, 76). To the Tsilhqot'in people, the areas surrounding these landforms are sacred and will not be traded for money or for resource development. Tsilhqot'in members voiced their opposition to resource development at some of these locations. Below are some expressions from the people:

And that's where our legends come from is from the land and from the waters. We have a lot of legends and a lot of stories that are passed down to us. But I can't stress the importance of that, you know, what's sacred to us, that we're dealing with serious, you're dealing with a serious issue, whether it's how that sacredness is connected to the land or to the water, and it's got a connection to us. And it's a very serious issue when you're dealing with that and trying to make a resource in those same areas. Chief Francis Laceese, Tl'esqox (Toosey). (CEAA 2010a, 2887)

We have been consistent throughout this entire process [Environmental Assessment process] in saying that we are not willing to sacrifice an area of such profound spiritual and cultural importance for the sake of profit. Crystal Verhaeghe, Executive Director of the Tsilhqot'in National Government. (CEAA 2010a, 7041)

I also want to say that we are not anti-development of the resources in Tsilhqot'in region. This is evidenced by the purchase of a mill near Hansville and development of a biomass energy plant in the same area. All the First Nation communities in the Tsilhqot'in are developing economic strategies and always have been. Our people have the same hopes and dreams as the Canadian society in general. We want our children to receive an education, become productive members of society. Our members want jobs like everyone else. They want a colour TV, a satellite dish, a nice

vehicle in the driveway, have money to go on holidays. But we will not create jobs at any cost to the environment. We will not create economic development at the expense of a sacred lake. We will not destroy anything valuable that relates to our teachings of our cultural and spiritual connections just for the sake of a new Dodge 4X4. Chief Percy Guichon, Tsi Del Del (Alexis Creek). (CEAA 2010a, 165 -166)

Douglas Johnny, also called Douglas Lulua, is a Tsilhqot'in medicine man from Xenigwet'in First Nations, who in his testimony stressed the spiritual connection of the people to the land:

And that land is very, very important to our People. They have clearcut our land, you know, you can see it from the satellite photo. And, like I said, you know, these trees have a spirit. And everything in the land has a spirit. Everything is sacred. Douglas Lulua, Xenigwet'in. (CEAA 2010a, 2869)

Douglas Lulua further described the sacredness of land to the people:

And we also know that this land is very sacred to our People. And the trees that's been removed, you know, from this land, that's very sacred. When you take a life, it doesn't have to be a human life. A lot of times, you know, the spirit, they will wander on this land for some time. Douglas Lulua, Xenigwet'in. (CEAA 2010a, 2905 - 2906)

Lenore Case of Tsi Del Del (Alexis Creek) First Nation further affirmed the connection between the land and the spirituality of the people. She stated, "We are spiritually connected to the environment. The environment links us to our language and our heritage" (CEAA 2010a, 3785). Frederick Johnson from the Esket'emc First Nation stated:

This place we call Dog Creek Dome has been used for fasting for many generations. We also use different meadows, but we go in cycles to different fasting areas as to not disturb an area for too long. And we will once again come back to the fasting areas within the next two, three years. The Esket'emc have a right to fast. As I have been researching my own community, but my own family, fasting ceremonies have not

been a part of our community for many years. Frederick Johnson, Esket'emc. (CEAA 2010a, 4994)

The testimonies of the people show the temporal connection and the spiritual archives at these specific locations. The natural archives and material traces of the past at these locations are best interpreted by the people who physically occupy the space (Turler 2007, 77). It is therefore understandable why the people will not sacrifice these locations for financial gain.

8.3.3 Health and healing

The median income of Aboriginal families living on or off reserves is typically low (Statistics Canada 2007). More than 30% of women living on reserves in the Cariboo Chilcotin region are reported as unemployed (ibid). These women depend on place-based activities for their survival. Country food from hunting, fishing, and berry picking provide valuable nutrition as reported by their health practitioners. Medicinal plants are important contributions to their health and well-being. In addition, women who live off-reserve also depend on their family members on-reserve for local harvests. At the CEAA Panel Hearings, health professionals testified to the nutritional benefits community members derive from eating wildlife, fish, and berries. These professionals also confirmed that the health of the people is linked to their pristine surroundings and ecosystems. A health worker for one of the communities explained how traditional and western medicines are used holistically for healing:

Catherine Haller is our traditional healer. She is a drug and alcohol worker, justice worker and primarily is doing traditional healing for the community. Catherine and I

work together treating people holistically, including using medicinal plants, traditional plant foods and spiritual healing. Both Catherine and Maryann have taught me their language, their traditions and beliefs, and they have worked with me to find traditional solutions for community members. Due to the inherent distrust that people have of western medicine here in this community, we have to combine our services together to make sure people become healthy. Shari Hughson, Healthcare worker for Xeni Gwet'in First Nation. (CEAA 2010, 2038)

Catherine Haller emphasized the significance of resources at place-based locations. In her presentation, she talked about the utilitarian values associated with particular locations.

These include sites for fasting and gathering medicinal plants:

Teztan Biny is special, like Xeni. The Xeni Gwet'in survive from that land. Most of us go hunting there, and most of us go fishing there. There's medicine there. I was there this summer between Teztan Biny and Xeni. It's like Vancouver and Victoria, people travel back and forth. Teztan Biny is not damaged. It's a place where we go to be alone, do fasting, things like that. Teztan Biny was the Reserve up there. We were back and forth from Xeni to Teztan Biny on a sled in the wintertime, even on a saddle horse. The Xeni people benefit from Teztan Biny. We go hunting up there, we go fishing, we gather medicine, everything. Catherine Haller, Xeni Gwet'in. (CEAA 2010a, 2639)

In addition to comparing specific locations with some big cities, Agnes Haller further explained the community values and benefits derived at these places. She likened specific locations to health and healing resorts:

You have your Hawaii where you relax. It's our Hawaii over there where we relax and to keep that spiritual energy we need. You go on your holidays to wherever to get your spiritual energy. Ours is up there [Red Mountain]. Agnes Haller, Yunesit'in (Stone). (CEAA 2010a, 2676)

Picking medicinal plants, conducting spiritual ceremonies, and healing at certain locations are prevalent among the people. The following are some expressions from people who illustrate this:

A part of our people's way was migration in different areas, before our people were put on reservations. They migrated within the Tsilhqot'in territory. Today we still migrate to Fish Lake and hunt there for moose and deer. I myself still migrate around the Tsilhqot'in territory to hunt, fish, and do spiritual ceremonies, pick medicines. To date, I conduct spiritual healings with our Aboriginal People, whether the Shuswap, the Tsilhqot'in, and the Carrier. Cecil Grinder, Tl'etinqox-t'in (Anaham). (CEAA 2010a, 1035)

High elevations, like, mountains, are spiritual zones where Tsilhqot'in find the most powerful medicinal plants. And it is where all water is considered to contain healing properties. Linda Smith, Yunesit'in (Stone). (CEAA 2010a, 1136)

Furthermore, some community members stated that they pick their medicinal plants at higher elevations because the medicines from plants in those area are more potent due to little disturbance and the pristine nature of these places. The remoteness of these communities can be attributed to their continued dependence on the place-based assets for their health and well-being.

8.3.4 Protection of place-based assets

Protection of place-based assets is evident in the expression of many community participants at the CEAA Panel Hearings, the focus group meetings, and the geothermal field trip. Protection of rivers and lakes is very important to the people because of their reliance on fish and cultural activities that go with fishing. Traditional fishing by the people not only provides food, but also the ability to teach the younger generation their language, culture, and their way of life. Fishing at certain locations also provides the ability to recite legends and stories of the location, in addition to carrying out rituals and ceremonies. Water is sacred to the people. The following quotations express this:

The people today are called Tsilhqot'in, "people of the river", because we are connected to the water. Chief Ivor Myers, Yunesit'in (Stone). (CEAA 2010a, 2537)

The water is sacred to Nengayni. It is viewed as spirit and as part of all creation. It is alive and it gives life. It is our responsibility to protect the water, not just for Tsilhqot'in, or humans, but for everything that we honour and respect through the culture and stories. Our value system views a clean earth as primary to health. If the water is clean, then our bodies and mind will remain healthy. This is based on reciprocity. Chief Ivor Myers, Yunesit'in (Stone). (CEAA 2010a, 2541)

I also conduct water ceremonies throughout the Tsilhqot'in. Water is just like a living thing, just like me and you. If you contaminate it, you destroy it. Just like putting a knife through your own heart. Water is just like a living thing. That's the way my grandparents brought me up. Cecil Grinder, Tl'etinqox-t'in (Anaham). (CEAA 2010a, 1037)

And we feel that our lakes are important for us to protect because this will ensure that our food source is there for our future generations. In our stories from our Elders, fish were transported to lakes for that purpose, to feed our future generations as a lot of our Elders knew that the rivers would soon one day be full of pollution. Loretta Williams, Xenigwet'in. (CEAA 2010a, 1118)

As Tsilhqot'in People, it is our duty and our responsibility to protect our land, to protect our water and our future generations. Chief Marilyn Baptiste, Xenigwet'in. (CEAA 2010a, 1656)

Every little stream coming from Teztan Biny and surrounding area is like the blood lines which flows through each and every member of the Bulyan-William family, and those that have used the land yesterday and those that use the land today. Doreen William, Xenigwet'in. (CEAA 2010a, 1903)

The need to protect water at these sites is very important for the sustainability of the culture and for the future generations. This was expressed by several people throughout the Hearings. Mr. Cecil Grinder from Tl'etinqox-t'in (Anaham) said, "We need to protect the headwaters, the land for our future generation" (CEAA 2010a, 1039). The sustainability of the future generation is a priority for the people. This was expressed by several people during their testimony:

...Tsilhqot'in people in 1864 has [have] protected our land on the southwest side of our territory known as the Chilcotin War of 1864 in the Bute Inlet area. That, and I will say again, was protecting our culture, our language, our people, and protecting our future generations. Chief Marilyn Baptiste, Xení Gwet'in. (CEAA 2010a, 1657)

And in the Declaration of 1989, we set forth certain criteria for our lands and our future generations. And the bottom line for our people, the Tsilhqot'in and other First Nations also, is the sustainability for all people and future generations; not for 20 years or 30 years. Chief Marilyn Baptiste, Xení Gwet'in. (CEAA 2010a, 1663)

... we don't want to extinguish ourselves, then whatever we do, we just want to make sure that our future generation is taken care of ... Councilor David Setah, Xení Gwet'in. (CEAA 2010a, 1855)

I have chosen to protect this way of life for those who cannot speak for themselves and for my future generation. This has made me who I am today and, without this, our future generation will lose their way and will not have respect in anyone, not even themselves. Loretta Williams, Xení Gwet'in. (CEAA 2010a, 1884 -1885)

The protection of place-based assets such as ecosystems for wildlife, water, and the land is often regarded as stewardship. However, this stewardship is directly linked to the sustainability of the people. Tsilhqot'in mythology shows the interrelationship between animals and humans. These mythologies, while providing a unifying identity for the Tsilhqot'in people, are also the vehicles for transferring land stewardship principles from generation to generation. Some of these principles expressed by some of the people show the K'andzin connections:

...for me, and the rest of the people, like I said, we are very simple people. We live off the land. And a lot of the things that, that are on the land are things, fish, moose, and everything, those are the things that we live off and those are the things that are going to be disturbed. Councilor Georgina Johnny, Tl'esqox (Toosey). (CEAA 2010a, 2898)

Therefore, we as a Nation, are the voices for the fish, animals and the water and the land. We are not only fighting for our land. We are also fighting to save Mother Earth to save our culture, to save our language, to save our fish, wildlife, our water and our identity. Doreen William, Xení Gwet'in. (CEAA 2010a, 1904)

At a young age, we were taught to be protectors of the land. And water within our Tsilhqot'in territory, along with the language. Cecil Grinder, Tl'etinqox-t'in (Anaham). (CEAA 2010a, 1034)

The use of water for economic development takes into account the values of the people. The TNG proposed the development of a commercial bioenergy facility. This development was engineered to use water conservatively, which in turn increased the capital cost, hence reducing the price competitiveness of the facility:

The bioenergy facility that the Tsilhqot'in have proposed along with their partners, is 70 kilometres west situated at Hanceville ... I think that people should be aware, though, that we have engineered this plant so that it would use approximately 25 gallons per minute rather than roughly I believe it's 600 gallons per minute in the Williams Lake facility, so we're talking about a tiny fraction of the water and we have the systems to recycle and reuse the water onsite. And close to a closed system so we're talking a net of we're talking about a few gallons a minute from some evaporation that you would get. Sam Zirmhelt, Economic Development Consultant for TNG. (CEAA 2010a, 1086 -1087)

When we were designing this plant, Williams Lake was in uproar. The primary news story was how much water that Canfor was using. Six hundred gallons a minute, or something and the impacts of that on the Williams Lake water supply; that was a huge issue here. It's an issue for the Tsilhqot'in, the river people, what are we going to do about water? We went back to the drawing board, we went back to our engineering company in Vancouver, we said, "Look, we've got to design this thing, it's got to use way less water or we're not doing it." So we were able to take the design from something that would use 600 gallons a minute down 25 gallons a minute. That's significant. It costs us more which then drives up our price and makes it harder to be competitive with BC Hydro's ceiling but we think we've done that and we're basically able to run it off of a well, off a regular well. Of course, we'll have three of them. But basically we won't be taking anything out of the river; that was important. Sam Zirmhelt, Economic Development Consultant for TNG. (Focus group event October 2010)

The need to protect place-based values superseded the economic development needs of the community. The design of the energy project where water is conserved showed that the

community was not willing to compromise on their stewardship principles in favour of economic needs.

8.4 Community Environmental Impact Assessment components

Beanlands and Duinker defined Valued Ecosystem Components (VECs) as environmental attributes or components identified during a social scoping exercise and considered valuable by participants in a public review process (1983). These VECs may be determined on the basis of perceived public concerns related to social, cultural, economic, or aesthetic values (Beanlands and Duinker 1983, 19). This definition which is widely adopted in Environmental Impact Assessment (EIA) processes was developed for ecological scoping. However, upon listening to presentations from community participants at the Hearings, the focus group forums, the geothermal field trip, Nazko's CCP visioning, and community research, it became apparent that any resource development project, regardless of environmental footprint, would be assessed by the communities based on Aboriginal values. First Nations people in the Cariboo Chilcotin region are concerned about important social and culture components. VECs which focus on social and cultural values, thus defined as Valued Social Components (VSCs) and Valued Cultural Components (VCCs) rather than ecosystems only, seem to be important in most assessments (see Hegmann et al. 1999).

The VECs attributes defined for the Prosperity mine project were environmental in nature and remained the focus of the Panel Hearings (see CEAA 2010b). Aboriginal interests, however, contributed important social and culture components. This study revealed that place-based assets have socio-cultural values. These can be classified as Valued Socio-

Cultural Components (VSCCs), which are a combination of VECs, VSCs and VCCs. For each place-based asset, VSCCs were found. VSCCs of land and water derived from the content analysis of the data are shown in Figure 24. These include dependence on the land and water (rivers, lakes, and creeks) for survival, honoring the land, identity in the land, land as mother earth, land as provision, land as economy, and landscape as home. Creating baseline data for each of these components, however, can become challenging. As an example, the baseline data for the landscape component can consist of a study of each individual theme in that category. The themes emerged from the content analysis of the data forms the landscape component shown in Figure 25. These themes are words used to describe the landscape such as sacred, legends, stories, rituals, teaching, history, aesthetics, landmarks, and landforms. These values require that the landscape remain 'intact'. The arrows in the diagrams, Figures 24, 25, and 26, represent the flow of values. If specific areas of the land are lost or not accessible, these values at those particular locations will be lost. It is uncertain if similar values at other locations will meet particular needs. Similarly, if the landscape is disturbed at particular locations, the values derived at those locations will be lost. For example, people travel to certain pilgrimage sites for specific needs which cannot be fulfilled in other sites.

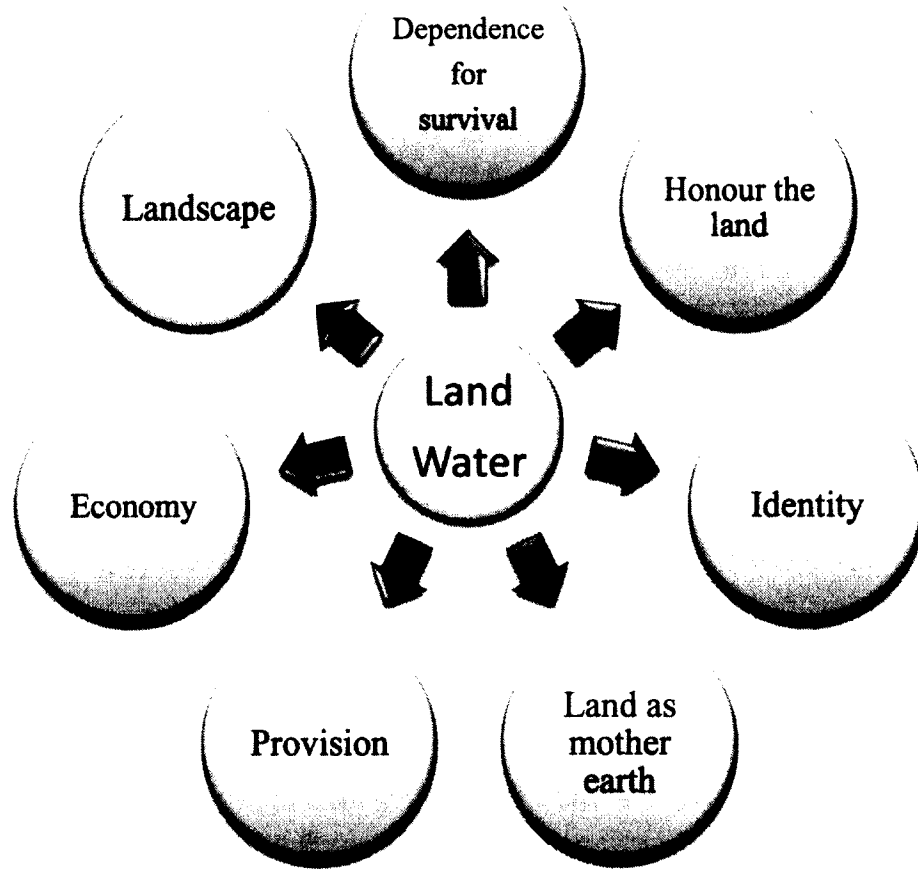


Figure 24: An illustration of VSCCs from the Land that emerged from the content analysis of data

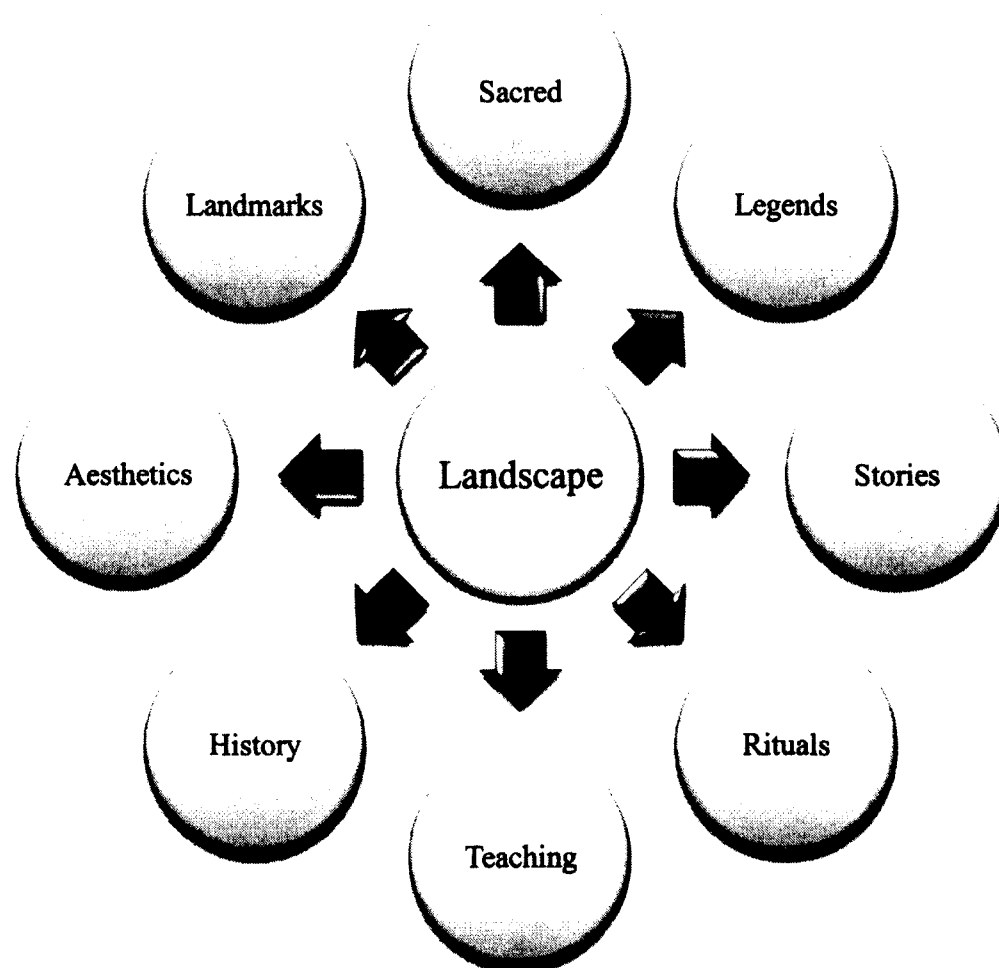


Figure 25: An illustration of VSCC from the Landscape which emerged from the content analysis of data

The words participants used in describing wildlife, fishes, berries, medicinal and other food plants are similar. The place-based assets, such as ecosystems for wildlife, water and aspects of land, were grouped into one VSCC. Figure 26 illustrates this important component. With this information, gathering baseline data for assessment can become easier. Again, using the words of participants and the Tsilhqot'in epistemology, the human component of the VSCCs shows the people are interested in honouring their ancestral

connections -- the ancient, the past, the present, and the future; language continuity; cultural identity, stability, and sustainability; continued connection to the land; and knowledge, teaching, and learning related to the land.

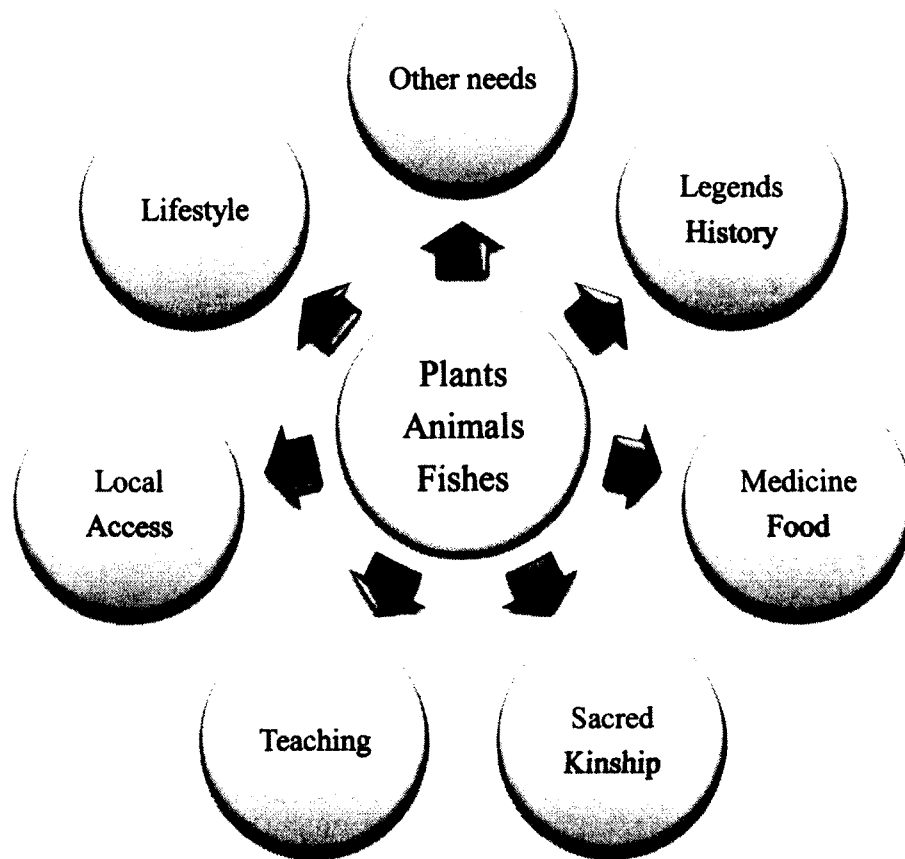


Figure 26: Examples of place-based assets as VSCC that emerged from the content analysis of data

The values articulated at the Panel Hearings provide an understanding of Aboriginal interests in relation to resource development. The Environmental Assessment process can be enriched by including VSCs and VCCs in the process as illustrated in Figure 27.

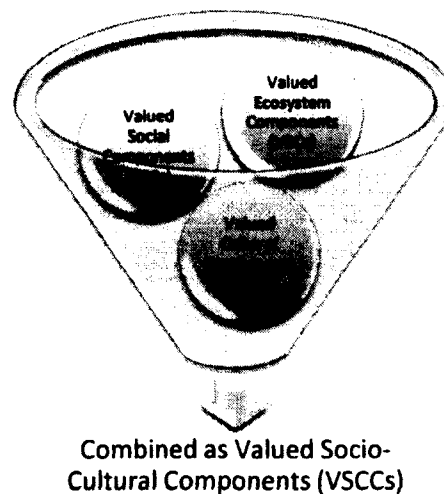


Figure 27: Incorporating community values in the Environmental Assessment process

The creation of distinct Valued Socio-Cultural Components (VSCCs), by combining Valued Social Components (VSCs) and Valued Cultural Components (VCCs), within the Environmental Assessment process would require more evaluation of these critical values through dialogue with the communities. The context and circumstances surrounding the CEAA data used for this particular study is that of community resistance to mine development. Not all community members testified within the quasi-judicial settings. However, that is the only federal process in place for conducting environmental assessment. This same process is applicable to all resource development involving federal Crown lands. It is therefore necessary to have all VSCCs identified for the different communities, thereby expanding Beanlands and Duinker's definition. Defining VSCCs and incorporating them into

the CEAA process will provide some mechanisms for addressing Aboriginal interests and concerns as these components are used by the communities in making resource decisions, regardless of environmental footprint of projects.

8.5 A summary of Aboriginal values

The importance of protecting place-based assets such as land, air, water, ecosystems for wildlife and humans was articulated by a number of people at the Panel Hearings at the different communities. The spiritual, intellectual, emotional, and educational connections to the lands are all place-based. Through their testimonies, people from different communities expressed these connections and linkages by participating in traditional activities. Some activities are seasonal, thereby requiring seasonal use of place-based assets. When asked about Tsilhqot'in values, Douglas Lulua from Xeni Gwet'in responded as follows:

This is the way the Creator gave us a way of life and gave us the seven, seven values. And he also gave us a sacred pipe and the seven laws to the pipe. I can only speak on my own culture. It is very clear to our People that this is the way the Creator wanted us to live. The other three colours of man on Earth were given something else. And I believe the White Man were given the Ten Commandments ... Well, number one is to respect, respect all of God's creation and to be humble. To be honest. To be truthful. To have courage. Wisdom. And fortitude. ... Fortitude. The power of the mind. Douglas Johnny Lulua, Xeni Gwet'in. (CEAA 2010a, 2902, 2913)

However, the findings of this study show that there are more values articulated by the people.

This study also shows that Aboriginal values are communal and not individual, hence it was difficult to compare Aboriginal values identified with Schwartz's individual level value structure as shown in Table 9. However, content analysis of the data shows a communal sense of power, tradition, and collective achievement which are universal and trans-

situational (Schwartz 2009). This study also found the collective Aboriginal values where applied in ways different from Schwartz's findings. The similarities and differences are shown in Table 9.

Table 9: Schwartz individual level values and Aboriginal communal values

Schwartz's value framework (2009)	Emerging Aboriginal communal values
Security: National security, sense of belonging, reciprocation of favours, clean, social order, family security, health.	Security in land and water: Food security (wildlife, berries, fish), health, identity, culture.
Tradition: Accepting my portion in life, moderate, devout, detachment, respect for tradition, humble.	Tradition: Knowledge, practice, protection, way of life, sustainability, sacredness, deeply rooted, stewardship, rituals, ceremonies, legends, history and stories.
Benevolence: Honest, loyal, responsible, meaning of life, true friendship, helpful, mature love, spiritual life, forgiving.	Benevolence: Sharing with others, spirituality, respect for the land and animals.
Universalism: Inner harmony, social justice, world at peace, wisdom, world of beauty, protect environment, equality, broad minded.	Universalism: Kinship and stewardship responsibilities; protection of land, wildlife, rivers, lakes and air.
Self-Direction: Freedom, curious, independent, creativity, choosing own goals, privacy, self-respect.	Community: Interconnection, sustainability, collective.
Stimulation: Exciting life, varied life, daring.	Culture: Cultural identity, self-identity.
Hedonism: Pleasure, enjoying life, self-indulgence.	Collectivism: Self-government, self-determination.
Achievement: Ambition, influential, successful, capable, intelligent.	Achievement: Language, culture, connection to past and future generations, traditional teachings and knowledge, contentment, deeply rooted.

8.6 Conclusion

The themes that emerged in the study show that Aboriginal values are embedded in traditional activities on the land. Without these activities, there is so much at stake for the communities. These include the loss of Aboriginal languages and cultures from their indigenous location. Furthermore, the loss of these activities could lead to the loss of a way of life for the people. In addition, family responsibilities such as teaching the younger generation and passing on knowledge will also be lost. Of importance is the connection of these activities to pertinent locations. The disturbance of these locations as a result of resource development can have irreparable damage which, in some cases, cannot be mitigated. The disturbance of landscape could result in the loss of stories and oral traditions, hence the loss of the ability to validate certain aspects of the culture of the people.

Categorizing the themes that emerged in this study shows the significance of place-based assets to communities and why these should be included in EIA processes. These categories also highlight why Aboriginal values remain the guiding principles which influence decisions made by the communities. It is, therefore, important for the people to protect these place-based assets from the impacts of resource development.

Expanding the EA process to include Aboriginal values as Valued Socio-Cultural Components would give the communities some assurance of their cultural survival. Baseline data for EA processes can be gathered using components drawn from the themes which emerged in this study. The communities in this study already assess development projects within their traditional territories based on these Valued Socio-Cultural Components.

Chapter 9 Results: How Tsilhqot'in women survive on the land

The relationship between Indigenous women and their lands has been discussed in a previous chapter. Like other Indigenous women, Tsilhqot'in women rely on their lands for economic, spiritual, and cultural survival. It was, therefore, important to capture the stories of Tsilhqot'in women and to understand their perspectives. Tsilhqot'in women testified at the CEEA Panel Hearings in 2010 about their connections to the land, often referring to the earth as 'Mother Earth'. These testimonies were mostly viewed as history of the land. The people described their seasonal activities and harvests at pertinent locations. However, what was not clear at the Hearings is how the women survive at the remote, often isolated, locations with very little income. The sections below report on my interviews with some Tsilhqot'in women. This report provides some insights into how Tsilhqot'in women live off the land within their traditional territory and was submitted to the Federal Panel for the assessment of the New Prosperity Mine at Williams Lake in August 2013.

The interviews with the Tsilhqot'in women were carried out in a conversational style. The women spoke because their understanding is that this report will help them in their fight to save Teztan Biny. However, it is important to note the cross-cultural communications which took place during the interviews. While the women freely shared information which was going to be available for public consumption, they trusted me to use the information in their favour. The Tsilhqot'in women shared stories of what they know and how they experienced living on the land. These stories are governed by Tsilhqot'in laws and protocols which were not articulated but rather known by the people. A Tsilhqot'in student in one of my classes once shared some cultural information and when queried about the source of her

knowledge, she simply stated, “we know these things because we are Tsilhqot’ins, we are born with it.” It is possible that such knowledge is internalized at a very young age and has become a way of life. In a similar way to the Witsuwit’en laws and protocols, the Tsilhqot’in people have laws that govern relationships among the people and between the people, lands, and the animals (Mills 1994). The women I interviewed only shared with me what they believed I needed to know. These conversations reported below are only a mere fraction of how Tsilhqot’in women use their lands. However, it provides a foundation from which one can build further dialogues.

9.1 Interviews at Fish Lake Gathering

On August 25th and 26th of 2012, the Youth group from Xeni Gwet’in First Nations hosted a two-day camp gathering at Fish Lake which is locally known as Teztan Biny. Fish Lake is a pristine lake in a very remote and relatively undeveloped area of the Tsilhqot’in territory. The area has been used by the Tsilhqot’in people for generations for spiritual and subsistence purposes. The lake is a popular site for teaching children how to fish, and the surrounding areas have provided the Tsilhqot’in people with medicinal and edible plants for generations. The discovery of gold in the area over a decade ago has led to a proposal for an open pit mine. The proposed mine development faces opposition both from First Nations communities and British Columbians who have environmental concerns. The original proposal, Prosperity Mine, was turned down by the Canadian government following an Environmental Assessment which concluded that the impact of the mine outweighed its benefits. In an unprecedented move, the government allowed a resubmission of the project under the new name ‘New Prosperity’ Mine. As part of the resistance and opposition to the

mine, the youth of Xeni Gwet'in invited guests and interested people to a gathering hosted at Fish Lake. The original mine proposal had suggested the lake should be used as a tailings pond. The current proposal includes a new tailings pond to be created in the vicinity of the lake (see Figure 28).



Figure 28: View of Fish Lake showing the mountain range in the vicinity of the proposed tailing pond dam, August 2012

Over one hundred people travelled to Fish Lake, some by horseback, some by cars and trucks, and others by a float plane in August 2012. Some people arrived the night before, and others stayed on beyond the gathering date. The event started with drumming and a spiritual ceremony, followed by updates of the mining proposal by various community

members and external organizations. The afternoon was filled with a number of cultural activities. Adults and children fished at the lake, some standing by the lake shores and others out in canoes and inflatable pontoon boats. There were team games such as lehal²⁸ and horse-shoe throwing. Other activities included carving and horse whispering. The evening was packed with entertainment by people participating in talent shows and by a local band. During the course of the two days, I met and spoke to several Tsilhqot'in members. Below are the results of my semi-structured interviews and conversations with some Tsilhqot'in women.

9.1.1 How Doreen William survives on the land

Doreen William is aged between 40 and 50 years and was born on the shores of Taseko Lake. She was raised in Nemiah Valley. Doreen has three children and still lives in Nemiah Valley. Her father, Joseph, was born and raised at Teztan Biny (also known as Fish Lake). Joseph knows the area like the back of his hand. Doreen stated that the Tsilhqot'in people moved from place to place throughout the year in search for food to harvest and preserve for winter. She grew up listening to stories from her parents about the area and the people who had lived there before them. Joseph has the knowledge of the migration patterns of the animals and hopes to pass these on to the younger generations. Doreen's family members sustain themselves by gathering medicinal plants in the area, by hunting in the fall season, and by fishing for salmon. Doreen and family also gather berries also in the fall. She learned to survive by living off the land. She has tried city life but states this lifestyle is not

²⁸ Lehal is a traditional gambling game played by First Nations people.

for her. Doreen's sister lives on a reserve near Savona²⁹ but still hunts and fishes in their area with her husband.

Doreen works part-time, about 16 hours a week. She goes fishing and hunting with her husband. Typically, her family needs two moose per year to survive without money; however, this is not always possible. Doreen explained that moose is scarce. Less than half a moose will provide the family with food and meat for a ceremony, and they consume the remaining. They donate the hides to other people, especially the elders who work with hide. These elders are unable to go hunting so rely on hide being donated to them to make moccasins, gloves, and other hide products for their personal use and to exchange for other goods and services.

Doreen, her husband, their three children, and her parents need to bring in about 200 fish during the salmon run. These are preserved through canning, drying, and freezing. The family typically dries between 67 and 150 fish during the season to last the winter months. When wildlife populations or the salmon harvest is low, the family is affected. The family not only eat what they bring in but also use some during feasts and ceremonies. They fundraise for their other needs with some of their harvests through 'loonie auctions', for example, to cover their children's hockey needs or any other sports or recreation needs, their costs of travel, and to pay fees.

Doreen explained that all the hunting, fishing, and gathering provide opportunities to teach the younger generation the stories and legends of the land. She stated that all these will be lost if the proposed gold mine goes ahead. She sadly stated that a gold mine in the area

²⁹ Savona is a town halfway between Kamloops and Cache Creek, within the Shuswap territories. The reserve is over 400 Km from Nemiah Valley.

will also take away her family's ability to survive on the land, and she is not familiar with communities who have success stories with mining. Doreen believes that Tsilhqot'in legends and stories are like Bible stories. She explained that each and every part of the land, in and around Teztan Biny, has its own stories and history; therefore, the land speaks in its own language, and those who understand it will also understand the true meaning of life, not only ours but for the wildlife as well. In Doreen's closing words, "Living at Williams Lake or any city is not the same."

9.1.2 Alice William's experiences of living off the land

Alice William is over 50 years of age and lives with her husband, Tom, who has two children from his first marriage. She works part time doing whatever job is available. Her work experiences include being an Environmental Monitor for the Tsilhqot'in National Government at Fish Lake/Little Fish Lake and as a camp cook/First Aid Attendant for other companies. Alice was attending school, taking university courses, but sadly was unable to complete her degree because of sickness. She is currently working under a Biologist as a Researcher for the local Band Government. Alice and her siblings were brought up on the land by their parents. Their parents lived around Teztan Biny (also known as Fish Lake), Yanah Biny (also known as Little Fish Lake) and have since passed away. She explained that most Tsilhqot'in people had supernatural gifts; her father was gifted with the horse power while her mother had healing power. Alice's mother continued to help her people until the day she passed away. Alice's father travelled around the territory and over mountains on horseback to far places for work or just to visit with other people, which was the norm in those days. He planted a garden south of Taseko Lake; however, hunters used to help

themselves to his onions. Alice and Tom plant a garden every year and grow their own vegetables such as cabbage, turnips, beets, greens, carrots, onions, parsnips, peas, green beans, tomatoes, spinach, herbs, and potatoes. In addition to planting the garden, they also keep one milk cow and a horse. She lives off the land by hunting, fishing, and gathering berries and plants. She learned a lot about how to survive on the land from her late father, her mother, and her siblings. Her mother taught her how to aim and shoot a rifle. She hunts for her own needs in addition to providing for others. Alice and her husband hunt and try to 'bag' a moose every year. However, this is becoming increasingly difficult because there are too many hunters who use the territory. She explained that there are typically over 300 limited entry moose draws per year provided by the provincial government, despite the fact that there are fewer moose in that region. This has resulted in more non-First Nation hunters camping out within the Tsilhqot'in territory and competing with community members for moose.

Alice explained that the land provides medicine for her people. The traditional Tsilhqot'in doctors, known locally as Deyens, gather medicinal plants which are much sought after. Most people still gather their own medicinal plants; however, those who are unable to trade other things such as meat and canned fish for medicines from the Deyens. In the past, she has had other people make medicine for her. People use traditional medicines for illness such as cancer and to help their immune systems. In the past, Alice had traded items such as deer meat and hooves for medicine. When people are unable to afford medicine from pharmacies, they would either pick their own or trade traditional medicine and food with others. Alice explained that people from the Xení Gwet'in community go on medicine trips. These trips consist of a group of elders who are driven out into the territory in a van to pick

medicine and food plants. The van brings the elders to Fish Lake and other places to gather the plants they need. The elders also gather natural tea, called Labrador or Indian tea. There is an abundance of this if you know where to look. Alice described the tea as being different from regular tea. She explained that the elders like to drink it because they have acquired a taste for it and it has a lot of vitamin C in it, but it has a different taste which most people say it is too strong. Alice picks a lot of this tea and often gives it away as gifts for people who are unable to go out and pick their own. When people receive this tea as a gift, it is very much appreciated. Alice also picks berries when she has time. She often picks enough huckleberries to make jam. She explained that some people make 'fruit leathers'³⁰ and sell them for income; however, she shares her extra berries she has with elders. Some of these elders also make fruit leathers.

Alice also explained that people still trap lynx, muskrats, otters, bobcats, fishers, martens, beaver, and possibly wolverines. The hides are used for clothes and decorations. She gives her hide to Tsilhqot'in members who tan hide to make items such as buckskin coats, gloves, moccasins, and souvenirs. Alice has a passion for her ancestral land on which she has learned how to survive. She continues to depend on it for her sustenance. Alice derives a lot of pleasure in hiking and enjoying the landscapes around her and taking pictures. She would like to see more Tsilhqot'in youth hike within the territory as she does. She is reclaiming her family heritage home at Yanah Biny (Little Fish Lake) and surrounding meadows for future use and for tourism.

Alice and Tom fish annually. She caught about 27 trout in two days in the summer of 2012. This added to the store of food for the winter. Some of these fish are used to barter for

³⁰ Fruit leather is a snack made from dried and rolled up fruits.

services she is unable to afford such as getting help to look after her garden and her livestock while she is attending a gathering or out working at her job. Alice expressed her sadness at the prospect of having Fish Lake destroyed by mining activities. She explained that the opportunity to camp together at that location will be taken away from the people. Fish Lake is a major fishing camp for the community. Despite the abundance of lakes within the territory, Alice explained that Teztan Biny (Fish Lake) is unique because it is an old gathering site; it has an aura of history and a peacefulness, a belonging which the elders feel when they are there. The younger generations are getting back to the culture through the elders teachings and they love the experience. Teztan Biny is only about an hour and a half drive from the Reserve. The people have no need for big Recreational Vehicles (RVs) to camp. The lake and its fish are clean and not polluted so people can eat the Rainbow Trout without worrying. The people only have to bring potatoes and dry meat because they can always catch enough fish to feed them for however long they camp at the site. The location provides everything the people need, from food to medicinal plants. Alice stated that there will be fewer places to have a fish camp. She loves camping and is advocating for a healthy lifestyle through camping out. Alice mentioned that the development of the gold mine would be a loss for the community. In addition to spirituality and the sacredness of Fish Lake to the people, the ambience and aesthetic values also connect the Tsilhqot'in people to the location. Alice explained that the mountains, lakes, creeks, and the landscapes all contribute to the spirituality of the people. She stated that the land is alive and living. The legends and stories continue to connect the people to the land.

9.1.3 How Lennie Billy feeds a family of 12

Lennie Billy is aged over 40. She has four children. Her youngest child is 18 years old while the oldest is 24 years old. Lennie lives with her husband, three of her four children, and three of her youngest sibling's children. Lennie's niece and nephews are fourteen, nine, and seven years of age. She considers them her children. In addition to raising her niece and nephews, Lennie also supports her two grandchildren born to her son and his wife who do not live at home. She has to get groceries for 12 people in total. Her parents camp out fishing and hunting. Together they hunt, pick berries, and fish. Lennie works full time, providing home care at Nemiah Valley. Due to her large family, grocery shopping is very expensive; she is unable to support her household through her wages. Lennie has to depend on the land to feed and support her family.

When Lennie goes out on the land, she takes the children with her, teaching them to pick and preserve berries. The family eat a lot of berries, hence Lennie and her family pick as many berries as they can find and preserve them by freezing, drying, and canning. These preserving methods are widely used by Tsilhqot'in people. She teaches the children various traditional activities on the land, and she also teaches them the Tsilhqot'in language through these activities. The children learn to make dip nets and how to use these nets. They learn the traditional activities and customs on the land by being on the land and watching the adults. The children also participate in week-long culture camps on the land. In addition to being out on the land with family members, Lennie's daughter learns the Tsilhqot'in language in school. She has some understanding of the language. Being out on the land provides the opportunity for her to ask questions about "words that pop in her head."

Lennie and her family fish in the fall. The children participate in this activity. Together they catch enough fish to supplement their diet. The family preserves fish to last them throughout the seasons. They typically dry about 40 fishes and can about three cases. They also freeze between 40 and 50 fish. In addition to supplementing their diet with the catch, Lennie has other uses for these fish. She uses canned fish as gifts for visitors or on special occasions. She also uses her canned fish to barter for items such as blankets, soapberries (Nuwish), and other necessities when she does not have enough or cannot afford to buy them. In the winter months, the family goes ice-fishing. This helps them re-stock and ensures they have enough food to survive.

Lennie and her family hunt for moose and deer. Her oldest son, whose family Lennie supports, helps his dad (Lennie's husband) during the hunting season. In the summer of 2012, the family got a moose and hoped to get another one before the winter set in. Lennie stated that moose are getting more difficult to find because it is hard to get into some of the hunting grounds when roads are blocked or damaged. Typically, the family will hunt for more than two moose. The meat is preserved through drying. Lennie explained that dry meats are consumed in greater quantities, hence they deplete these more quickly than fish. The children are taught to dry meat properly. They keep an eye on the smoke and fire and attend to other details as required. The family donate moose hides to people who make moccasins and do bead work. Donating the hide helps other people who are unable to go out and hunt but rely on hide products for their sustenance. In addition to their own sustenance, Lennie's family also help other people in need by donating to those who run out of meat. The family use some of their meat at birthday parties and give some meat as their contributions to traditional gatherings, ceremonies, and funerals. These contributions are preferred to store bought items.

The family also helps elders who are unable to hunt. These elders sometimes contribute some money towards their gasoline and bullet shells. When asked about contributing meat for traditional gatherings, Lennie explained that these gatherings are necessary as they provide the opportunity to learn the legends and stories of the land at these events. Their contributions along with that of others are needed for the continuity of these important community gatherings.

9.2 Brittany Gathering, September 2012

The Brittany Gathering of 2012 provided an opportunity for me to spend more time with the Tsilhqot'in people, to experience the culture, and to become more familiar with their ancestral land. The Brittany Gathering is an annual event and has its origins rooted in people's resistance to industrial logging within areas of cultural significance to the Tsilhqot'in people. The annual venue for the Brittany Gathering is at Henry's Crossing. Evidence of Tsilhqot'in use of the site as residence and for camping predates 1846 (TN-A2 2007, 16). The gathering commemorates the 20th anniversary of the people's gathering in an area of land referred to as Brittany Triangle (and areas of land between Chilko and Taseko Rivers (TN-A2 2007, 35). On May 7, 1992, Tsilhqot'in members mounted a blockade to prevent the bridge repair at Henry's Crossing which began the annual gathering at the site. The Tsilhqot'in communities have met along the banks of the Chilko River, at Henry's Crossing in Nemiah Valley to camp for two days in the summer or late fall every year for over 20 years. At the gathering, people participate in cultural activities including singing and dancing, playing cultural games such as lehal, storytelling, making tools such as fish traps and dip nets. Some community members take the opportunity to fish for salmon at the river.

This gathering provided me with an opportunity to understand the significance of that specific location to the Tsilhqot'in people. Below are some of the conversations with Tsilhqot'in women at Brittany Gathering.



Figure 29: Traditional salmon drying at Brittany Gathering, September 2012

9.2.1 Annie Williams' perspective on Tsilhqot'in ways of knowing

Annie Williams is an ex-chief of the community. Annie was born and raised in Tatlayoko where she also raised her family, including her siblings. She is a college graduate and worked as a Chief in the community for several years. She now works with Tsilhqot'in youths. Annie is a fluent Tsilhqot'in speaker and lives within the territory.

Sharing from her experiences, Annie explained the need for education which focuses on community needs rather than general studies. She described how she took accounting courses but discovered that these did not cover what was needed to deal with the accounting

systems required by Band Administration. She believed that the mainstream education system does not prepare community members for life on reserves. In her experience, getting mainstream education does not guarantee work for individuals. Annie stated that a main challenge faced by students in school is language. She referred to the works of Dr. David Dinwoodie which showed that children from the communities who spoke Tsilhqot'in language at home were quieter in the classroom because they have to translate English into Tsilhqot'in which puts them at a disadvantage. However, their teachers did not understand this and make no concessions. These children often learn from elders by watching and participating in traditional activities. She further explained how racism affects students today. Annie shared her schooling experiences in the mid-1960s and 1970s. She explained that the non-Native children in school were poorer in those days and were helped by Native families. She stated that the children did not experience racism in school in those days, while children these days constantly face racism in schools. Nowadays, a number of Native families live in poverty, living on \$230 per month. These families are able to survive in Nemiah Valley which she believes is a miracle. She believes that these families would not survive if they lived in urban settings. Annie stated that "out on the land, people will catch their own fish and hunt for their own meat and survive." Hence, it is important for children to learn to live on the land.

Annie further explained that there are customs protocols which have to be observed on the land. For example, there are certain times when a woman should not touch salmon. Salmon are significant to the Tsilhqot'in people. These fish, she explained, have travelled long distances and have been through a lot of hurdles to get to the local river. Hence, it is

important that they are respected and appropriate rituals observed. She stated that the youth can only learn these when they are out there, on the land.

Annie described the Brittany triangle and explained that it is like the Bermuda Triangle for the Tsilhqot'in people. It consists of sacred sites which have to be protected. The triangle serves as an intersection and provides interconnections for the people. The elders have a lot of knowledge about the place; however, this knowledge is only given to the community as required. Some things are very sacred and will not be articulated even within a courtroom setting. The elders have knowledge about the environment, the future of fish, land, and water. This knowledge is sacred. Annie explained that knowledge is from the inner self and consists of the way the people are brought up. She stated that it is difficult to articulate how Tsilhqot'in knowledge comes into being. In Annie's words, "teachings are passed down from generation to generation. Through these teachings, knowledge is transmitted. The knowledge becomes internalized, so people know what they know but cannot explain how they know." Traditional gatherings are important because a lot of teaching happens at these events. Because the landscape is changing and there are lots of developments within the region, Annie believes that the youth today will grow up differently and the elders are scared of what will happen. Annie believes that the Tsilhqot'in Chiefs today are warriors just like the warriors in 1864. She believes that these warriors are powerful people. She praises the work they are doing to keep the land intact and to help protect the Tsilhqot'in culture, not only for this generation, but for those yet to come.

9.2.2 Susie Lulua's perspective on teaching on the land

Susie Lulua was born and brought up in Nemiah. She is in her late 50s. Susie attended residential school and also went to school at Williams Lake. She has a First Nations Teachers' Assistant certificate. Susie has been teaching Tsilhqot'in language to children since she was 19 years old. Some of the children she taught have become parents and are still speaking the language. She now teaches their children at the daycare. The daycare is allowed eight children per certified Early Childhood Education (ECE) program worker. The program only caters to children aged between three and six years old. Children are no longer eligible to be part of the program at the end of the month they turn six years old.

Susie's parents taught her to speak the Tsilhqot'in language. She took some courses with Ed Cook to learn how to read and write in Tsilhqot'in. Susie teaches the children at daycare to speak, read, and write Tsilhqot'in language. She explains the land and landscapes are important in teaching Tsilhqot'in language to the children. Susie believes that the land is sacred, and there are spirits in everything. She believes that the mountains, rocks, and trees have spirits, and these spirits help them. She stated that the mountains are important landmarks and believes that if the children know the mountains, they will never get lost within the territory. Children learn about the different mountains. The children are taken onto the land year round. In the summer months, the children and mothers camp with the teachers for four days as part of their program. During this time, they learn about the environment, animals, and the trees. The children memorize different parts of animals in the Tsilhqot'in language. The children learn about the different trees and berries. They pick only certain types of berries and different types each trip. This way they learn the names of the different berries. The children are encouraged to feel the bark on different trees and to touch

the different pine needles. Susie explained that these activity-based teachings provide the children with survival skills and ways to live on the land. The daycare group camps at different locations within the territory. While at the campsite, they fish and gather berries and medicinal plants, and they learn about the mountains and the lakes within the area. Each lake has Tsilhqot'in names, the meanings of which do not always translate into English. The Tsilhqot'in names relate to events or things. The children learn about these events or things during their trips. Susie explained that each campsite is chosen for the resources it offers. For example, the daycare group will camp at Brittany Triangle to learn how to hook salmon in the Chilko River but will go to other lakes to learn how to use rods and fish nets. During the camping trips, the children will learn about the importance of the land and how the land can provide for them. Susie believes that the land is more important than gold. She emphasized how important the land is to the people, how it helps teach the children both the Tsilhqot'in language and culture. She maintained that the land has more value to the community than gold. If the landscape changes, Susie stated that it would be hard to pass on Tsilhqot'in language to the children.

9.3 Cross cultural communications and conclusion

The time spent and the conversations had with the Tsilhqot'in women provided a peek into how the people use the land. The works of Mills with the Witsuwit'en people were insightful as the knowledge of Witsuwit'en laws and protocols guided my conversations with these Tsilhqot'in women (1994, 2005). Conversations with Annie Williams showed that the traditional Tsilhqot'in laws are still enforced and govern what cultural knowledge is shared, with whom, and how. In a sense, this is similar to the Witsuwit'en laws and protocols

explained by Mills (2005, 31). Annie Williams stated that the elders have sacred knowledge about certain places, animals, and events but would only share some information, not all. In a similar way, the Tsilhqot'in women only shared with me the information they believe is relevant to what I needed to know about how they use their land.

Like the Witsuwit'en people, the Tsilhqot'in worldview remains intricately linked to the land and to the animals, fish, and plants (Mills 1994, 188). The Tsilhqot'in women, who live on reserves and those who live in urban areas or on the reserves of other Nations, continue to depend on their traditional territory for sustenance. The women barter some of their harvests for other supplies and services they are unable to afford. In addition, they sell some homemade crafts to pay for other expenses. Furthermore, Tsilhqot'in elders depend on hunters for hides to make moccasins, gloves, and traditional clothing. In addition, they depend on the land for berries and medicinal plants, all of which are linked to their physical and spiritual wellbeing. The people pass on their knowledge of the land, language, and culture through traditional activities.

The traditional lands of the Tsilhqot'in still provide for all the needs of the women. These needs include their spirituality, wellbeing, sustenance, the ability to fulfill their roles as teachers, their ability to pass on cultural knowledge, and to meet the needs of everyday living. The land teaches these women and they in turn teach their children and grandchildren what they learn. In conclusion, any development that alters the land at pertinent locations within the Tsilhqot'in territory will increase hardship on the women and hinder their ability to fulfill their roles as providers, caretakers, and teachers.

Chapter 10 Native Space and theory propositions

The rationales for choosing to assess the compatibility of geothermal resources development and Aboriginal values were based on the smaller ecological footprint of the resource; the expressed needs of the communities to create sustainable economic development opportunities; and the ability of this type of development to accommodate land-based traditional activities. Furthermore, the abundance of geothermal resources within the region and the need for energy sustainability in the remote communities was an additional impetus for this research. The geothermal field trip, supported by literature review, showed that the development of this renewable resource can be sustainable if managed within the limits of the rechargeable reservoir. The uses of this resource in a remote location would not only create jobs at the geographic location, but would also create the opportunity for agriculture development, domestic heating, and could support tourism development such as spa resorts at these locations.

The findings of this study provide new insights into Aboriginal values at specific geographic locations. These findings further contribute to theories on Native Space. In this chapter, I argue that Native Space has evolved politically, socially, culturally, and economically, all of which are now intertwined. Native Space now encompasses both colonially created reserve lands and definite tracts of land within the traditional territories of these communities used for cultural purposes and for subsistence activities. The economic sustainability of the communities is 'locked' into the Native Space. The transformed Native Space now embodies the identity and beliefs of the people; in addition, this space has now become a recognized place from which they chart their future. Furthermore, this space is

described by community values that emerged in this study which I have summarized in Figure 30.

Glaser and Strauss proposed an uninterrupted time away from the field to generate theory (2009, 72). They called this 'respite for reflection and analysis' (ibid). The fluid nature of this research, the length of time spent interacting with these First Nations, and the ongoing changes in the region as a result of the MPB infestation made it appropriate to generate theory at the end of the period. The following sections are theory propositions about the transformed Native Space which is grounded in the data.

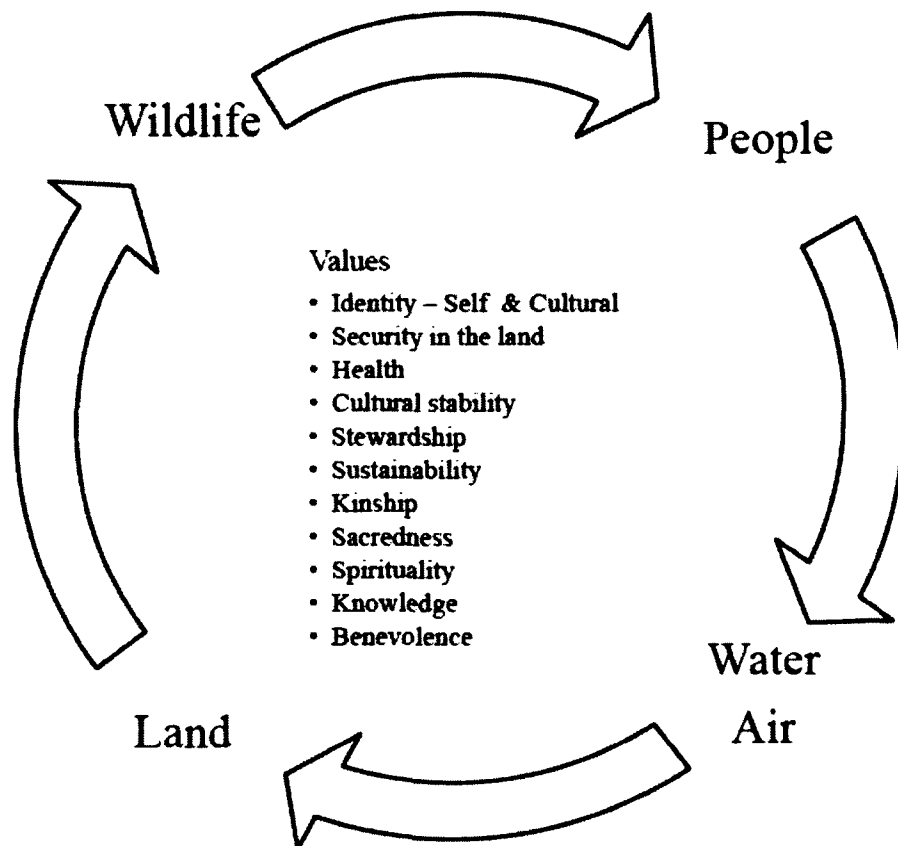


Figure 30: A summary of the interconnection of Aboriginal values within the transformed Native Space

10.1 Native Space and Aboriginal identity: It is “who we are”

Kew introduced the idea that the identity of First Nations people is locked into a particular Native Space and this space is shrinking (1974). Harris defined the space as set apart for the people as a ‘staging ground’ while they are being prepared for integration into the Euro-Canadian society (2002). I expand this space, based on the outcomes of this study, to include definite tracts of lands used by the communities for cultural purposes and subsistence activities. Willems-Braun characterized the space as ‘nature’ which was viewed by some as being separate from ‘culture’, thus relocating it “within the abstract spaces of the market” (1997). As discussed in Chapter One, Native Space is the resource hinterland of BC. Furthermore, the same space is considered ‘wilderness’ or ‘nature’ to be preserved by ‘Activists’ (Turkel 2007, Willems-Braun 1996). These Activists also have ideals of Aboriginal people as being primitive, thus needing to be preserved. However, this study relocates and resituates Native Space as place-based assets for Aboriginal communities. To the Aboriginal people, the Native Space is who they are. The William Court case and the actions of the Nazko people to protect their traditional territory show that despite the prevalence of Euro-Canadian society and its economy, the desire of the communities remain that of preserving their Indigenous values and to protect their place-based assets. These assets define the Native identity. The space is their classroom and their teaching and learning centres. Native Space is the origin and source of Indigenous Knowledge, and the space is equipped with all the resources required by the people to successfully remain ‘Native’. While separated from mainstream society, Native Space has been thousands of years in the making and continues to maintain its purpose and to retain its meaning to the Aboriginal communities as stated in the following quotes from Chief Percy Guichon of Tsi Del Del (Alexis Creek) and Chief Marilyn Baptiste from Xeni Gwet’in:

I have been raised to show and practice mutual respect. I have also been raised to respect my cultural and spiritual values that have connections to the environment. Many of my Elders who are my connection to my culture and spiritual values are passing on. We as First Nations struggle every day to keep our identity and cultural values. In losing Elders, we lose important traditional knowledge about our culture and connection to the land. Once the last of our Elders has passed on, what do we have left to carry on our cultural beliefs? And more importantly, what do we have left to teach our children? What is left is the land itself, the water, the trees, the fish, the animals, and the stories that connect them. This is why we strongly oppose the destruction of important lakes such as Teztan Biny, as it represents our spiritual and cultural connection to our ancestors. And compensating for the destruction of Teztan Biny, which is a sacred lake to the Tsilhqot'in Nation, Taseko proposes to build a new man-made lake. My question to Taseko is do you realize we cannot transfer our cultural and spiritual connection, which is in the thousands of years in the making, to a man-made lake? It's just not possible. Chief Percy Guichon, Tsi Del Del (Alexis Creek). (CEAA 2010a, 164-165)

And we had, last summer we had four of our young men that do not ordinarily ride horses, one of them did, but three of them are not all very accustomed to riding horses all the time, and they are young, they are teenagers, and some of them getting into trouble, but their opportunity on the land was beyond your imagination. To be able to be out there, there was only one way home, and that was through the mountains. And that is south of this Proposed Project. And we went up, we camped out at the Fish, Fish Lake which is to the south of this Project, and into the Tchaikazan, and we went back through to behind Ts'yl'os and back to the valley, through the mountains. And that in itself is a part of who we are. It's our healing. Our people are a part of this land. And that experience, you can never, can never take away from us again. And that's something that our youth need. They need to be out there on the land. Chief Marilyn Baptist, Xení Gwet'in. (CEAA 2010a, 1674 -1675)

Native Space is sacred to the people. The space supports their spiritual beliefs and their physical needs. Furthermore, in that space, the people find healing and health. This space itself has become local assets for the Aboriginal people, providing for their social, economic, and cultural needs. Furthermore, the space is still subject to traditional laws.

In one of my classes, one non-Native student, who shall remain nameless, defined 'traditional' Aboriginal people as poor, with low educational attainment, and typically only

have the ability to hunt, fish, trap, and gather berries. Although this image is supported by development indicators as discussed in Chapter Two, the daily lives of the people are not confined to these indices. In my travels, community members often described the 'traditional' person as being in an enviable position. This traditional person is someone who is rich in culture; speaks the Aboriginal language; has a wealth of knowledge; and authenticates the community stories. The point that Aboriginal values are embedded within the traditional hunting, trapping, fishing, and gathering activities is often missed by the mainstream society. These activities remain the vehicles for the transmission of community values, traditions, and cultures. The continuation of these activities is important for their survival and wellbeing in these isolated and remote locations. These contrasting images of the traditional Aboriginal person continue to shape how the Native Space is viewed and further perpetuates stereotypes and false assumptions.

This study shows that the Aboriginal people value who they are and know what they want for their Native Space. The renewed strength of the Aboriginal communities, like the Tsilhqot'in people, sends a clear message that their Native Space remains vibrant despite its marginality. The space is developing; albeit, in a contemporary Aboriginal way which is unique to each community. This contemporary Native Space is now who they are.

10.2 Native Space and development: “Probably they don’t even know we lived here all our lives”

The settler’s mentality of *terra nullius*³¹ excluded the Natives from development during colonial times. In this hopefully progressive postcolonial era, neocolonialism creates its own challenges within Native Space. Through neocolonialism, the Native Space in the Cariboo Chilcotin region has become situated within the market space, a highly productive part of the resource development hinterlands of BC. This space is still home to the Aboriginal people and subject to development with or without participation from the Natives at this present time. The provincial government manages resource extraction from these geographic locations to create wealth and prosperity for the greater good of all British Columbians following federal environmental regulations. The Aboriginal people manage the space for sustenance and their community sustainability. Resource exploitation and extraction activities in and around Native Space in the region seldom include the development of needed infrastructure for community use or local content.³² Arguably, industries still consider the space as being outside urbanized areas, ‘in the middle of nowhere.’ However, this middle of nowhere is still home to the Aboriginal people. A Nazko Band member said:

Probably they don’t even know we lived here all our lives and to us the land is OURS. Why don’t they give us time to think over what we want to do with our land?
(Lena Patrick quoted in *Coyote Prints* 1976)

This expression by Lena Patrick showed how the Native Space is viewed by the Aboriginal people. The space is home to the people, they live there, and they want the right to decide how their land is being developed. In addition, the people want the ability to veto activities

³¹ *Terra Nullius* is the doctrine of discovery of empty land i.e. land belonging to no one.

³² Local content is used to denote services and goods produced locally.

on the land. The people have no intention of going elsewhere. They have limited adaptive capacity. Leaving the land, their home, does not guarantee a life without poverty or acceptance into mainstream society.

Socio-economic indices show that Aboriginal communities continue to lag behind others. The concept of Native Space as being in a fixed state of wilderness with a lack of infrastructure to support development has left the people behind by western standards. At present, there are no development policies which include local content within Native Space. This presumably justifies industries proposing development activities which are designed to ‘accommodate or mitigate cultural use of land’ by the Aboriginal people. At this time, the only obligation of the provincial government is to consult with the local First Nation communities if there is potential for infringement on their Aboriginal rights. The legal context of the consultation policy is situated in its definition of Aboriginal rights as “practices, customs or traditions integral to the distinctive culture of the First Nation claiming the right” (PBC 2010). However, the rights are often limited to the hunting, fishing, spiritual ceremonies, and gathering activities of the communities or to very narrowly defined spaces where there are archeological remains. As a result, resource development consultations with the communities and Environmental Impact Assessments (EIAs) have often focused on accommodating or mitigating traditional activities. The lack of invitation to participate fully in provincial resource development decisions typically leaves out the communities until consultation is required. This in turn leaves out opportunities to incorporate development ideas and the Indigenous knowledge of the First Nation people who live on the land as stated by a community member:

We could zone out a lot of different areas of [sic] our traditional activities where economics doesn't interfere with our traditional activities. Economics doesn't interfere with our rights. Economics doesn't interfere with our, with our heritage sites. Unfortunately we've been scrambling for money here and there. David Setah. (CEAA 2010a 1851-1852)

Furthermore, the communities do not have the financial capacity to participate fully in consultation without help from either industry or government. Neither do they have access to capital to take on resource development on their own terms. Seventeen years on from the RCAP report, the Aboriginal people are still regarded as incapable of making their own decisions; it is assumed that wardship is still appropriate for the people, hence actions deemed to be for their benefit could be taken without their consent or their involvement in design or implementation; that concepts of development, whether for the individual or the community, could be defined by non-Aboriginal values alone; and that Aboriginal peoples now constitute an interest group, one among many in a pluralistic society. However, Aboriginal people want to be a meaningful part of conversations and decisions made within and around Native Space.

After resource extraction, companies are obligated to reclaim the land, which means remove whatever infrastructure they put in. In other words, Aboriginal communities do not have any long term benefits from resource development activities. The Native Space is once again left as wilderness. Do policy makers not know or remember that Aboriginal people still live in these areas? Should infrastructure development within Native Space not benefit all? It is certain that some Natives are not moving away from their ancestral lands. The future generations of Natives already have their identity locked within Native Space. They will continue to use the space as their ancestors did in the past.

10.3 Native Space and development: Jagged worldviews and jagged communities

The failed attempt to dislocate the Aboriginal people from Native Space is seen as an economic inconvenience for urban areas such as the Cariboo Chilcotin, and the rest of the province, particularly in the wake of the MPB epidemic. Native Space in the Cariboo Chilcotin region has become a location where Euro-Canadian and Aboriginal cultures collide. The assertion of Euro-Canadian economic dominion at this location, thereby subjugating Aboriginal values, has led to collision of cultures as seen with the Nazko and Tsilhqot'in people. The jagged edge of the collision is where competing values meet within the Native Space. The initial idea that Native Space is temporal led to the lack of development of economic infrastructure which marginalized the people. The intention was to dislocate the people from their space and to relocate and assimilate them within mainstream society. However, the people were not to be dislocated but continue to survive in "the margins" which are their homelands. In fact, the people continue to develop, not in line with the contemporary Euro-Canadian society, but in traditional ways in spite of attempts to the contrary. Chief Percy Guichon expressed the development needs of communities as one which is not at the expense of Aboriginal cultures and traditions:

I also want to say that we are not anti-development of the resources in Tsilhqot'in region. This is evidenced by the purchase of a mill near Hansville and development of a biomass energy plant in the same area. All the First Nation communities in the Tsilhqot'in are developing economic strategies and always have been. Our people have the same hopes and dreams as the Canadian society in general. We want our children to receive an education, become productive members of society. Our members want jobs like everyone else. They want a colour TV, a satellite dish, a nice vehicle in the driveway, have money to go on holidays. But we will not create jobs at any cost to the environment. We will not create economic development at the expense of a sacred lake. We will not destroy anything valuable that relates to our teachings of

our cultural and spiritual connections just for the sake of a new Dodge 4X4. Chief Percy Guichon. (CEAA 2010a, 165)

Aboriginal values will not be sacrificed for the contemporary development of Native Space by the people because these are critical for the survival of Indigenous cultures at these locations. The emerging development of Native Space has become a blend of the tribal and modern communities. Leroy Little Bear expressed the combination of modernity and tradition seen in communities as jagged worldviews:

Colonization left a heritage of jagged worldviews among Indigenous peoples. They no longer had an Aboriginal worldview, nor did they adopt a Eurocentric worldview. Their consciousness became a random puzzle, a jigsaw puzzle that each person has to attempt to understand. Many collective views of the world competed for control of their behavior, and since none was dominant modern Aboriginal people had to make guesses and choices about everything. Aboriginal consciousness became a site of overlapping, contentious, fragmented, competing desires and values ... When jagged worldviews collide, objectivity is an illusion. The only things I know for sure are the things I experience, see, feel, and so on ... Yet all colonial people, both the colonizer and the colonized, have shared or collective views of the world embedded in their languages, stories, or narratives. It is collective because it is shared among a family or group. However, this shared worldview is always contested, and this paradox is part of what it means to be colonized. Everyone attempts to understand these different ways of viewing the world and to make choices about how to live his or her life. No one has a pure worldview that is 100 percent Indigenous or Eurocentric; rather everyone has an integrated mind, a fluxing and ambidextrous consciousness and back again. It is this clash of worldviews that is at the heart of many current difficulties with effective means of social control in postcolonial North America. It is also this clash that suppresses diversity in choices and denies Aboriginal people harmony in their daily lives. (Little Bear 2000, 84-85)

These jagged worldviews have created 'jagged communities' which now occupy the Native Space. Furthermore, each of these jagged communities has unique experiences of the Native Space. The uneven edges are defined by the low socio-economic status and limited contemporary infrastructure which continue to plague the identity of the Aboriginal person

and the space within which they reside. However, jagged edges were developed from policies which support the notion of Aboriginal people as wards of the government, thus transforming them into impoverished and vulnerable people who seemingly need help because they cannot help themselves.

These new contemporary communities are a blend of the traditional and modern which is evident in development initiatives seen in places such as Xeni Gwet'in in the Nemiah Valley. The Aboriginal communities have their visions for how they want their space managed. For example Xeni Gwet'in's vision for their Native Space is set out in the Nemiah Declaration. The Xeni Gwet'in people want to see their Native Space free from neocolonialism and managed in accordance with traditional Tsilhqot'in laws. Furthermore, Aboriginal communities want to see their space moved out of the abstract market spaces in the Cariboo Chilcotin region and certainly not left as wilderness spaces. The communities believe in development and are doing so at their own pace by utilizing local resources to meet their contemporary needs. Examples of such can be seen in the development of solar and wind energy for electricity and greenhouses for local food production. Furthermore, Aboriginal tourism, which is slowly becoming a reality for some communities in the Cariboo Chilcotin region, is one of their propositions for engaging in the wider economy. It is a mechanism that can also teach the settler society about their values and that looking after the environment is something that the Euro-Canadian society can also endorse. Therefore, Aboriginal people are transforming the Native Space by combining the new with the old.

10.4 Tribal sacred eco-environment: “It's our culture, our lives”

The Aboriginal tribal³³ identity and Indigenous Knowledge (IK) of the communities are tied to their Native Space and eco-environments within their traditional territories. These eco-environments contain sacred landforms and landscapes. Furthermore, specific locations and landscapes are integral to how the tribes pass on knowledge to the younger generation and how the people gain the knowledge they need for survival on the land. Turkel described these landscapes and landforms as natural archives of the histories, stories, and beliefs of the people (2007). Furthermore, these landscapes and landforms are detailed local maps used by the people. A Tsilhqot'in elder and medicine woman, Catherine Haller, described pertinent locations which are sacred and are integral to the culture of the Tsilhqot'in people:

It is important to have the gatherings where the ancestors and Elders lived. We had our Elders' Gatherings in July on Jididzay, Onion Lake, and Teztan Biny, because those are some of our most traditional grounds. We get more help from our ancestors when we pray where they used to live and do our ceremonies there. We understand better where we, as Tsilhqot'in People, come from, our history, our situation, when we go to where our ancestors lived. We will lose all the gatherings there. What are we going to do? Who are we going to teach? The mine will take away the best of us. The best of us is what we have up there. The company thinks that they are going to get rich and us, we lose our health. We lose everything that we survive on and we lose everything - it's our culture, our lives. We are going to die off and they are not going to see us. Catherine Haller, Xení Gwet'in. (CEAA 2010a, 2637-2638)

Without these tribal locations, the elders cannot perform their duty which is to teach and to pass on knowledge to the younger generations. Furthermore, certain aspects of Aboriginal cultures and oral traditions, such as the proper recital of stories and knowledge, can only be authenticated at these locations (Battiste 2002). Within the Tsilhqot'in territory, numerous distinct rock formations and landforms are still intact. Each of these rock formations, as

³³ Tribe is used to collectively describe Aboriginal language groups rather than Bands or communities.

archives, teaches unique stories about the land and is used by the tribe to pass on specific knowledge. These landforms are essentially pilgrimage sites. At these locations, community legends are also authenticated. These rock formations and landforms are sacred and serve as visual reminders of the ancestral past of the people and the Aboriginal laws that still govern their land. These locations also provide visual representations for stewardship responsibilities of the people in addition to supporting their belief systems. The disturbance of such places within Native Space could mean that certain ceremonies and rituals cannot be properly performed; stories and legends cannot be properly authenticated; and the use of language pertinent to these activities will be lost. In addition, these natural archives could be lost forever. Consequently, resource development which proposes to alter these specific tracts of land or have a large ecological footprint could impact the ability of the people to continue their cultures and to transfer their knowledge to the next generation.

The *Canadian Environmental Assessment Act of 2012* stated the need to promote and cooperate with Aboriginal people during the assessment of a project (Canada 2012).

Furthermore, the environmental effects considered in the Act in relation to the Aboriginal communities include the following:

- (i) health and socio-economic conditions,
- (ii) physical and cultural heritage,
- (iii) the current use of lands and resources for traditional purposes, or
- (iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance. (Canada 2012)

However, the strength of Aboriginal tribalism and intergenerational connections to their traditional territory transcends the physical and current use of the land by the people. The attachment of the Aboriginal people to their land is intergenerational, with spatial, temporal,

and spiritual dimensions. It is important that the attachment and dimensions are officially recognized along with the environmental effects.

The cultural transformation of Aboriginal communities is a continuum as seen in the Tsilhqot'in people's community. Aboriginal people have linkages to their land that goes back many generations and transcends reincarnation of the past into the future (Mills 1994, 13). These non-physical aspects of Aboriginal cultures, not captured by the EA Act, are often difficult to comprehend by non-members of the tribe and are equally difficult to integrate within an EA process. Furthermore, the connection of the people to animals and the transfer of knowledge between humans and animals are maintained today through vision quests (CEAA 2010a, 2018, 2261; Farrand 1900; Mills 1994, 165). The Aboriginal use of Native Space goes beyond those identified in the EA Act of 2012. Altered landscape as a result of resource development can lead to the permanent loss of Aboriginal values at such locations even with reclamation (CEAA, 2010b). With this recognition, it is essential that critical Valued Socio-Cultural Components as defined by Aboriginal communities are included in the EA process. This will ensure that those locations are protected from significant adverse environmental effects. It is also essential to expand the current EA framework to include tribal VSCCs and the spatial and temporal needs of Aboriginal communities at the scoping stage. This will ensure that appropriate needs of the people are not jeopardized but included in meaningful ways.

10.5 Conclusion

The identity of Aboriginal people and their communities in the Cariboo Chilcotin region remains locked within sacred eco-environment in their Native Space. With failed attempts to dislocate the Aboriginal people from the Native Space, there has been limited provision for infrastructure development within their communities. The people, through their resilience, have managed to continue to carve out their existence using their natural environment as infrastructure. Natural resource development for economic activities within the space continues to create wealth for the greater good of British Columbians but fails to meet the needs of the daily lives of those who live within the hinterlands. These development activities have not taken into consideration the long-term viability of Native Spaces as settlement nor has it included local content to ensure the participation of the people. Hence, development activities have been happening in and around Native Space with little or no participation from the people and no plans to develop the Native communities to take advantage of the market economy. In spite of this, the communities are developing by themselves in a contemporary traditional manner, albeit at a slower pace than the neighbouring non-Native communities. The Native Space is now becoming unique in its transformation, combining the tribal with the modern.

Native Space is sacred to tribes and provides intrinsic values which, in most cases, cannot be accommodated or mitigated during or after resource exploitation. These values are required to survive within the marginal space in which the Aboriginal people now find themselves. The landscape and landforms at specific locations are the vehicles for the transmission of IK by the tribes. These locations, as natural archives, also authenticate their stories and oral traditions. Resource exploitation in and around these locations without input

from the Aboriginal communities are viewed as a threat to their languages, cultures, and identities. The loss of specific sites significant to Aboriginal cultures and traditions cannot be mitigated and are deemed as irreversible. The nature of the linkages to these sites and sacred eco-environments is such that the mere thought of development at close proximity to some of these locations causes trauma for the local Aboriginal people, as seen in the case of the proposed Prosperity Mine project and the Tsilhqot'in communities. Individuals and their communities are still suffering from trauma caused by the residential school system; the apprehension of Aboriginal children for fostering outside their communities; and the continued impact of resource exploitation activities within their traditional territories. These people are currently finding their health and healing by being involved in their traditional activities out on the land.

In conclusion, the communities are seeking development opportunities which are in line with their Aboriginal values, within their Native Space, and do not compromise their language, culture, and their identity. Furthermore, the Aboriginal communities are thinking ahead and considering the needs of the future generations in development decisions.

Chapter 11 Recommendations, reflections, limitations, and conclusion

This research study took place in the Cariboo Chilcotin region of British Columbia. The investigation focused specifically on Aboriginal values within the context of regional resource development in an attempt to assess the compatibility of Aboriginal values and the development of geothermal resources. This study captures the struggles of the Tsilhqot'in people as they resist the development of a new mine in an area they have used for generations to meet their needs. Furthermore, this study gained insights from documenting the comprehensive community planning process of the Nazko First Nation and increased the community's knowledge of geothermal resources as they make plans for their future. The major themes addressed in this study are as follows: (1) Aboriginal values expressed during a Federal Panel Assessment of a proposed mine development in the Cariboo Chilcotin region; (2) the contemporary culture of the Tsilhqot'in people, including how some women continue to survive on the land; and (3) geothermal energy as a potential primary resource for remote First Nations communities. This chapter is a summary of the findings and recommendations, my reflection on this research including my methodology, followed by my conclusions.

11.1 Summary of the findings and recommendations

This research study shows that the location and ecological footprint of resource development within the traditional territories of Aboriginal people are important as the people continue to meet the needs of their daily lives within remote areas. There are numerous studies about Indigenous Knowledge and the traditional activities of Aboriginal

people; however, this work provides new insights into Aboriginal values and how these are embedded within traditional activities and landscapes. Furthermore, the findings show that inadequate development infrastructure within remote communities require that the people continue to depend on their lands, their Native Space, for subsistence and for their social, cultural, spiritual, and economic needs. This dependency further locks the identity of the First Nations people within their Native Space. The inadequate infrastructure as defined by western standards also limits what economic development activities can happen within the space, thereby contributing towards maintaining the status quo.

The findings of this study show that Aboriginal values are embedded in traditional activities and these values are location specific. Resource developments at these locations continue to highlight the collision of values arising from urban-remote interactions. These locations, while contributing to wealth creation for all British Columbians, also provide the means for subsistence and moderate livelihoods for First Nations people who are isolated. The socio-economic gap between the urban and rural communities has led to the inability of the First Nations people to participate equally in job opportunities created by these resource development activities. Consequently, resource development activities typically do not benefit communities in remote locations as they do those in urban areas. This perpetuates the inequality of Indigenous people bearing the costs of development without its benefits.

This study shows that traditional activities are essential as vehicles for transmitting oral cultures from generation to generation. Without these activities, Aboriginal languages and cultures in the Cariboo Chilcotin region are in danger of becoming extinct. These cultures of First Nations people are assets required to authenticate Aboriginal tourism within this region. The inadequate social and economic infrastructure within Native Space presents a challenge

for communities engaging in Aboriginal tourism as a means of economic development. The viewsapes and landscapes in and around the Cariboo Chilcotin region lend themselves to unique experiences in Aboriginal tourism. Aboriginal communities have identified this sector as one which they will comfortably develop. However, the constraints of developing this sector include difficulty of access and inadequate amenities. Regardless, Aboriginal communities in the region are pressing forward with development in this sector.

The development of geothermal resources still has significant potential for communities in remote areas of the region. Food security and meeting local energy needs are priorities for First Nation communities. The potential for geothermally heated greenhouses and open field irrigation with geothermal water remain unexplored. The economic viability of geothermal electricity requires overproduction of the power in areas without the necessary infrastructure to connect to the main electricity grid. In addition to infrastructure requirements, further investigation is required to determine the detailed geographic location of geothermal reservoirs, some of which Geoscience BC is currently undertaking through its TREK project.

As a way forward, I recommend urgent upfront investment in infrastructure within Native Space. While the development of infrastructure is primarily a government responsibility, it is important for industry proponents to work with these remote communities and help develop basic infrastructure as part of their corporate citizenship. This form of upfront reciprocity serves to build relationships between industry and Indigenous communities thus creating goodwill locally. Furthermore, the availability of physical, economic, human, and community infrastructures described in Table 1 will enable the communities to take advantage of some of the benefits of resource development activities. In

addition, investing in Native Space will create both short term and long term employment opportunities which will benefit the region as a whole. The lack of essential infrastructure development within the Cariboo Chilcotin Native Space will continue to hinder resource development activities and the ability of the Aboriginal people to benefit fully from economic opportunities afforded by these. Furthermore, this lack of adequate infrastructure will continue to widen the socio-economic gap between the urban and remote communities in the region.

11.2 Reflections: Indigenous research revisited

The initial focus of this study was to increase the understanding of Aboriginal community and economic development and to add to the knowledge of geothermal resources within the region. As the research projects unfold, the main goal was to contribute further to knowledge and discussions on Aboriginal community and economic development in the region. There were two study objectives: the first was to understand how Aboriginal values influence resource development decisions within the traditional territory of Cariboo Chilcotin First Nations communities; and the second was to assess the compatibility of geothermal resources development and the Aboriginal values of the people. The initial research flowed out of this question: *“Is geothermal resource development compatible with Aboriginal values in the Cariboo Chilcotin area?”* The scant information available about Aboriginal values necessitated the need to ask a broader question: *“What are Aboriginal values associated with resource development?”* The need to know what Aboriginal values are in turn provided a new direction, which broadened the scope of the research and brought to light the needs and values of remote communities.

The needs of the Aboriginal communities are multi-dimensional. These needs include information required to address immediate concerns, the ongoing need for self-determination and self-government, the need to protect community spirituality and traditions, and the need to observe protocols. This study was only able to address some of the information needs of communities in the Cariboo Chilcotin region. However, consciousness of the other needs was at the forefront of this study and that consciousness guided the methods used for data collection and interpretation. This consciousness also guided the research process and the engagement of participants. The communities generously selected appropriate members for the different projects. Some of the people were employed by the Band Offices and others assisted from time to time. Each of these people reported back to their communities, thus addressing other community needs typically outside the scope of this work.

11.3 Study limitations

All studies have limitations. In this study, access to participants and community priorities, time to develop relationships and to acquire critical data, and my Afrocentric bias are some of the limitations. Access to participants was a challenge. I was only able to engage with Band employees while they were in employment. These employees were only able to assist in line with their duties. When people moved on to other duties, their participation typically ended. In addition, the relevance of my questions to meeting the situational and political needs of Band Administrators also determined how much priority was given to my work. It has to be remembered that the people are not idle or waiting to be researched. The community prioritized their needs based on their daily lives and current situations. This is a limitation.

The timing of this study suited the Tsilhqot'in people. Due to the *Tsilhqot'in Nation* court case and the CEEA Panel Hearings, the Tsilhqot'in people made available to the public some of their culture, traditions, histories, and beliefs, most of which had never been textualized. Through these, I was able to learn some aspects of the culture and traditions of the people which would otherwise not have been in the public domain despite Farrand (1900), Teit (1909), Lane (1953), and Dinwoodie (1996, 2002). In addition, I was in a position to present some information at the CEEA Panel Hearings in 2010 and 2013. These presentations provided some immediate benefits of the research for the communities, for example, my report on how Tsilhqot'in women survive on the land. Furthermore, working with the TNG on community research for the development of university-level culture courses gave me access to members of the Tsilhqot'in Language Group. Through this work, I was able to ask questions, clarify my understanding of their culture, and visit some of the sacred landforms and sites. Attending community gatherings also gave me firsthand experience of the culture of the people and the setting within which Aboriginal values are situated. Without this quasi-judicial setting, it would not have been possible to create an environment to acquire critical data.

Engaging the Nazko people in this research was possible because of the trusted relationship I have with the people. I attained this position as a result of my ongoing community work with the people. The challenge with this type of relationship is that of expectations and tangible deliveries. However, research outcomes do not necessarily match community needs. Therefore, it was important to reciprocate and give back to the community, not only after the study was completed, but during the process. As a result, I worked with the Band to document their comprehensive community planning process and to

present these at community gatherings. I was also able to share some of my research outcomes with the people which they find helpful in their treaty negotiations. Furthermore, I shared new information with the Board of Directors of the Nazko Economic Development Corporation, thus giving back to the people. This reciprocal relationship had been developed prior to the study. It is uncertain if a researcher not known to the communities would gain trust and insights in a timely manner as I did.

My Afrocentric Indigenous position made it easy for the research participant relate to me. I have often been referred to as 'family' by some community members. The family connection is often linked to the shared colonial history which often comes up in my conversations with some members of the Aboriginal communities. Regardless, conducting Indigenous research was certainly advantageous. I was able to conduct the study with prior knowledge and experience of Indigenous thinking. This type of thinking is typically referred to as cultural sensitivity and includes knowledge and understanding of oral traditions, unconventional beliefs, experiences of ceremonies and rituals, and the different roles of people within communities. As a result, I was able to observe and respect Aboriginal community protocols. The space between observing community protocols and institutional process, however, is tricky ground (Tuhiwai Smith 2005). This space is described as complicated and changeable with the ability to play tricks on research and researchers (ibid). I was fortunate that the tricky ground worked in my favour; however, this may not be the case for someone with a different background or from a different culture.

11.4 Research outcomes, future research, and final words

This dissertation has touched on the work of many others including Markey et al. on development infrastructure and the resource hinterlands (2012) and that of Halseth et al. on place-based assets (2006). The place-based assets that emerged in this study are natural capital which the Aboriginal people are managing for their community sustainability and that of generations to come. Furthermore, the critical Aboriginal values that emerged during the studies, outlined in Chapter Eight, provide the foundation for my understanding of the needs of the people and how they sustain themselves on the land within the resource hinterlands. Without these critical values, the poverty levels within the communities will continue to be severe. The understanding of these values also informed this study of the epistemology of the Tsilhqot'in people and how the people are rooted to their traditional territory. The values show the significance of the place-based assets as natural infrastructure used by the communities as they develop in their contemporary traditional way, thereby mixing the tribal with the modern. Themes on Aboriginal values that emerged in this study include the intergenerational transfer of Indigenous Knowledge at these locations and the linkages of Aboriginal values to the health and well-being of the communities. It is therefore important for the people to protect the place-based assets at their geographic locations in order to preserve their cultures and languages.

This study defines some Valued Socio-Cultural Components and explains why these are essential in the Environmental Assessment of resource development projects within the traditional territories of First Nations people. The inclusion of these components will expand the current Environmental Assessment framework to include the spiritual, spatial, and temporal needs of the communities. The inclusion may also provide some guarantees for the

communities that their heritage and cultural assets will be preserved during resource development. This hopefully, will help safeguard their cultures and languages. The Environmental Impact Statement for the assessment of the mine project proposed by Newgold at Blackwater site has incorporated Valued Components which includes Aboriginal values along with traditional use of land (CEAA 2012). It will be interesting to see how the Valued Components are translated by the project proponent and how Aboriginal values are integrated in the assessment. This is a positive step by the CEAA.

This study shows that geothermal resources can be compatible with Aboriginal values provided the development does not occur within areas of cultural significance. Furthermore, the Valued Socio-Cultural Components at the site will need to be identified and the impact of the development on these considered. While the resource has the potential to create sustainable economic development for communities, the ability of the communities to continue using the land around the development site for traditional purposes is essential. Place-based assets at the site of development also have to be protected. It is important to ensure that the ecological footprint of geothermal resources development will not impact current use of the land. In the words of Crystal Verhaeghe, the Executive Director of the Tsilhqot'in National Government, the people will not "sacrifice an area of such profound spiritual and cultural importance for the sake of profit" (CEAA 2010a, 7041).

The gendered stories of women informed a major paradigm shift from Aboriginal values as being mere hunting, fishing, trapping, gathering activities to that of the embeddedness of community values in traditional activities. The stories of these women showed that traditional activities are the vehicles for transmitting oral traditions from generation to generation. Conducting these activities at specific locations is important in the

survival of the culture and language of the people as they are place-based. The stories provided rich descriptions of the Native Space and an opportunity to build further on the work of Cole Harris and William Turkel (Harris 2002, Turkel 2007). The testimonies of Tsilhqot'in people at the Environmental Assessment Panel Hearings opened up the private lives of the people to the public from which to learn. Just like the Witsuwit'en people, the Tsilhqot'in people opened up their 'sacred box' at the Hearings, and I was able to learn from them (Mills 2005). The Nazko and Xeni Gwet'in people invited me into their community, to participate in their gatherings, and to learn from those experiences. Through these, I was able to understand the significance of their Native Space and what it means to them today. The people want development, but not at the expense of their identity or how they currently sustain themselves, and certainly not at the expense of their culture. While development activities in areas surrounding and within their Native Space have contributed to the livelihood of a few members of these communities, these development activities have not created wealth for the majority of the people. By urban standards, the majority of the people living on reserves live in poverty; nevertheless, they are considered rich in culture by traditional standards. Urban First Nations people still rely on their family members on reserves for traditional foods. These urban dwellers continue to participate in cultural activities within their traditional territories as they bear the burden of transmitting their culture to the younger generation who live in urban settings. It is therefore important for these communities that the geographic location of any resource development activity does not take away their ability to continue practising their culture.

There have been several reports published on Aboriginal economic development. The Harvard Project on American Indian Economic Development paved the way with studies

from Tribes in the United States (Cornell 1987, Cornell and Kalt 1992, Jorgensen and Taylor 2000). The 1996 report of the Royal Commission on Aboriginal Peoples made key recommendations for the development of Aboriginal communities. A 2003 study showed that some Aboriginal communities in eastern Canada are participating meaningfully in mainstream economy while keeping close ties with their cultures and traditions (Atlantic Canada Opportunities Agency 2003). The 2007 report of the Senate Standing Committee on Aboriginal People showed that the Aboriginal people want to be part of the economic prosperity of the country (St. Germain and Sibbeston 2007). There is clearly a gap in translating report recommendations into policy. Horn and Halseth highlighted some of the limits and gaps of what we know about urban Aboriginal economic development (2011). This study shows some of the Aboriginal values that influence resource development in the Cariboo Chilcotin region, but there are still gaps in our knowledge of community and economic development issues and how these can be addressed. It is important to remember that Aboriginal communities will be the largest land owners in the Cariboo Chilcotin region when all treaties and land claims are settled. In addition, there are differences in stages of development and variations in these communities, ranging from coastal to inland, from urban to rural, to remote and isolated. Focused studies on the unique community and economic development successes and issues faced by these communities are still required. To make these studies relevant to communities, it is important to use Indigenous methodologies. The fluid nature of Indigenous research and the ability to address some community needs are essential because these re-situate the communities from being 'research objects' to becoming active participants and consumers of research. From such studies perhaps development goals and objectives for the region, at provincial and national levels, can be set, with measurable targets. The communities want a "hand up not a hand out" (St. Germain and Sibbeston 2007).

Furthermore, the communities want economic development on their own terms. More dialogue is required to understand how these can be achieved for the Aboriginal communities within the Cariboo Chilcotin region.

11.5 Conclusion

This research is an important contribution to the knowledge of Aboriginal values. Some of the findings were presented to the people at their communities and also at Panel Hearings for the Environmental Assessment of a proposed mine development within the Tsilhqot'in territory. These presentations were important contributions as they provided openings for questions to be asked and for me to clarify some of the findings. This contribution to knowledge, while local to the Cariboo Chilcotin region, presents opportunities for further research work on the topic with other Indigenous people in other regions, both nationally and internationally. The study highlighted important community socio-cultural values which should be considered during environmental assessment of resource development projects. The study concludes with the recognition that the compatibility of resource development with Aboriginal values depends on the geographic location and the spatial-temporal use of land at that specific location for cultural activities. We await the decision of the Supreme Court of Canada on the William Court case, which will hopefully help define Aboriginal rights to traditional land.

References

- Aboriginal Affairs and Northern Development Canada. 2013. First Nation profiles. <http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/Search/SearchFN.aspx?lang=eng> (accessed June, 2013).
- Absolon, K. and C. Willett. 2005. Putting ourselves forward: Location of Aboriginal research. In *Research as resistance: Critical, Indigenous, and anti-oppressive approaches*, eds. Brown, L. and S. Strega. Toronto: Canadian Scholars' Press.
- Adeniji-Neill, D. 2011. Omolúàbí: the way of human being: an African Philosophy's impact on Nigerian voluntary immigrants' educational and other life aspirations. In *irinkèrindò: A Journal of African Migration 5*, ed. Mojúbàolú Olúfúnké Okome. Available at www.africamigration.com
- Alec, Stuart. 2013. Personal communication. Nazko Band.
- Ali, S. H. 2003. *Mining, the environment and Indigenous conflicts*. The Arizona Board of Regents. Tuscon: The University of Arizona Press.
- Amarc: Amarc Resources Ltd. 2012. Maps and figures. Amarc Resources Inc. <http://www.amarcresources.com/ahr/MapsFigures.asp> (accessed June 2012).
- Anderson, J. M. and E. K. McCann. 2007. Toward a post-colonial feminist methodology in nursing research: Exploring the convergence of post-colonial and Black feminist scholarship. *Nurse Researcher* 9. no.3 : 7-26.
- Armstrong, J. 2006. Community: "Sharing one skin." In *Paradigm wars-Indigenous peoples' resistance to globalization*, eds. Mander, J. and V. Tauli-Corpuz. San Francisco: Sierra Club Books.
- Asante, M. K. *n.d.* Afrocentricity: The theory of social change. <http://multiworldindia.org/wp-content/uploads/2010/05/Afrocentricity.pdf> (accessed November 12, 2012).
- . 2003. *Afrocentricity: The theory of social change*. Chicago: African American Images.
- Atlantic Canada Opportunities Agency. 2003. Aboriginal Economic Development in Atlantic Canada: Lessons Learned and Best Practices. Understanding Conditions for Successful Economic Developments in Aboriginal Communities. *Canadian Institute for Research on Regional Development*. New Brunswick: University of Moncton.
- Battiste, M. 2002. Indigenous knowledge and pedagogy in First Nations education: A literature review with recommendations. Ottawa: Indian and Northern Affairs Canada.

- BC Adventure Network: British Columbia Adventure Network. 2013. British Columbia's Travel Guide. <http://www.bcadventure.com/adventure/explore/cariboo> (accessed October 2013).
- BC First Nations Mountain Pine Beetle Interim Working Group. 2005. BC First Nations Mountain Pine Beetle Action Plan. BC First Nations Leadership Council.
- BC Hydro. 2009. Report on bioenergy call Phase I: Request for proposals. http://www.bcuc.com/Documents/Proceedings/2009/DOC_21037_B-1_BCH_Bioenerg_Call.pdf (accessed June 2013).
- . 2010. Community electricity plan for Anahim Lake Electrical Service Area. Schedule 8: BC Hydro community-based biomass power call. http://www.bchydro.com/energy-in-bc/acquiring_power/closed_offerings/cbb_rfq/documents.html (accessed June 2012).
- BC Parks. 2011. Ts'yl'os Provincial Park. British Columbia. <http://www.env.gov.bc.ca/bcparks/explore/parkpgs/tsilos/> (accessed October 11, 2013).
- BC Stats. 2008. British Columbia Indian Reserve census figures 2006: Census total population results. <http://www.bcstats.gov.bc.ca/data/cen06/ir2006.asp> (accessed November 10, 2011).
- . 2010. Regional District 41- Cariboo: Statistical profile. <http://www.bcstats.gov.bc.ca/data/sep/index.asp> (accessed November 10, 2011).
- . 2013. Reference map: Regional Districts. Province of BC. <http://bcstats.gov.bc.ca/StatisticsBySubject/Geography/ReferenceMaps/RDs.aspx> (accessed April 2013).
- BC Treaty Commission. 2009a. Negotiation updates. Vancouver: BC Treaty Commission. Canada. <http://www.bctreaty.net/files/updates.php> (accessed June, 2011).
- . 2009b. Statement of intent: Nazko. Vancouver: BC Treaty Commission. Canada. <http://www.bctreaty.net/soi/soinazko.php> (accessed July, 2013).
- . 2012. Learning from our success. BC Treaty Commission annual report 2012. http://www.bctreaty.net/files/pdf_documents/2012_Annual-Report.pdf (accessed October 11, 2013).
- Beanlands, G. E., and P. N. Duinker. 1983. An ecological framework for environmental impact assessment in Canada. Institute for Resource and Environmental Studies, Dalhousie University and Federal Environmental Assessment Review Office. Canada.
- Berkes, F. 1993. Traditional knowledge in perspective. In *Traditional Ecological Knowledge Concepts and Cases*. ed. J. T. Inglis. International Program on Traditional Ecological Knowledge International Development Research Centre. Canada.

<http://www.idrc.ca/EN/Resources/Publications/Pages/IDRCBookDetails.aspx?PublicationID=306> (accessed December 2013).

- Bhattacharyya, J. 2012. *Knowing Nashiny (Horse), understanding the land: Free-roaming horses in the culture and ecology of the Brittany Triangle and Nemiah Valley*. PhD diss., University of Waterloo.
- Blodgett, A. T., Schinke, R. J., Peltier, D., Fisher, L. A., Watson, J. W., and M. J. Wabano. 2011. *May the circle be unbroken: The research recommendations of Aboriginal community members engaged in Participatory Action Research with University Academics*. *Journal of Sport and Social Issues* DOI:10.1177/0193723511416984
- Botha, L. 2011. *Mixing methods as a process towards Indigenous methodologies*. *International Journal of Social Research Methodology* 14, no. 4: 313-325.
- Brasfield, C. 2001. *Residential school syndrome*. *BC Medical Journal* 43, no. 2: 78-81
- Brown, L. and S. Strega. 2005. *Introduction: Transgressive possibilities*. In *Research as resistance: Critical, Indigenous, and anti-oppressive approaches*, eds. Brown, L. and S. Strega. Toronto: Canadian Scholars' Press.
- Bryant, A. and K. Charmaz. 2007. *Discursive glossary of terms*. In *The Sage Handbook of Grounded Theory*, eds. Bryant Antony and Kathy Charmaz. California: Sage Publications.
- Bulizuk, B. 2011. *Business indicator: Recent trends in the off-reserve Aboriginal labour force participation*. BC Stats. <http://www.bcstats.gov.bc.ca/guide.asp> (accessed June 2011).
- Cadence Strategies. 2013. *Cariboo Chilcotin coast regional Aboriginal tourism strategy*. Aboriginal Tourism Association of BC.
- Calliou, B. 2007. *Final Activity Report: A forum to explore best practices, policy and tools to build capacity in Aboriginal business and economic development*. Alberta: The Banff Centre.
- Canada 2012. *Canadian Environmental Assessment Act, 2012*. S.C. 2012, c. 19, s. 52. <http://laws-lois.justice.gc.ca/eng/acts/c-15.21/FullText.html> (accessed December 2013).
- Careless, Ric. 1975. *The Nazko-Kluskus Indian Band: Blockade of Michelle Creek Road*. Alan Chambers fonds. UBC Rare Books and Special Collections, University of British Columbia.
- Cassidy, F. and N. Dale. 1988. *After Native claims? The implications of Comprehensive Claims settlements for natural resources in British Columbia*. Oolichan Books and The Institute of Research on Public Policy. Canada.

- Caverley, N. 2009. An Indigenous perspective on economic sustainability in Mountain Pine Beetle-affected communities. *BC Journal of Ecosystems and Management* 10, no 2:140–147. www.forrex.org/publications/jem/ISS51/vol10_no2_art12.pdf (accessed October, 2009).
- CCBAC: Cariboo Chilcotin Beetle Action Coalition. 2008. Cariboo-Chilcotin: Living on the edge of climate change: MPB; Comprehensive mitigation strategy, final report <http://www.c-cbac.com/pdfs/CCBAC-Comp-Mit-Strategy-Final-Report.pdf> (accessed May, 2013).
- . 2011. CCBAC receives provincial funding for ongoing Pine Beetle mitigation. CCBAC Media Release. <http://www.c-cbac.com/news-releases/MediaRelease-CCBAC-April11-FundingAnnounced.pdf> (accessed June, 2013).
- CEAA: Canadian Environmental Assessment Agency. 2010a. Prosperity gold-copper mine project, Vols. 1 – 35, 1-7476. Canadian Environmental Assessment Registry #09-05-44811. Ottawa, ON.
- . 2010b. Report of the Federal Review Panel: Prosperity Gold-Copper Mine Project Taseko Mines Ltd., British Columbia. Canadian Environmental Assessment Registry #09-05-44811. Ottawa, ON.
- . 2012. Draft EIS guidelines: Guidelines for the preparation of an Environmental Impact Statement for an environmental assessment conducted pursuant to the Canadian Environmental Assessment Act, 2012; Blackwater Gold Mine Project – British Columbia, New Gold Incorporated. Ottawa, ON. <http://www.ceaa-acee.gc.ca/050/documents/p80017/84195E.pdf> (accessed December 2013).
- . 2013. Report of the Federal Review Panel: New Prosperity Gold-Copper pine project Taseko Mines Ltd., British Columbia. Canadian Environmental Assessment Agency Reference no. 63928. Ottawa, ON.
- . 2014. News release: New Prosperity Gold-Copper mine project – Environmental Assessment decision. Canadian Environmental Assessment Agency. Ottawa, ON. <http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=98459> (accessed February 26, 2014).
- Chantyman, R. and T. Kunkel. 2012. Nazko comprehensive community planning, 2012: Draft report. Nazko First Nation. Quesnel, BC.
- Charmaz, K. 2006. *Constructing Grounded Theory: A practical guide through qualitative analysis*. Sage Publications Inc. Thousand Oaks, California.
- Childs, P. and P. Williams. 1997. *An introduction to post-colonial theory*. London: Prentice Hall.

- Coates, K. 2008. The Indian Act and the future of Aboriginal governance in Canada: Research paper for the National Centre for First Nations Governance. National Centre for First Nations Governance. http://fngovernance.org/ncfng_research/coates.pdf (accessed November 2013).
- Collins, P. H. 1986. Learning from the outsider within: The sociological significance of Black Feminist thought. *Social Problems* 33, no. 6, Special Theory Issue (Oct. - Dec., 1986): S14-S32. University of California Press on behalf of the Society for the Study of Social Problems. <http://www.jstor.org/stable/800672> (accessed March 13, 2011).
- Combahee River Collective. 1979. A Black feminist statement. In *Capitalist Patriarchy and the Case for Socialist Feminist*, ed. Z. Eisenstein. Monthly Review Press. New York.
- Corbin, J. and A. Strauss. 1990. Grounded Theory research: Procedures, canons and evaluative criteria. *Qualitative Sociology* 13, no. 1. <http://www.springerlink.com/content/j8pw5067pu421747/> (Accessed August 17, 2011).
- Cornell, S. 1987. Indian reservation economic development: Some preliminary hypotheses. Harvard Project on American Indian Economic Development. Malcolm Wiener Center for Social Policy, John F Kennedy School of Government, Harvard University. U.S.A.
- Cornell, S. and J. P. Kalt. 1992. Reloading the dice: Improving the chances for economic development on American Indian reservations. In *What can tribes do? Strategies and institutions in American Indian economic development*, eds. S. Cornell and J. P. Kalt. American Indian Studies Center, University of California, Los Angeles, CA. U.S.A.
- Coyoti Prints*. 1976. Caribou Tribal Council. Vol. 11. no. 9. September 20, 1976.
- Cummins, B. D. 2004. Only God Can Own the Land: The Attawapiskat Cree. *Canadian Ethnography Series* 1, eds. B. D. Cummins and J. L. Steckley. Pearson Prentice Hall.
- Denzin, N. K. 2007. Grounded theory and the politics of interpretation. In *The Sage Handbook of Grounded Theory*, eds. Bryant Antony and Kathy Charmaz. California: Sage Publications.
- Denzin, N. K., and Y. S. Lincoln. 2008. Introduction: Critical and Indigenous methodologies. In *Handbook of Critical and Indigenous Methodologies*, eds. Denzin, N. K., Lincoln, Y. S., and L. Tuhiwai-Smith. California: Sage Publications.
- Dinwoodie, D. 1996. Reserve memories: Historical consciousness on the Nemiah Valley Indian Reserve. PhD diss., University of Chicago.
- . 2002. *Reserve memories: The power of the past in a Chilcotin community*. Lincoln: University of Nebraska Press.

- Eisenstein, Z. 1978. Developing a theory of capitalist patriarchy and socialist feminism. In *Capitalist Patriarchy and the Case for Socialist Feminism*, ed. Z. Eisenstein. Monthly Review Press. New York.
- Elliot, N.J. 2008. Including Aboriginal values in resource management through enhanced geospatial communication. PhD diss., University of Northern British Columbia.
- Elos, S. and H. Kyngash. 2008. The qualitative content analysis process. *Journal of Advanced Nursing* 62(1), 107–115 doi: 10.1111/j.1365-2648.2007.04569.x
- Fairbank, B.D. and R.L. Faulkner. 1992. Geothermal resources of British Columbia (Map). Geological Survey of Canada, Ottawa, Ont. Open File 2526.
- Fairbank Engineering Ltd. 1991. Geothermal resources of British Columbia (Map). Geological Survey of Canada and B.C. Ministry of Energy, Mines and Petroleum Resources, Vancouver, B.C.
<http://www.empr.gov.bc.ca/Titles/OGTitles/geothermal/Pages/GeothermalResourcesMap.aspx> (Accessed May 2012).
- Farrand, L. 1900. Traditions of the Chilcotin Indians. In *Memoirs of the American museum of natural history: The Jesup North Pacific expedition*, ed. Frank Boaz. Part IV.
- Few, A. 2007. Integrating Black consciousness and Critical Race Feminism into Family Studies Research. *Journal of Family Issues* 28. no. 4. Sage Publications. 10.1177/0192513X06297330 <http://jfi.sagepub.com> (accessed April 2013).
- FIMI: Foro Internacional de Mujeres Indigenas (International Indigenous Women's Forum). 2006. Mairin Iwanka Raya: Indigenous women stand against violence. A companion report to the United Nations Secretary General's study on violence against women. New York.
- Fixico, D. 1998. Ethics and responsibility in writing American Indian history. In *Native and academics researching and writing about American Indian*, ed. Mishesuah, A. Devon. USA: University of Nebraska Press.
- . 2003. *The American Indian mind in a linear world: American Indian studies and traditional knowledge*. NY: Routledge.
- Fondahl, G., Wright, P., Yim, D., Sherry, E., Leon, B., Bulmer, W., Grainger, S., and J. Young. 2009. Co-managing research: Building and sustaining a First Nation-University partnership. Prince George, BC: The Community Development Institute at UNBC.
- Fournier, S. and E. Crey. 1997. *Stolen from our embrace: The abduction of First Nations children and the restoration of Aboriginal communities*. Vancouver: Greystone Books Ltd.

- Fraser Basin Council. 2013. Remote Community Initiative: Remote Community Implementation Program. Fraser Basin Council.
http://www.fraserbasin.bc.ca/ccaq_rci.html (accessed October 2013).
- Fraser, T. N. 2009. Māori-Tūhoe epistemology: Stages of sustaining tribal identity through Tūhoe performing arts. PhD diss., University of British Columbia.
- Freire, P. 1970. *Pedagogy of the oppressed*. NY: Continuum Publishing Co.
- Frideres, J. S. 2011. *First Nations in the twenty-first century*. Oxford: Oxford University Press.
- Frost, A. 2008. Literacy practices in a First Nations community: Women writing culture. PhD diss., University of Louisville.
- Furniss, E. 1993a. *Changing Ways: Southern Carrier History, 1793 - 1940*. Quesnel School District (SD28). Quesnel, British Columbia. Canada.
- . 1993b. *Dakelh Keyoh: The Southern Carrier in Earlier Times*. Quesnel School District (SD28). Quesnel, British Columbia. Canada.
- . 1995. *Victims of benevolence: The dark legacy of the Williams Lake Residential school*. Cariboo Tribal Council. Vancouver: Arsenal Pulp Press.
- Gallant, A. 2004. Nazko Band digging out of whopping \$2.8 million debt. *Quesnel Observer*, March 28.
http://www.quesnelmuseum.ca/CaribooObserverDocs/2004/20040328_Cariboo%20%20Observer_01.pdf (Accessed July 08, 2013).
- General Assembly of the United Nations. 1995 – 2004. Fact Sheet no.9 (Rev. 1). The Rights of Indigenous Peoples. Office of the High Commissioner for Human Rights.
www.unhchr.ch/html/menu6/2/fs9.htm#intro (accessed March 8, 2008).
- Geoscience BC. 2013. About us. <http://www.geosciencebc.com/s/AboutUs.asp> (accessed May 2013).
- Getty, G. A. 2010. The journey between Western and Indigenous research paradigms. *Journal of Transcultural Nursing* 21. no.1: 5 – 14. DOI:10.1177/1043659609349062
- Glaser, B. G. and A. L. Strauss. 2009. *The discovery of grounded theory: Strategies for qualitative research*. USA: Aldine Transaction.
- Glavin, T. and The people of Nemiah. 1992. *Nemiah: The unconquered country*. Vancouver: New Star.

- Grande, S. 2008. Red pedagogy: The un-methodology. In *Handbook of Critical and Indigenous Methodologies*, eds. Denzin, N. K., Lincoln, Y. S., and L. Tuhiwai-Smith. California: Sage Publications.
- Grant, Peter R., and Neil J. Sterritt 2000. The Delgamuukw decision and oral history. In *Expressions in Canadian Native Studies*. Laliberté, R. F., P. Settee, J. B. Waldram, R. Innes, B. Macdougall, L. McBain, and F. L. Barron. 2000. Saskatoon: University Extension Press.
- Grasby, S.E., Allen, D.M., Chen, Z., Ferguson, G., Jessop, A., Kelman, M., Ko, M., Majorowicz, J., Moore, M., Raymond, J., and R. Therrien. 2011. Geothermal energy resource potential of Canada. Natural Resources Canada, Geological Survey of Canada, Ottawa, Ont. Geological Survey of Canada, Open File 6914.
- Greenwood, M. 2005. Children as citizens of First Nations: Linking Indigenous health to early childhood development. *Paediatric and Child Health* 10, no. 9.
- Greenwood, D. J. and M. Levin. 2007. *Introduction to Action Research: Social research for social change*. Thousand Oaks: Sage Publications.
- Greenwood, M. and J. Place. 2009. Executive summary: The health of First Nations, Inuit and Métis children in Canada. In *Aboriginal children's health: Leaving no child behind. Canadian Supplement*. Fisher, N., Greenwood, M., Place, J., Eni, R., Ford, S., McKenna, M., Tait, C. L., King, G., and C. Blackstock. Toronto: UNICEF.
- Haig-Brown, C. 1993. *Resistance and Renewal: Surviving the Indian residential school*. Tillacum Library. Canada: Arsenal Pulp Press Ltd.
- Haig-Brown, C. and K. Dannenmann. 2002. A pedagogy of the land: Dreams and respectful relations. *McGill Journal of Education* 37, no. 3:451-468.
- Halseth, G., Manson, D., Markey, S., Lax, L., and O. Buttar. 2006. The connected North: Findings from the Northern BC economic vision and strategy project. *Journal of Rural and Community Development* 3:1-27.
- Harris, C. 2002. *Making Native space: Colonialism, resistance, and reserves in British Columbia*. Vancouver: University of British Columbia Press.
- Hartstock, N. 1979. Feminist theory and the development of revolutionary strategy. In *Capitalist Patriarchy and the Case for Socialist Feminism*, ed. Z. Eisenstein. NY: Monthly Review Press.
- Health Canada. 2004. Health impacts by industry sector: A Report of the Federal/Provincial/Territorial Committee on Environmental and Occupational Health. *Canadian handbook on health impact assessment* 4.

- Heath, H. and S. Cowley. 2004. Developing a grounded theory approach: a comparison of Glaser and Strauss. *International Journal of Nursing Studies* 41:141-150.
- Hebron, T. 2010. Remote energy implementation program. Fraser Basin Council. Presentation at Cariboo Chilcotin First Nations Energy Forum October 25, 2010.
- Hedican, E. J. 2008. *Applied anthropology in Canada: Understanding Aboriginal issues*. 2nd ed. Toronto: University of Toronto Press.
- Hegmann, G., Cocklin, C., Creasey, R., Dupuis, S., Kennedy, A., Kingsley, L., Ross, W., Spaling, H., and D. Stalker. 1999. Cumulative effects assessment practitioners guide. Prepared for Canadian Environmental Assessment Agency.
- Hewlett, S. E. 1973. The Chilcotin uprising of 1864. *BC Studies* 19: 50-72.
- Hindle, Kevin, Anderson, Robert B., Giberson, Robert J., and Bob Kayseas. 2005. Relating practice to theory in Indigenous entrepreneurship: A pilot investigation of the Kitsaki Partnership Portfolio. *American Indian Quarterly* 29, no. 1/2: 1-23. University of Nebraska Press <http://www.jstor.org/stable/4138799> (accessed June 22, 2010).
- Hoffman, R. 2005. Rekindling the fire: The Impact of Raymond Harris's work with the Plains Cree. PhD diss., Trent University.
- Hofstede, G. 2011. Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture* 2, no. 1. <http://dx.doi.org/10.9707/2307-0919.1014> (accessed February 28, 2014).
- Hogg, R. 2010. A hand prepared to be red: Manliness and racial violence on Britain's colonial frontiers. *Australasian Journal of Victorian Studies* 15, no. 1.
- Horn, C. L. and G. Halseth. 2011. Seeing like a circle: Perspectives on the field from a dialogue on urban Aboriginal economic development. *Aboriginal Policy Studies* 1, no. 2:101-131. <http://ejournals.library.ualberta.ca/index.php/aps/article/view/9613> (accessed November 24, 2011).
- Horne, G. 2009. 2006 Economic dependency tables for ILMB areas. BC Stats. http://www.bcstats.gov.bc.ca/pubs/econ_dep/2006/2006_ilmb.pdf (accessed November 16, 2011).
- Howitt, R. 2002. Worlds turned upside down: Inclusionary research in Australia. Panel Session. *American Association of Geographers*. March 2002. LA.
- Howitt, R. and S. Stevens. 2008. Cross-cultural research: Ethics, methods, and relationships. In *Qualitative Research Methods in Human Geography*, ed. I. Hay. 2nd ed. Oxford: Oxford University Press.

- Huhndorf, S. M. and C. Suzack. 2010. Indigenous feminism: Theorizing the issues. In *Indigenous women and feminism: Politics, activism, culture*, eds. Suzack, C., Huhndorf, S. M., Perreault, J. and J. Barman. Vancouver: UBC Press.
- Ignace, M. B. 1998. Shuswap. In *Handbook of North American Indians*, eds. W. C. Sturtevant and D. Walker. Plateau. Washington: Smithsonian Institute 12: 201-219.
- Isaac, T. 2004. *Aboriginal law: Commentary, cases and material*. 3rd ed. Saskatoon: Purich Publishing Ltd.
- Jorgensen, M. and J. B. Taylor. 2000. What determines Indian economic success? Evidence from tribal and individual Indian enterprises. *Harvard Project on American Indian Economic Development*. Malcolm Wiener Center for Social Policy, John F. Kennedy School of Government. USA: Harvard University.
- Kashaninia, Z. 2011. Aboriginal population in British Columbia: A study of selected indicators for off-reserve and urban Aboriginal and non-Aboriginal populations. BC Stats. <http://www.bcstats.gov.bc.ca/Publications/AnalyticalReports.aspx> (accessed April 08, 2013).
- Kew, M. 1974. Nazko and Kluskus: Social conditions and prospects for the future. Nazko Kluskus Study Team Report on the Nazko and Kluskus Bands. The Nazko Kluskus Study Team, Special Collections Division, Main Library, University of British Columbia. Vancouver BC.
- Kimball, S. 2010. Favourability map of British Columbia geothermal resources. Master of Applied Science thesis, University of British Columbia.
- Kincheloe, J. L. and S. R. Steinberg. 2008. Indigenous knowledges in education: Complexities, dangers, and profound benefits. In *Handbook of Critical and Indigenous Methodologies*, eds. Denzin, N. K., Lincoln, Y. S., and L. Tuhiwai-Smith. California: Sage Publications.
- Knight: Knight Piésold Ltd. (2010). Report on updated feasibility design of the 70,000 tonnes per day tailings storage facility (Ref. no. VA101-266/12-1). Prepared for Taseko Mines Limited. <http://www.ceaa-acee.gc.ca/050/documents/p63928/87860E.pdf> (accessed November 2011).
- Kovach, M. 2005. Emerging from the margins: Indigenous methodologies. In *Research as resistance: Critical, Indigenous, and anti-oppressive approaches*, eds. Brown, L. and S. Strega. Toronto: Canadian Scholars' Press.
- Kunkel, T. I. 2007. Personal employment work with Nazko First Nation.
- . 2008. Creating sustainable economic development for two BC First Nations communities: A rights-based approach. Master's thesis, University of Northern British Columbia.

- . 2013. Aboriginal values and the use of land and resource for traditional purposes: A presentation to the Federal Review Panel for the proposed New Prosperity Gold-Copper Mine Project. Available at <http://www.acee-ceaa.gc.ca/050/documents/p63928/92739E.pdf>
- Kunkel, T., Ghomshei, M., and R. Ellis. 2012. Geothermal energy as an indigenous alternative energy source in BC. *Journal of Ecosystems and Management* 13, no. 2.
- Kunkel, T.I., Halseth, G., Petticrew, E., Mills, A., Ghomshei, M., and R. Ellis. 2013. First Nations expectations from the mining industry: Lessons from the Tsilhqot'in people. Proceedings of the 23rd World Mining Congress. Montreal, Quebec.
- Kunkel, T., Schorcht, B., and R. Brazzoni. 2011. Aboriginal business capacity building programs in the central interior of British Columbia: A collaborative project between the university and communities. *Canadian Journal of University Continuing Education* 37, no. 1: 1 -11. <http://ejournals.library.ualberta.ca/index.php/cjuce-rcepu> (accessed June 2011).
- Laaksonen-Craig, S. 2012. Mountain Pine Beetle epidemic response: Presentation for special committee on Timber supply. Ministry of Forests, Lands and Natural Resource Operations. Available at http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/mid-term-timber-supply-project/MPB-Response-Committee-Presentation.pdf (accessed May 2013).
- Laliberté, R. F., P. Settee, J. B. Waldram, R. Innes, B. Macdougall, L. McBain, and F. L. Barron. 2000. *Expressions in Canadian Native studies*. Saskatoon: University Extension Press.
- Lane, R. B. 1953. Cultural relations of the Chilcotin Indians of west central British Columbia. PhD diss., University of Washington. <http://search.proquest.com/docview/301971311?accountid=14601>
- Leach, A. 2008. Carrier Chilcotin Tribal Council economic development strategy in response to the Mountain Pine Beetle epidemic. Andrew Leach and Associates. Submitted to Cariboo-Chilcotin Beetle Action Coalition. <http://www.c-cbac.com/pdfs/Carrier-Chilcotin-TC-Economic-Development-Strategy.pdf> (accessed May 2013).
- Lebel, D., ed. 2009. Geoscience needs for geothermal energy development in western Canada: Findings and recommendations. B.C. Ministry of Energy, Mines and Petroleum Resources, Victoria, B.C. Petroleum Geology Open File 2009-03.
- Lee, R. 2006. Values. In *The dictionary of human geography*, eds. Johnston, R. J., Gregory, D., Pratt, G., and M. Watts. USA: Blackwell Publishing.
- Legislative Assembly Province of BC. 2012a. Growing fiber, growing value: The report of the Special Committee on timber supply. Fourth session Thirty-ninth Parliament.

- <http://www.leg.bc.ca/cmt/39thparl/session-4/timber/reports/PDF/Rpt-TIMBER-39-4-GrowingFibreGrowingValue-2012-08-15.pdf> (accessed May 2013).
- . 2012b. Report of Proceedings: Special Committee on timber supply, Quesnel. Fourth session Thirty-ninth Parliament. British Columbia Hansard Services.
<http://www.leg.bc.ca/cmt/39thparl/session-4/timber/hansard/F0706am-19.pdf> (accessed May 2013).
- Little Bear, L. 2000. Jagged worldviews colliding. In *Reclaiming Indigenous voices and vision*, ed. M. Battiste. Vancouver: UBC Press.
- Louis, R. P. 2007. Can you hear us now? Voices from the margin; Using Indigenous methodologies in geographic research. *Geographical Research* 45, no. 2:130-139.
- Lutz, J. S. 2008. *Makúk: A new history of Aboriginal and White relations*. Vancouver: UBC Press.
- Markey, S., Halseth, G., and Manson, D. 2012. *Investing in place: Economic renewal in northern British Columbia*. Vancouver: UBC Press.
- Marsden, T. 2005. From the land to the Supreme Court, and back again: Defining meaningful consultation with First Nations in Northern British Columbia. Master's thesis, University of Northern British Columbia.
- Martin, A. 2012. Community-company relationships in forest dependent communities in Northern BC: assessing the local, sectoral, and theoretical implications. PhD diss., University of Northern British Columbia.
- Massachusetts Institute of Technology. 2006. The future of geothermal energy: Impact of Enhanced Geothermal Systems (EGS) on the United States in the 21st Century. An assessment by an MIT-led interdisciplinary panel.
http://geothermal.inel.gov/publications/future_of_geothermal_energy.pdf (accessed October 31, 2008).
- Memmi, Albert. 1965. *The colonizer and the colonized*. London, England: Earthscan Publications Ltd.
- Minister of Aboriginal Affairs and Northern Development Canada. 2013. Implementation Report / 2011–2012: Tsawwassen First Nation Final Agreement. B.C. Ministry of Aboriginal Relations and Reconciliation, and Tsawwassen First Nation.
http://www.gov.bc.ca/arr/reports/down/Tsawwassen_First_Nations_Implementation_Report_2011-12_Nov42013.pdf (accessed November 2013).
- MOFR: Ministry of Forest and Range. 2001-2006. British Columbia Mountain Pine Beetle epidemic. Mountain Pine Beetle Task force. Ministry of Forest, Bark Beetle Coordinator Office.

- Ministry of Forests, Lands and Natural Resource Operations. 2012a. A history of the battle against the Mountain Pine Beetle: 2000 – 2012.
http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/ (Accessed May 2013).
- . 2012b. Cumulative percentage of pine killed: Slideshow with data for 1999-2011 and projection for 2012-2020.
http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/maps.htm (Accessed May 2013).
- Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians. 2009. Federal framework for Aboriginal economic development. Ottawa.
- Miller, J. R. 1996. *Shingwauk's vision: A history of Native residential schools*. Toronto: University of Toronto Press.
- Milloy, J. 1999. *A National Crime: The Canadian Government and the residential school system – 1897 to 1986*. Winnipeg: University of Manitoba Press.
- Mills, A. 1994. *Eagle down is our law: The Witsuwit'en law, feasts, and land claims*. Vancouver: UBC Press.
- . 2005. *Hang on to These Words: Johnny David's Delgamuukw evidence*. Toronto: University of Toronto Press.
- Natural Resources Canada. 2006. The atlas of Canada: Data and mapping notes.
<http://atlas.nrcan.gc.ca/auth/english/maps/economic/rdc2001/dataandmappingnotes.html/#economic> (accessed November 18, 2011).
- . 2013. Nazko Cone and nearby 2007 activity.
http://www.earthquakescanada.nrcan.gc.ca/nazko_cone-eng.php (accessed September 06, 2013).
- Nazko-Kluskus Study Team. 1974. Report to Nazko and Kluskus Bands of Carriers Indians. The Nazko Kluskus Study Team, Special Collections Division, Main Library, University of British Columbia. Vancouver BC.
- Nesika*. 1973. Nazko-Kluskus: Self-reliance. Union of British Columbia Indian Chiefs. Vol. 2. No. 11-12 (November 1973). Vancouver: United Native Nations.
- . 1976. Nazko-Kluskus: History of the dispute. Union of British Columbia Indian Chiefs. August/September 1976. Vancouver: United Native Nations.
- . 1977. Nazko talks deadlocked. Union of British Columbia Indian Chiefs. Spring Issue. Vancouver: United Native Nations.

- Newgold: New Gold Inc. 2012. Blackwater gold project, British Columbia: Project description summary. Canadian Environmental Assessment Agency. <http://www.ceaa-acee.gc.ca/050/documents/p80017/83283E.pdf> (accessed June 2013).
- Northern Development Initiative Trust. 2013a. About Northern Development: By northerners, for northerners. Northern Development Initiative Trust. <http://www.northerndevelopment.bc.ca/about/> (accessed May 2013).
- . 2013b. Invest in Cariboo Chilcotin Coast, British Columbia. Northern Development Initiative Trust. <http://investcariboochilcotincoastbc.ca/> (accessed June 2013).
- Norton, J. 2008. Census fast fact: Recent trends in the off-reserve Aboriginal labour force participation. BC Stats. <http://www.bcstats.gov.bc.ca/guide.asp> (accessed June 2011).
- O'Faircheallaigh, C. 1999. Making social impact assessment count: A negotiation-based approach for Indigenous Peoples. *Society and Natural Resources* 12, no. 1:63-80.
- Orkustofnun. n.d. Geothermal. National Energy Authority of Iceland. <http://www.nea.is/geothermal/> (accessed October 03, 2013).
- Ospina, S., Dodge, J., Foldy, E. G., and A. Hofmann-Pinilla. 2008. Taking the action turn: Lessons from bringing participation to Qualitative research. In *The Sage Handbook of Action Research*, eds. Reason, P. and H. Bradbury. 2nd ed. London: Sage Publications.
- Parfitt, B. 2005. Battling the beetle: Taking action to restore British Columbia's Interior forests. Canadian Centre for Policy Alternatives BC Office. www.policyalternatives.ca/ (accessed February 25, 2007).
- . 2007. True partners: Charting a new deal for BC, First Nations and the forests we share. Canadian Centre for Policy Alternatives BC Office. www.policyalternatives.ca/ (accessed February 25, 2007).
- Peredo, A. M., Anderson, R. B., Galbraith, C. S., Honig, B., and L. P. Dana. 2004. Towards a theory on Indigenous entrepreneurship. *International Journal of Entrepreneurship and Small Business* 1, Nos. 1/2. : 1 – 20.
- Powell, G. 2005. A regional profile of Non-Timber Forest Products being harvested from the Cariboo-Chilcotin, British Columbia area. The Centre of Non-Timber Resources, Royal Roads University. BC.
- PBC: Province of British Columbia. 2010. Updated Procedures for Meeting Legal Obligations When Consulting First Nations: Interim. http://www.gov.bc.ca/arr/reports/down/updated_procedures.pdf (accessed January 2014).
- . 2013a. Ministry of Aboriginal Relations: Treaties and other negotiations. <http://www.gov.bc.ca/arr/treaty/default.html> (accessed January 2013).

- . 2013b. BC Bioenergy strategy: Growing our natural energy advantage. Ministry of Mines and Petroleum Resources. <http://www.energyplan.gov.bc.ca/bioenergy/> (accessed May 2013).
- . 2013c. Maa-nulth First Nations and Aboriginal Relations and Reconciliation: First Nations of the Maa-nulth Treaty. http://www.gov.bc.ca/arr/firstnation/maa_nulth/default.html#final (accessed November 2013).
- Quayson, A. 2000. *Postcolonialism: Theory, practice, or process?* Cambridge: Polity Press.
- Quesnel Community and Economic Development Corporation. 2005. Quesnel and area community and economic profile. <http://www.quesnelcorp.com/reports2.asp> (accessed January 23, 2008).
- Ray, Arthur J. 2000. The fur trade history as an aspect of Native history. In *Expressions in Canadian Native Studies*. Laliberté, R. F., Settee, P., Waldram, J. B., Innes, R., Macdougall, B., McBain, L., and F. L. Barron. Saskatoon: University Extension Press.
- RCAP: Royal Commission on Aboriginal Peoples. 1996a. Looking forward, looking back. In *The report of the Royal Commission on Aboriginal peoples*. 1, 1-691. Ottawa: Library of Parliament. <http://caid.ca/RepRoyCommAborigPple.html> (accessed April 08, 2013).
- : Royal Commission on Aboriginal Peoples. 1996b. Restructuring the relationship: Economic development. In *The report of the Royal Commission on Aboriginal peoples* 2, 750-974. Ottawa: Library of Parliament. http://caid.ca/Vol_2_RepRoyCommAborigPple.html (accessed April 08, 2013).
- : Royal Commission on Aboriginal Peoples. 1996c. Perspectives and Realities: Women's Perspectives. In *The report of the Royal Commission on Aboriginal peoples* 4, 7-100. Ottawa: Library of Parliament. http://caid.ca/Vol_4_RepRoyCommAborigPple.html (accessed April 08, 2013).
- Reason, P. and H. Bradbury. 2008. Introduction: Action research; Participative inquiry and practice. In *The Sage Handbook of Action Research*, eds. Reason, P. and H. Bradbury. 2nd ed. London: Sage Publications.
- Reimer, B. and S. Markey. 2008. Place-based policy: A rural perspective. http://crcresearch.org/files-crcresearch_v2/ReimerMarkeyRuralPlaceBasedPolicySummaryPaper20081107.pdf (accessed November 26, 2011).
- Roy, C. K. 2004. Indigenous Women: A gender perspective. Resource Centre for the Rights of Indigenous Peoples. Resource Centre for the Rights of Indigenous Peoples. Norway. http://www.galdu.org/govat/doc/indigenous_women_croy.pdf (accessed November 2011).

- Rundstrom, R. and Deur, D. 1999 Reciprocal appropriation: Towards an ethics of cross-cultural research. In *Geography and Ethics: Journeys in a Moral Terrain*, eds. J.D. Proctor and D.M. Smith. 237-250. London and New York: Routledge.
- Saavedra, C. M. and E. D. Nymark. 2008. Borderland-Mestizaje feminism: The new tribalism. In *Handbook of Critical and Indigenous Methodologies*, eds. Denzin, N. K., Lincoln, Y. S., and L. Tuhiwai-Smith. California: Sage Publications.
- Schnarch, B. 2004. Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. *Journal of Aboriginal Health* 1, no. 1: 80 – 95.
- Schwartz, S. 1992. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology* 25.
- . 2009. Basic human values. The Hebrew University of Jerusalem.
http://www.ccsr.ac.uk/qmss/seminars/2009-06-10/documents/Shalom_Schwartz_1.pdf
 (accessed April 2013).
- Schwartz, S. and W. Bilsky. 1987. Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology* 53, no. 3:550-562
- Sen, G. and C. Grown. 1987. *Development crisis, and alternative visions: Third World Women's perspectives*. New Feminist Library. NY: Monthly Review Press.
- Sherry, E. E. 2002. Constructing partnership: a Delphi study of shared resource management in the north Yukon. PhD diss., University of Northern British Columbia.
- Sherry, E. E., Halseth, R., Fondahl, G., Karjala, M. and B. Leon. 2005. Local-level criteria and indicators: An Aboriginal perspective on sustainable forest management. *Forestry* 78, no. 5: 513-539.
- Smith, L. R. 2011. *Beghadf Jigwedetaghel?anx: A Yunesit'in and Xenigwet'in project*. Yunesit'in Government (Stone Band).
- Sona: Sona Resources Corporation. n.d. Blackdome Gold Mine (BC).
http://www.sonaresources.com/properties/blackdome_bc/ (accessed June 2013).
- Spradley, J. 1979. *The ethnographic interview*. USA: Harcourt Brace Jovanovich College Publishers.
- St. Germain, P.C. and Sibbeston, N. 2007. Sharing Canada's prosperity – a hand up, not a handout: Special study on the involvement of Aboriginal communities and businesses in economic development activities in Canada. Standing Senate Committee on Aboriginal Peoples. Canada.

- Statistics Canada. 2007. Cariboo, British Columbia (Code5941) (table). 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007.
<http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E> (accessed October 11, 2013).
- Stock, C. 2008. Aboriginal peoples labour force survey: Labour market characteristics of off-reserve Aboriginal population. BC Stats. <http://www.bcstats.gov.bc.ca/guide.asp> (accessed June 2011).
- . 2009. The Aboriginal population of BC: Highlights from the statistical profiles of Aboriginal peoples in BC. BC Stats.
<http://www.bcstats.gov.bc.ca/pubs/bcbi/bcbi0908.pdf> (accessed November 20, 2011).
- Story, W., ed. 2004. Early Cariboo-Chilcotin pre-emption.
<http://www.rootsweb.ancestry.com/~bccaribo/Prempts.html>. (accessed April 2013).
- Straus, A. and J. Corbin. 1998. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications. 2nd ed. California: Thousand Oaks.
- Swanky, T. 2011. *The true story of Canada's "war" of extermination on the Pacific plus the Tsilhqot'in and other First Nations resistance*. BC: Dragon Heart Enterprises.
- Swantz, M. L. 2008. Participatory action research as practice. In *The Sage Handbook of Action Research*, eds. Reason, P. and H. Bradbury. 2nd ed. London: Sage Publications.
- Swisher, K. G. 1998. Why Indian people should be the ones to write about Indian education. In *Native and academics researching and writing about American Indian*, ed. Devon, A. Mishesuah. USA: University of Nebraska Press.
- Taseko: Taseko Mines Ltd. 2013. New Prosperity water management: Video. Retrieved from: <http://www.tasekomines.com/home>
- Teit, J. A. 1909. The Shuswap. In *Memoirs of the American Museum of Natural History*. In *The Jesup North Pacific Expedition 2*, ed. Frank Boaz. Part V11. New York.
- Tennent, P. 1990. *Aboriginal people and politics: The Indian land question in British Columbia, 1849-1989*. Vancouver: University of British Columbia Press.
- The Human Rights Clinic. 2010. Bearing the burden: The effects of mining on First Nations in British Columbia. Harvard Law School's Human Rights Program.
<http://www.law.harvard.edu/news/spotlight/human-rights/mining-effects-on-takla.html>
- T'lazt'en Nation and UNBC. 2005. Community-university research alliance: Partnering for sustainable resource management. <http://cura.unbc.ca/index.htm> (accessed December 2013).

- Tsilhqot'in Language Group (The) and T. Kunkel. 2012. *Tsilhqot'in Culture: Sadanx, Yedanx, K'andzin – The Ancient, the past, and the present*. Tsilhqot'in National Government: Williams Lake, BC.
- Tsilhqot'in Stewardship Department: 2007. Tsilhqot'in Nation strategy: Towards sector strategies to address the impact of Mountain Pine Beetle; Working Document. Prepared by Read and Associates, Stonefield Consulting, and the Tsilhqot'in Stewardship Department for Cariboo Chilcotin Beetle Action Coalition. Tsilhqot'in National Government.
- Tuhiwai Smith, L. 1999. *Decolonizing methodologies, research and Indigenous peoples*. London: Zed Books.
- . 2005. On tricky ground: Researching the Native in the age of uncertainty. In *The Sage handbook of qualitative research*, eds. Denzin, N. K. and Y. S. Lincoln. Sage Publications. 3rd ed. London: Thousand Oaks. 85-107.
- Turkel, W. J. 2007. *The archive of place: Unearthing the pasts of the Chilcotin plateau*. Vancouver: UBC Press.
- Walters, M. 2008. The jurisprudence of reconciliation: Aboriginal rights in Canada. In *The politics of reconciliation in multicultural societies*, eds. Kymlicka, W., and B. Bashir. 165-191. New York: Oxford University Press.
- Weber-Pillwax, C. 2001. What is Indigenous research methodology? *Canadian Journal of Native Education* 25, no. 2: 166 – 174.
- Wendall, S. 1987. A (qualified) defense of liberal feminism. *Hypatia* 2, no. 2 (Summer, 1987): 65-93. <http://www.jstor.org/stable/3810017> (accessed November 2013).
- Willems-Braun, B. 1996. Materializing nature: Discourse, practice and power in the temperate rainforest. PhD diss., University of British Columbia.
- Willems-Braun, B. 1997. Buried epistemologies: The politics of nature in (Post)colonial British Columbia. *Annals of the Association of American Geographers* 87, no. 1: 3 – 31.
- William, Roger. 2013. Personal communication.
- Wilson, D., and D. Macdonald. 2010. The income gap between Aboriginal peoples and the rest of Canada. Canadian Centre for Policy Alternatives. <http://www.policyalternatives.ca/publications/reports> accessed June 11, 2011.
- Wilson, A. C. 1998. American Indian history or non-Indian perception of American Indian history? In *Native and academics researching and writing about American Indian*, ed. Devon, A. Mishesuah. USA: University of Nebraska Press.

- Wilson, S. 2001. What is Indigenous research methodology? *Canadian Journal of Native Education* 25, no. 2: 175 – 179.
- . 2003. Progressing Toward an Indigenous Research Paradigm in Canada and Australia *Canadian Journal of Native Education* 27, no. 2:161. ProQuest Education Journals.
- . 2008. *Research is ceremony: Indigenous research methods*. Canada: Fernwood Publishing.
- Xeni. 2013. Xeni: Nature as created. Xeni Gwet'in First Nation Government. <http://xeni.ca/Home/tabid/36/Default.aspx> (accessed October 2013).
- Xeni Gwet'in. 2013. Xeni Gwet'in People of Nemiah. Xeni Gwet'in First Nation Government. <http://xenigwetin.ca> (accessed October 2013).
- Yim, D. 2009. Evolving Co-Management Practice: Developing a Community-Based Environmental Monitoring Framework with Tl'azt'en Nation on the John Prince Research Forest. Master's thesis, University of Northern British Columbia.
- Zimhelt, D. 1976. The Caribou Tribal Council. Master's thesis. University of British Columbia.

Cases sited

- Bernard and Marshall: R. v. Marshall; R. v. Bernard*. 2 SCR. 220. [2005]; SCC. 43. [2005].
- Calder: Calder et al. v. Attorney-General of British Columbia*. SCR. 313. [1973].
- Delgamuukw: Delgamuukw v. British Columbia*. 3 SCR. 1010. [1997].
- Haida Nation: Haida Nation v. British Columbia (Minister of Forests)*. 3 SCR. 29419. [2004].
- Taku River: Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*. 3 SCR. 29146. [2004].
- Tsilhqot'in Nation 2006: Tsilhqot'in Nation v. British Columbia*. Argument of the plaintiff. BCSC. 1700. [2007].

Tsilhqot'in Nation 2007: Tsilhqot'in Nation v. British Columbia. Reasons for judgment. BCSC. 1700. [2007].

Tsilhqot'in Nation 2010: Tsilhqot'in Nation v. British Columbia. Factum of the respondent, Roger William. CA 035617. [2010].

TN-A1A: *Tsilhqot'in Nation Appendix 1A. 2007: Plaintiff's Response to the Defendants' Submissions on Definite Tracts of Land. Tsilhqot'in Nation v. British Columbia*. BCSC. 1700. [2007].

TN-A2: *Tsilhqot'in Nation Appendix 2. 2007: Select Tsilhqot'in villages, dwellings and burial grounds in the Claim Area. Argument of the Plaintiff. Tsilhqot'in Nation v. British Columbia*. BCSC. 1700. [2007].

TN-A3: *Tsilhqot'in Nation Appendix 3. 2007: Tsilhqot'in Pattern of Claim Area Occupation. Argument of the Plaintiff. Tsilhqot'in Nation v. British Columbia*. BCSC 1700. [2007].

Van der Peet 1996. R. v. Van der Peet. 2 SCR. 507 [1996].

William 2012: William v. British Columbia. BCCA 285 No.: CA035617, CA035618, CA035620 [2012].

Appendix 1: UNBC ethics approval

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Titi Kunkal
CC: Ellen Petticrew

From: Henry Harder, Chair
Research Ethics Board

Date: February 8, 2012

Re: E2010.1012.153.01
Assessing the compatibility of Aboriginal values and geothermal
resource development

Thank you for submitting a request for a renewal to the above-noted proposal to the Research Ethics Board. Your request has been approved.

We are pleased to issue approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review and renewal of REB approval. Any changes or amendments to the protocol or consent form must be approved by the Research Ethics Board.

Good luck with your research.

Sincerely,

Original document signed

Dr. Henry Harder
Chair, Research Ethics Board

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Titi Kunkel

From: Henry Harder, Chair
Research Ethics Board

Date: November 1, 2010

Re: E2010.1012.153
Assessing the Competibility of Aboriginal values and geothermal resource development

Thank you for submitting the above-noted proposal to the Research Ethics Board. Your proposal has been approved.

We are pleased to issue approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review and renewal of REB approval. Any changes or amendments to the protocol or consent form must be approved by the Research Ethics Board.

Good luck with your research.

Sincerely,


Original document signed


Henry Harder

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Tili Kunkel
CC: Bob Ellis

From: Henry Harder, Chair
Research Ethics Board

Date: March 8, 2010

Re: E2010.0215.031
Assessing the compatibility of Aboriginal values and geothermal resource development

Thank you for submitting the above-noted request and required amendments to the Research Ethics Board. Your proposal has been approved.

We are pleased to issue approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review and renewal of REB approval. Any changes or amendments to the protocol or consent form must be approved by the Research Ethics Board.

Good luck with your research.

Sincerely,

Original document signed

Henry Harder

Appendix 2: Community support letters, Nazko First Nation



Nazko First Nation

P.O. Box 4125, Quesnel, British Columbia V2J 5K1 • Phone (250) 992-3085 Fax (250) 961-7061

September 23, 2009

Dr R. Ellis and Mrs T. Kunkel
University of Northern BC
S100 – 100 Campus Way,
Quesnel
BC V2J 7K1

Dear Dr Ellis and Mrs Kunkel,

Re: Proposed geothermal resource field trip in 2010 and capacity building session

This letter is a confirmation of the Nazko First Nation's support for University's Geothermal Resource capacity building proposal. The Band is willing to appoint a representative to participate in the field trip to Soda Lake, Nevada in the United States and to participate in the capacity building session after the field trip.

The Band's contribution to this project is limited to the regular wages paid to its representative. It is our understanding that the University will apply for grants to cover the cost of travel, sustenance, and accommodation for this field trip, and also cover the cost of associated capacity building sessions.

Yours sincerely,

Original document signed

Laurell Crocker
Treaty Manager

**PART OF THE GREAT CARRIER NATION
OUR LAND IS OUR HISTORY, CULTURE AND IDENTITY**

Appendix 3: Community support letters, Xeni Gwet'in First Nation

