

**KNOWLEDGE TO ACTION: FIRST NATIONS ENGAGEMENT WITH RESEARCH
FOR COMMUNITY BENEFIT**

by

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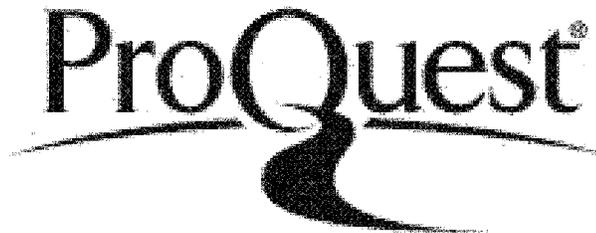


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Abstract

Knowledge translation is the sharing of knowledge in an effort to make research more meaningful to society. Currently, many gaps exist in effective knowledge to action especially for research carried out with Aboriginal peoples. My master's research explores knowledge translation and knowledge to action in regards to recent research initiatives in, and for, the Takla Lake First Nation (TLFN). Using content analysis based on focus group interviews with 17 community participants, I was interested to see if community members' expectations of the research process had been met, and to hear from community members themselves about strategies and approaches they wanted taken to translate knowledge obtained from research into actions. This thesis research finds that a better understanding of the context and ways of knowing of a group is necessary to undertake effective research and knowledge translation activities. Also, there is a need for more defined and established evaluation criteria and techniques for Aboriginal knowledge translation. Finally, I argue that the TLFN want future actions in the community to derive from strength-based approaches based in the traditional TLFN culture as a method to improve community unity, health and wellbeing.

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CHAPTER ONE: INTRODUCTION

The Takla Lake First Nation (TLFN) has engaged in a number of research initiatives in the recent past, but questions remain about how to translate the knowledge gained from research into actions that will best benefit the community. Knowledge translation is an important area of study, as too often research data and findings remain in report form, generally inaccessible and unused by those who are supposed to benefit from the research. One reason for this is that knowledge translation is often a complex and frustrating area, as there is no one method or model to effectively translate research findings into practice that can be applied successfully. When working with First Nations, there is an added dimension of cultural sensitivity that must be considered. Effective methods for translating knowledge into actions, therefore, must be tailored to the context of the research.

Knowledge is defined by Hanson & Smylie (2006) as familiarity, awareness or understanding gained through study or experience. Knowledge translation is a transfer of information to a target audience in forms that are intended to be comprehensible (Graham et al, 2006; Smylie et al, 2009). Since I have chosen a participatory approach, it is important to add the objective of tailoring the transfer of information so as to help an intended audience engage in beneficial actions. This is sometimes referred to as knowledge to action, a term closely related to knowledge translation (Hanson & Smylie, 2006). Put more simply, knowledge to action and knowledge translation are about sharing what is known about living a good life (Estey, Smylie & Macaulay, 2009).

There are many different types of knowledge, and many different contexts in which knowledge translation and knowledge to action activities occur. Fundamentally, any type of research or knowledge translation work that is done with Aboriginal peoples should involve applying a research methodology and knowledge translation strategy that is structured in the Indigenous worldview of the community (Smylie, Martin, Kaplan Myrth, Steele, Tait, Hogg, 2003). Without maintaining the perspectives of the community at the forefront of the research, the project will lack relevance, and neither the research or knowledge translation and knowledge to action activities will be effective.

Research Questions

Each research project completed is a step in a research journey that is moving collectively towards providing increased knowledge and understanding about the subjects investigated. There have been more than six research projects undertaken with the TLFN over the past eight years supported by different funding agencies. I believe an opportunity now exists to hear from members of the TLFN about their experiences and expectations of the research initiatives they have recently engaged in. The main objective of this thesis was to work with the TLFN to inform strategies on ways to translate the knowledge obtained from recent research initiatives into actions that will be of greatest benefit to the TLFN. Other goals of this research were to learn about the history of the TLFN community, and explore the TLFN's sense of place and risk to this sense of place. My research questions are:

1. What do the members of TLFN see as their sense of place and what if any risks do they perceive to this sense of place?
2. What are the community of TLFN's expectations of research and have these expectations been met?

3. How could the knowledge learned in recent community based research projects be used by TLFN for community benefit?
4. What information is still needed, and how can this be used to negate risk from the community's point of view?

Theoretical Framework

The theoretical framework for this research project is based on a post-colonial approach to knowledge creation and translation. An important component in working with and understanding the TLFN today, requires an understanding that they, along with most Indigenous peoples in Canada, live with the long term effects and impacts of colonialism. The events of the colonial past still overshadow the lives of Indigenous peoples; and they are factors in the composition of the modern social, cultural, political and economic lives of the TLFN people, as well as current relations between the TLFN and the government, and general society.

With this context in mind, I designed a research process that recognizes that, for research to be relevant *to* the TLFN community, it must be directed *by* the TLFN. To ensure the priorities of the research participants remain at the forefront of the research, I used a participatory research methodology to guide the work. This thesis was also informed by the concept of appropriate engagement, an approach that emphasizes the importance of understanding the history of the people you are working with, and recognizing the strength of their culture and beliefs (Tobin, French & Hanlon, 2010). Participatory research and appropriate engagement are complementary approaches; both focus on the need to have a collaborative relationship between the researcher and the research participants. Using appropriate engagement to inform this project offered additional assurance that the perspectives, concerns and priorities of the research participants would remain at the forefront of the research, that the research process remained grounded in an

understanding of the philosophies and worldviews of the TLFN, and that divergences between Indigenous and mainstream assumptions were adequately addressed (Tagalik, 2010).

In summary, the framework of this thesis was guided by the principles of respect, cultural awareness and cultural sensitivity. These guiding principles formed the bases from which I approached and engaged the community of TLFN, and the individual community members who participated in my research. Below, I offer a brief background on the reasons for undertaking this research.

Background

Many of the research initiatives the members of TLFN have undertaken recently have been in environmental health research to increase their knowledge about the effects of industrial contamination on their traditional territory. I have been employed on three of these projects as a project coordinator, and understand the concerns in the community that fueled the research, as well as the benefits of engaging in this type of research. There has been industrial activity on the TLFN's traditional territory since the 1950s. Today, there is a renewed global interest in the energy extraction industry and in response an increase in interest of the resources in the TLFN traditional territory (Place & Hanlon, 2011). Having baseline information and accurate knowledge about the health of the environment due to the effects of current and former industry, such as that collected by TLFN during recent research initiatives, offers a better position to engage industry and government in negotiations over industrial development on the traditional territory (Kwiatkowski, Tikhonov, Peace & Bourassa, 2009). Having baseline information also increases the TLFN's knowledge and power in their own decision-making about issues that affect their environment and community. This includes a better understanding in the degree of risk associated with conducting traditional activities in areas where industrial activity occurred.

Knowledge translation strategies are an opportunity to disseminate information collected by research projects to the larger community in such a way that the research knowledge can be accessed and hopefully used by the very people the research is supposed to benefit. For this reason, I was motivated to undertake this master's thesis research, and explore the ways that the TLFN would like to translate the information that has been learned on their behalf in recent research projects into actions for community benefit. An outline of the thesis is offered in the following section.

Overview of Thesis

In this introductory chapter, I provided an overview of my motivations for undertaking knowledge translation and knowledge to action work with the TLFN and my research objective and questions. In Chapter Two, I provide a literature review discussing the main themes, concepts and ideas that informed the research project, with a general focus on literature about the interior and north of British Columbia (BC). Chapter Three is a study context chapter to briefly explain the history of the TLFN, specifically since European contact, the external pressures and changes to the community and culture as a result of colonization, the development of the natural resource industry in the traditional territory, and the TLFN's recent engagement with environmental health and other research initiatives. Chapter Four is a discussion of the methodology that framed my research process and the methods, ethical considerations, and activities I undertook to complete the research. In Chapter Five, I present my research results, including the four themes that emerged from the data. These themes are: the changes brought by wage labour, strengthening connection to culture, language and identity, increasing community labour, and environmental cleanup and monitoring. In Chapter Six, I provide an analysis and

discussion of the research results, drawing comparisons to the literature, as well as a discussion of the study limitations. Finally, in Chapter Seven, I present my research conclusions.

Prior to entering into the body of the thesis, a note about the terminology used in this thesis is in order. The words Aboriginal and Indigenous are used interchangeably to mean the First Nations, Inuit and Métis people who live in Canada. The term First Nations is also used throughout, especially in the context of the TLFN, and other groups whose traditional territories are located in the province of British Columbia. The reason for this usage is that the term First Nations is commonly used in BC, and many Aboriginal groups such as the TLFN self-identify as First Nations.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The translation of research findings and research knowledge into actions is a complex area of study. The first step in translation activities involves collecting the data, or deciding what knowledge to translate (Graham, Logan, Harrison, Strauss, Tetroe, Caswell, Robinson, 2006). Research is undertaken for many reasons, one of which is to address existing concerns or priorities in a group of people about levels of risk. For research and knowledge translation activities to be successful, and have an impact, they need to be relevant to those involved. This means keeping the perspectives, ways of knowing and understandings of the people involved at the forefront of the activities.

The following chapter is broken down into three sections. In the first section, information risk perception, risk assessment and risk management, including the environmental impact assessment process in Canada, is synthesized. The purpose of this synthesis about risk is to provide background to explain why I believe the TLFN have engaged in the recent body of research they have undertaken. Further literature reviewed in the second section builds on the reasons why the TLFN have engaged in previous research, and have embarked on this current research project. This includes how, in an Aboriginal context, traditional ways of knowing, sense of place, and the importance of culture, cultural continuity, language, and identity are interconnected, and directly impact overall health and wellbeing. This section will also explore literature that looks at how risk is perceived, analyzed and managed by a group based on a shared belief system, and how these social constructions of risk are important determinants of health. Finally, in the third section, knowledge translation approaches are discussed. Particular attention is paid to the need to tailor these approaches to the context, culture, and target audience, or the

intended recipients, of the knowledge translation activities. Specifically, knowledge translation in an Aboriginal context is reviewed.

Risk Perception, Analysis and Management

The TLFN has recently engaged in several research projects to investigate community concerns about the degree of risk associated with industrial activity operating on their traditional territory. This includes assessing the effects and degree of risk to the environment, individuals, and the community, of past and current industrial activity. Additionally, the TLFN were motivated to increase their knowledge about the effects of industrial activity on their land so they may be well-informed when engaged in the environmental impact assessment (EIA) process, and when making any decisions about what future industrial activity will take place on their traditional territory, and how they want it to operate.

Risk perceptions, analysis, and management are derived from a practical need for societies to protect people from natural and technological hazards (Krimsky & Golding, 1992). A society will perceive something to be a risk, and attribute levels of severity to it, based on the degree it is perceived to threaten the social stability and/or health and safety of the culture. The ideology of the society is fundamental to the development of risk perception and risk aversion (Krimsky & Golding, 1992; Wildavsky & Drake, 1992). Risk perceptions are socially constructed as they are created and developed by society, and reinforced by social and cultural practices (Jardine, Boyd & Furgal, 2009). As a result, the context and situation of a group of people is important to understanding what is perceived as a risk, and how it is analyzed and responded to (Jardine et al, 2009).

Risk perception and analysis help inform society and individual decision making, so having accurate information about the presence and degree of risk allows individuals to develop risk assessment and management models (Arquette, Cole, Cook, LaFrance, Peters, Ransom, Sargent, et al, 2002), and more accurately communicate risk to others (Kwiatkowski et al, 2009). The different personal attributes that contribute to the development of risk perception and risk aversion for individuals and groups includes their level of knowledge and understanding of risk (Krimsky & Golding, 1992). Thus having a greater degree of accurate knowledge will translate into a more realistic assessment of risk for individuals and groups (Krimsky & Golding 1992). For this reason, public education and collective learning has the potential to allow communities to take greater control over decisions that directly affect them (Stevenson, 1996).

Lack of control over decisions that directly affect an individual or community contributes to an increased level of risk in that individual or community, and also can negatively affect the health and wellbeing of the people (Jardine et al, 2009; Place and Hanlon, 2011). Risk based decision making has historically been hierarchical and expert based (Arquette et al, 2002). Many Aboriginal groups, including the TLFN, have often been left out of important decision making about factors that have impacted them. Interference from external influences beyond the control of people results in increased levels of risk. For many Aboriginal groups this has meant they experience different levels of risk as a result of the loss of their traditional culture and lifestyle (Jardine et al, 2009), as well as the industrial activity on their traditional territory. Aboriginal peoples have a greater social, cultural and economic investment in their lifestyle and the activities on their traditional territories than external forces, including the industries that engage in industrial activity (Stevenson, 1996). Having a greater degree of control over managing the environment has also been linked to increasing the health and wellbeing of First Nations peoples

(Kingsley, Townsend, Phillips & Aldous, 2009). It stands to reason that Aboriginal peoples would benefit from having more control in decisions that will affect their lives; this includes increased control in the EIA process on proposed activity to take place on their traditional territory.

Risk and the Environmental Impact Assessment Process in Canada

In Canada, risk assessment is largely accomplished by policy makers and stakeholders by using the EIA process. An EIA is a planning process used to predict the potential risk of a project, policy, program, or action by estimating in advance what the bio-physical, social or other impacts will be on an area (Kwiatkowski et al, 2009). Canadian federal law requires proposed development projects undergo an EIA, and the municipalities or corporations in charge of the proposed project are subject to the EIA requirements of the particular province or territory their projects fall under. The purpose of EIA is to inform policy makers and stakeholders of possible impacts to aid in decision making, and to help inform sustainable and responsible environmental practices that take environmental values into account (Kwiatkowski et al, 2009).

The Canadian EIA process has been critiqued as being flawed for many reasons (Kwiatkowski et al, 2009). Reasons include that the EIA process often does not identify all of the potential impacts of a proposed project, policy, program, or action. The EIA process has historically been focused on economic and environmental impacts, failing to take into consideration the broader interconnection of health, social, economic and environment impacts together (Kwiatkowski et al, 2009). Another critique is that the EIA process often fails to include all relevant stakeholders meaningfully. This includes the exclusion of First Nations people from meaningful participation in decisions that affect their lands (Arquette et al, 2002; Galbraith,

Bradshaw, & Rutherford, 2007). For instance, it has been concluded in a recent research project that the members of TLFN have long been excluded from meaningful consultation and decision making power over industrial development conducted on their territory (Place, 2007). Aboriginal peoples' connection to, and relationship with, the land is a very important part of their culture, and is a part of overall health and wellbeing. For this reason, many Aboriginal peoples have long had growing concerns about the effects of past, current and future industrial activity on their traditional territory (Parlee, O'Neil, & Lutsel K'e Dene First Nation, 2007),

Kwiatkowski et al (2009) explain that in 2008, the EIA process in Canada was changed to be more inclusive of Indigenous people's interests and meaningful participation. In accordance with this change, the Canadian EIA process adopted five guideline principles: mutual respect for all participants; accessibility and inclusiveness of all stakeholders; openness and transparency of the process; efficiency of existing and proposed processes and resources while maximizing contributions of all participants; and consultation timeliness that includes clear and reasonable timelines for input and comments. It is now necessary to enforce these principles and ensure appropriate consultation and environmental decision making processes are accomplished.

There are a number of barriers to meaningful Aboriginal involvement in the EIA process. When an Aboriginal group has unproven land or treaty claims to the area in question, they must negotiate to have their interests included (Place & Hanlon, 2011). Many Aboriginal groups are in this situation as the signing of land agreements and treaties is a complex and ongoing process (Berkes, Mathias, Kisalioglu & Fast, 2001). Power relations are not equal in the EIA processes and this is obvious when the interests of the Aboriginal Peoples, or other interest groups, are at odds with the government and/or industries economic development strategy. The decision to approve a project is generally that of a government department or ministry, and this decision can

legally override EIA findings (Gailbraith, Bradshaw & Rutherford, 2009). Aboriginal groups have historically well-founded mistrust in the ability of EIA's to accommodate their interests, and still are frequently not included in the EIA process in the planning stages; instead often a formulated and inflexible plan is presented to them with little room for change (O'Faircheallaigh, 2007). Finally, lack of resources such as capacity, finances, and the rural location of some Aboriginal groups also negatively affects their ability to participate effectively in the EIA process (Galbraith et al, 2009; O'Faircheallaigh, 2007).

For an EIA or environmental management strategy to be successful it should take into consideration that the different stakeholders may have different approaches to risk assessment and management. Another important consideration is that there are different knowledge types and ways of knowing, and to accurately assess and manage risk these different types of knowledge should also be taken into consideration (Kwiatkowski et al, 2009; Stevenson, 1996). Combining the different or a range of types of knowledge will often produce much more accurate and powerful EIA or environmental management strategies (Kwiatkowski et al, 2009). Gailbraith et al (2009) suggest that successful EIAs or environmental management processes must include a balance of power and control among competing actors. Along similar lines, Berkes et al (2001) emphasize the need to include meaningful participant and local inclusion in environmental assessment, monitoring and decision making. Stevenson (1996) suggests that developing partnerships between industry and Aboriginal groups in environmental risk assessment and management can create an important partnership that has the potential to develop the best course of action for the environment.

Overall, levels of risk and risk perception are directly related to the degree of knowledge, understanding, and control a group of people have over the perceived risk. Levels of risk are also

related to the health and wellbeing of a group of people. Historically, and to some extent today, Aboriginal peoples in Canada have had limited control over many factors that have affected their lifestyle and environment, thus increasing their perceptions of risk. Today, there is increased demand to meaningfully involve Indigenous peoples and traditional ways of knowing in risk analysis, such as the EIA process, and in any decisions that directly affect them. Informed by this literature, a key premise for this research is that Aboriginal traditional ways of knowing incorporates their understanding of the world around them, and are essential considerations in any research done with First Nations.

Traditional Ways of Knowing

Ways of knowing incorporate an individual or group's worldview and perspective about the world. Aboriginal ways of knowing are generally based on traditional knowledge, defined by Jack, Dobbins, Furgal, Greenwood & Brooks (2010) as "a cumulative, collective body of knowledge, experience, and values held by societies with a history of subsistence" (p. 9). Although there is great variation in the traditional ways of knowing of Aboriginal peoples in Canada, there are some commonalities. Important aspects that many different Aboriginal groups share include a strong sense of place, connection to traditional lands and an understanding of the interrelation between sense of place, culture, identity, language, and health and wellbeing (de Leeuw & Greenwood, 2007; Saylor & Blackstock, 2005; Tagalik, 2010).

Sense of Place in an Aboriginal Context

The Aboriginal connection to place is an important part of their personal, cultural and political identity (Larsen, 2006), as well as overall health (Wilson, 2003) and wellbeing (Napoleon & Dickie, 2009). Connection to place means connection to the land, and the

traditional territory of the people. Greenwood (2005) explains that connection to place includes the intimate relationship people establish with the environment and with all things that make or give them life. The land is not just a symbolic space where people carry out their daily lives (Wilson, 2003). In Aboriginal culture, the land is often described as being a mother, and as a mother the land provides for its people all things necessary to sustain them (Wilson, 2003; Windsor & McVey, 2005). The land not only connects people to their past, but must also be protected for the use of future generations (Windsor & McVey, 2005).

Connection to place does not just mean connection to a physical place. Connection to place is instrumental in shaping the relationships in all aspects of Aboriginal peoples lives (Wilson, 2003), this includes a person's mental, emotional, cultural (Windsor & McVey, 2005), social, physical, and spiritual aspects, and ultimately overall wellbeing (Wilson, 2003). Aboriginal culture is inseparable from the land and activities that take place on the land (Napoleon & Dickie, 2009). The connection to place has usually been established over a very long time, and is expressed as part of a belief system (Kingsley, Townsend, Henderson-Wilson & Bolam, 2013). Connection to traditional territory provides a sense of security (Windsor & McVey, 2005), and meaning to people (Windsor & McVey, 2005). In turn, people have a knowledge of, and sense of responsibility over, the management and care of their traditional territory (Kingsley et al, 2009). In this sense, the individual or community's relationship to the land is inextricably linked to health and wellbeing. The loss of place can result in increased levels of risk and stress (Jardine et al, 2009). As previously stated, risk perception is constructed from cultural beliefs and perceived threats to the health and safety of the group (Krimsky & Golding, 1992). As a result of the connection to risk, loss of place is strongly connected to psycho-social harm (Windsor & McVey, 2005).

Wilson (2003) explains that many Aboriginal peoples believe that being outside on the land and in nature simultaneously contributes to physical, emotional, mental and spiritual health in a variety of ways. As a result of the important relationships between individuals and the land, and the connection between land and culture, Aboriginal peoples just feel better when they are on the land (Wilson, 2003).

The differing viewpoints between dominant Western culture and Aboriginal people's ideas about the land have led to conflicts over Aboriginal places. Commonly, the dominant Western perspective objectifies land in monetary terms, fuelled by the idea that if land is not developed it is unproductive (Larsen, 2006). This viewpoint marginalizes land from society, and considers it a thing that needs to be controlled by people (Kingsley et al, 2013). Correspondingly, the purpose of land production in a capitalist framework is to provide individuals or groups power and status (Arquette et al, 2002). In contrast, as Arquette et al (2002) suggest, Aboriginal views of land are based on their relationship with and responsibility to the land, not simply what the land can produce for them in the present. Aboriginal people's relationship with the land incorporates such broad concepts as "respect, caring, appreciation, duty, purpose, and responsibility" (p.262), and, as Windsor & McVey (2005) explain, is inclusive of so much more than just viewing the land in monetary terms. To many Aboriginal peoples, the land is not just material, it has economic, social, cultural, emotional and symbolic value and meanings (Berkes, 1999; Parlee et al, 2007), and the relationship they have is based on reciprocity (i.e., the people care for the land, and the land provides the necessities of life for the people).

Aboriginal people's sense of place with their traditional territories has been under stress since European contact and settlement. Today, in many instances, this level of stress is increasing, as resource industries search further afield for commercial exploitation. Place &

Hanlon (2011) explain that, most recently, with the forest sector in recession and the accelerating industrialization of countries, there is a renewed global interest in mineral extraction and energy. Many Aboriginal groups in Canada cope with government sanctioned exploitation of resources on their traditional territory in the name of national development (Napoleon & Dickie, 2009). This is a contentious issue that sacrifices remote and sparsely populated regions for the common good (Windsor & McVey, 2005).

Many Aboriginal leaders in Canada and internationally are now pushing for economic development as the main way to improve poverty and unemployment rates in their communities. Napoleon & Dickie (2009) pose the question, how can economic development be balanced within a cultural framework? In other words, how can economic development based on resource extraction in Aboriginal territory, occur in a way that protects culture, language, health, and the important connection to land of Aboriginal groups who reside in these areas? For that matter, Kwiatkowski et al (2009) question how economic development today in general can be supported to enhance the health and wellbeing of all Canadians, without negatively impacting the environment? Napoleon and Dickie's recommendations include encouraging community-centred approaches that can provide a balance between economic concerns, and social, cultural and health concerns, and not to focus solely on a dominant Western capitalist framework. As previously stated, there is also growing call for decision making that involves Aboriginal communities from the outset, such as in the EIA process, in planning and making decisions that will affect them (Berkes et al, 2001; Kwiatkowski et al, 2009; O'Faircheallaigh, 2007). Aboriginal risk perception and analysis is based on the fundamental understanding that health and wellbeing are determined by the interconnection of social, cultural and environmental conditions. Having meaningful First Nations involvement in the EIA process would provide for a

more comprehensive EIA, and thus, result in development and industrial projects that are safer for all Canadians. Correspondingly, there is a call to integrate Indigenous knowledge in partnership with Western Scientific based knowledge (Jack et al, 2010; Kwiatkowski et al, 2009; Stevenson, 1996). Importantly, Napoleon and Dickie (2009) call for governments to stop pressuring communities into processes that promise resource extraction without an examination of the growing industrial impacts within specific regions.

The Importance of Aboriginal Culture

Culture is defined as being the social framework that directs how we participate in the world (Tagalik, 2010), and the filter through which we view and understand the world. Written representations of Aboriginal cultures are too often essentialized, but it is important to understand that there is great variation in the cultures of Aboriginal peoples in Canada (Greenwood & de Leeuw, 2007; Saylor & Blackstock, 2005), including diversity in language, spiritual beliefs and political systems (Willows, 2005). The reason for this cultural diversity rests in the fact that the Aboriginal peoples of Canada occupied a huge, varied geographical area with different histories in relation to dominant Western culture and other Aboriginal groups (Chandler & Lalonde, 2003).

There are also commonalities in the culture and worldviews of Aboriginal groups that are worth noting (Greenwood & de Leeuw, 2007; Saylor & Blackstock, 2005; Tagalik, 2010). These commonalities include guiding principles and core values that incorporate a more holistic view of the world, and an understanding of the interconnection between all living things, including nature and community (Tagalik, 2010). There are also commonalities in ideas of health and wellbeing amongst Aboriginal groups, including the understanding that health and wellbeing is improved when there is a balance between the social, cultural, economic, and spiritual (Arquette

et al, 2002; Jardine et al, 2009). Ideas of health and wellbeing incorporate the relationships between individuals and their family, community, and the environment (Saylor & Blackstock, 2005).

The importance of the connection between Aboriginal people and the environment, specifically their traditional lands, has further been explained by the National Collaborating Centre for Aboriginal Health (NCCAHA) (2010), the “health of the land and the health of the community are synonymous” (p. 2). In accordance with this description of Aboriginal concepts of health and wellbeing, it has been stated that cultural continuity (Chandler & Lalonde, 2008; Hallett, Chandler & Lalonde, 2007), as well as cultural and linguistic revitalization (National Collaborating Centre for Aboriginal Health (NCCAHA), 2010), are effective strategies for improving health outcomes (NCCAHA, 2010) and reducing inequalities in Aboriginal populations.

Cultural Continuity, Language & Identity

Cultural continuity is defined as the desire to retain core elements of a culture, even as the culture itself changes over time. As culture is always evolving, adapting and changing in relation to the world around it, the task of maintaining cultural continuity is to engage in an “ongoing process of re-articulating oneself in the modern world in ways that honours ancestors, and maintains links with crucial values” (Kirmayer, Simpson & Cargo, 2003, p. S18). This connection to, and respect for, the past must be maintained at the same time as members of a group creatively respond to the pressures of the modern world. Where traditional ways are abandoned due to force or coercion, the balance between old and new ways is seen to be an unhealthy one (Jack et al, 2010). In these instances, cultural continuity is linked to cultural and

linguistic revival, as well as re-incorporation of traditional and holistic approaches to health promotion, prevention, and intervention into everyday life (Earle, 2011b).

Language is an important symbol of culture and group identity (Hallett et al, 2007). Language is how we communicate with the outside world, and is also both an important part of a person's self (Arquette et al, 2002) and a link between a people and their past (Hallett et al, 2007). Language is one of the most important ways of producing and reproducing culture (Napoleon & Dickie, 2009). For this reason, language preservation is an important part of cultural continuity in a community (Hallett et al, 2007). Language is a conveyer of culture (NCCA, 2010), and as such an important method for transferring traditional knowledge (Greenwood & de Leeuw, 2007). There are meanings, beliefs and relationships embedded in language, in the words and terms, and communicated by the spoken word (Greenwood, 2005).

Indigenous legends and stories in particular are important methods of passing on and teaching Indigenous knowledge. Songs are also forms of knowledge transmission that provide cultural teachings, and form an important connection between the past, current and the future (Greenwood, 2005). Napoleon & Dickie (2009) provide the following quote by a group of Indigenous language preservationists that summarizes the importance of language and song to Indigenous cultures:

No new songs could be written in our languages, ancient songs would no longer be understood, we would no longer be able to communicate with the spirit world in our language and no one would be able to understand our sacred prayers. (p. 12)

It is been suggested by some, such as Napoleon & Dickie (2009), that the core of traditional Indigenous spirituality can never be completely understood without an understanding of the language, as the words, phrases, concepts and even omissions of a language are what provide the real meaning to that cultures worldviews.

As Indigenous language use is an indicator of cultural continuity, Hallet et al (2007) asserts that language is an important predictor of health and wellbeing in Canada's Aboriginal communities. In contrast, the loss of language and culture has adverse effects on the health and wellbeing of Aboriginal communities. The loss of a language can spell the end of a manner of looking at the world, explaining the unknown and making sense of life (Hallett, et al, 2007). Napoleon & Dickie (2009) go so far as to state that "without the language of one's ancestors, individual and collective identity gets weakened and it is likely that the culture would die out within a few generations" (p. 12).

Sense of identity plays an important part in cultural continuity. In an Indigenous context, sense of identity means knowing who you are, where you came from (Chandler & Lalonde, 2008), and how you are linked to the world (Tagalik, 2010). Identity development is an important part of overall health and wellbeing (Hallett et al, 2007), and culture is the foundation for an individual or shared identity (NCCAH, 2010). Cultural connections provide a sense of a personal or collective past, and ideas about the responsibilities and roles that ground you in your life. These, in turn, provide a level of grounding and security, self-assurance and self-esteem, and also can provide ideas about life directions for the future (Chandler & Lalonde, 2008). In contrast, those with a poor identity development, such as a weakened sense of self coupled with poor links to others such as family, friends and community, are more prone to lack appropriate care for their own health and wellbeing. This can result in higher instances of self-abuse and self-injury, including suicide (Chandler & Lalonde, 2008).

An individual's relationships are instrumental in helping to shape their identity (Saylor & Blackstock, 2005), including their relationships to the world surrounding them (i.e., spirituality, nature, family, and community). Once again, from an Indigenous context, a sense of community

is developed when strong relationships exist between community members, there is community satisfaction, and this is positively associated with individual wellbeing. Kirmayer, Simpson & Cargo (2003) state that, not only identity, but also self-esteem, receives strength from collective identity. Collective identity and community cohesion are the basis for strength-based approaches for health and wellbeing that draw on the strength of Indigenous communities (Tagalik, 2010).

Culture as a Determinant of Health and Wellbeing

It is important to understand what the members of TLFN, and many other Aboriginal groups, believe that health and wellbeing mean. The World Health Organization (WHO) defines health and wellbeing as not just as an absence of disease, but a state of complete physical, mental and social wellbeing (WHO, 2013). The NCCAH (2010) explains that many Aboriginal peoples consider health and wellbeing as a balance between the emotional, mental, spiritual, economic, and physical dimensions of the person. Parkes (2011) adds to this definition by stating an individual's connection to their environment is also part of overall health and wellbeing, as previously discussed. The NCCAH (2010) and Parlee et al (2007) further identify connections to family and community, and Tagalik (2010), connection to culture and identity, as factors in health and wellbeing. Illness can be considered being out of balance in all aspects of life (NCCAH, 2010). Tagalik (2010) suggests that for Indigenous peoples, an individual's health and wellbeing is explained as directly connected to an individual's sense of whom they are in the world, and how they are connected to the world.

Health and wellbeing are directly influenced by the social determinants of health. The social determinants of health include income and socio-economic status (Kingsley et al, 2013), as well as political and environmental factors (Earle, 2011b). They are "the conditions in which people are born, grow, live, work and age-conditions that together provide the freedom people

need to live lives they value” (Greenwood & de Leeuw, 2012, p. 381). Greenwood & de Leeuw (2012) argue that the social determinants of health are in direct proportion to the level of money, power and resources an individual has access to, and must be taken into consideration when designing health interventions. The social determinants of health of Aboriginal populations in Canada has been affected by disproportionate levels of low socioeconomic status and poor health statuses compared to the general Canadian population, as well as the intergenerational trauma as a result of residential schools (Greenwood, 2005).

Cultural continuity is a social determinant of health, as cultural continuity has been identified as an important part of Aboriginal health and wellbeing, and improving health outcomes, and has been strongly linked to building individual and community resilience (NCCAH, 2010). Mitigating poor health outcomes includes the epidemic of youth suicides disproportionately affecting the Aboriginal population (Chandler & Lalonde, 2003; 2008; Hallett, Chandler & Lalonde, 2007). There are many other health problems that disproportionately affect Aboriginal peoples and result in health inequalities between Indigenous and non-Indigenous populations (Greenwood & de Leeuw, 2012; NCCAH, 2010). These include chronic diseases such as diabetes, cardiovascular disease (Earle, 2011b; Napoleon & Dickie, 2009), cancer and chronic respiratory disease (Earle, 2011b) as well as higher rates of substance abuse (Greenwood, 2005), and higher chance of being affected by accidents, abuse and violence (Wadden, 2008).

Kingsley et al (2013) argues that to reduce health and wellbeing inequalities in Indigenous populations, there needs to be a better understanding of the social and cultural determinants of health. Kingsley et al (2013) further explains that this deepened understanding would include an acknowledgment of the complexity of Indigenous ideas of health and

wellbeing, an important part of this being viewing health and wellbeing from a more holistic perspective (Kingsley et al, 2013). This holistic perspective includes the linkages between risk perception and analysis, connection to the land and sense of place, traditional ways of knowing, and the importance of culture. All of these concepts directly impact overall health and wellbeing, and all aspects must be perceived as in balance for health and wellbeing to be achieved.

The members of TLFN have long been exposed to the Western scientific system of health and wellness, which is argued by authors such as Smylie, Kaplan-Myrth, & McShane (2009) to be inadequate to address First Nation's needs. Western scientific knowledge systems are based on modern science and technology that deals in measurable outcomes, facts and truths (Berkes, 1999). Watson and Huntington (2009) explain that Western scientific knowledge strives to be "objective, explicit and consciously rational" (p. 262), in contrast to Aboriginal traditional ways of knowing that are better described as "subjective, implicit, and unconscious" (p. 262). Watson & Huntington argue further that Western scientific knowledge attempts to understand things by relating it through Western epistemologies, but this cannot be successfully done with traditional ways of knowing. Instead, there needs to be an acknowledgment that different knowledge types and ways of knowing are valid, and that there needs to be a space in between where different knowledge systems can meet (Watson & Huntington, 2009).

Another strategy suggested to improve the health and wellbeing outcomes of Aboriginal peoples includes culturally appropriate health care. Culturally appropriate health care necessitates using more holistic and inclusive ideas of what contributes to health and wellbeing, such as the call by Kingsley et al (2013) to incorporate greater understandings of the social and cultural determinants of health to reduce health care inequalities. Culturally appropriate health care also incorporates traditional Aboriginal approaches to health and healing with Western

models of health care (Earle, 2011b). This includes designing and/or implementing health care approaches that are based in or take into consideration aspects of traditional connection to the land, traditional ways of knowing, and culture. Using culturally appropriate health care can improve and increase the use of health care by Aboriginal peoples, as well as improve health outcomes (NCCAHA, 2010).

There is also a call to increase Aboriginal children's connection to culture, connection to the land, identity and language as a strategy to improving health outcomes (NCCAHA, 2010) and reduce inequalities in the population (Greenwood & de Leeuw, 2012). The purpose is to transform the health and wellbeing of Aboriginal children, and by association, their families and communities, by focusing on increasing cultural continuity (Greenwood & de Leeuw, 2007). Investing in early childhood development programs that focus on traditional culture and language is suggested as a key activity to improving health outcomes for Aboriginal peoples (NCCAHA, 2010). The transfer of traditional culture and language to children is also a culturally appropriate form of knowledge translation (NCCAHA, 2010).

In summary, cultural continuity, and the revival of cultural and linguistic practice in Indigenous communities is important to improving health and wellbeing outcomes for people, families, and communities (NCCAHA, 2010). Specifically, the revival of these practices helps build resiliency and reduce negative health outcomes (Greenwood, 2005). Traditional knowledge is embedded in cultural language and teachings, the better access individuals have to core traditional knowledge, the stronger their sense of individual and/or community identity (Napoleon & Dickie, 2009). Therefore, strategies for increased health and wellbeing in Aboriginal peoples should include the sharing and culturally appropriate translation of traditional knowledge. Knowledge translation incorporates the transfer of many different types of

knowledge, including traditional as well as Western scientific, for the purpose of increasing health and wellbeing. Knowledge translation is discussed further below.

Knowledge Translation and Knowledge to Action

The translation of research knowledge should be an important part of any research project. Without knowledge translation, information would not be shared and the end result of research is “lengthy reports (that) just gather dust” (Jack et al, p. 7). Without knowledge to action processes, information might be known by the intended audience, but not necessarily mobilized and used. There are different phrases used by different sources to describe the translation of knowledge, such as knowledge transfer (Straus, Tetroe & Graham, 2009), knowledge transfer and exchange (Jack et al, 2010), and the translation of knowledge into actions such as knowledge utilization (Estey et al, 2010) and knowledge mobilization (Graham et al, 2006; Smylie, Kaplan-Myrth, & McShane, 2006). The terms I have chosen to use throughout this thesis are knowledge translation and knowledge to action. I believe that the basic, underlying meaning behind these words is a process of sharing information with a target group with the intent they will turn this information into actions for their benefit.

The definition of knowledge translation is explained as the “exchange, synthesis and ethically-sound application of knowledge-within a complex system of interactions among researchers and users” (Canadian Institute of Health Research (CIHR), 2009a, p.1), the transfer of research findings into practice (Graham et al, 2009), or simply, bridging the know-do-gap (Bennett & Jessani, 2011). The definition that is the most relevant to this research project is that knowledge translation is the process of sharing what we know about living a good life (Estey et al, 2009). This is a commonly held idea about what knowledge translation means in an Aboriginal context (Estey et al, 2009).

The intent of knowledge translation is generally to inform for the purpose of facilitating uptake of the information and mobilization into actions (Graham et al, 2006). To begin knowledge translation, it is important to identify what knowledge is to be translated and why you are translating it. This includes deciding what research findings to disseminate, and what key messages are relevant to the participants and the target audience (Tagalik, 2010). Further information needed to make this decision includes identifying who the knowledge should be disseminated to (Graham et al, 2006), how to disseminate the information to best reach these intended users (Graham et al, 2006), and ensuring that the meaning and value of the knowledge is maintained (Hanson & Smylie, 2006).

When deciding what knowledge is to be translated, it is important to consider that there are different types and sources of knowledge in research, and it is important to respect them all (Estey et al, 2009). Increasingly, research projects, specifically research projects undertaken with Aboriginal peoples, will include elements of Western scientific knowledge as well as traditional knowledge, and the use of both types of knowledge must be negotiated. The integration and exchange of information between different knowledge systems may be difficult as a result of different and sometimes conflicting cultural standpoints and values (Jack et al, 2010). To facilitate knowledge translation activities in any situation that incorporate more than one type of knowledge or worldview, cultural appropriateness should be used as a framework. Cultural appropriateness in knowledge translation activities is defined as the delivery of programs and strategies that are consistent with the communication styles, meaning system and social network of stakeholders (Tagalik, 2010). Maintaining a framework directed by cultural appropriateness is a method to ensure the proper respect and understanding for different perspectives, values, belief

and concerns is maintained in a research project, while ensuring the knowledge translation remains relevant (Jack et al, 2010).

The translation and exchange of traditional knowledge should be a relevant part of Aboriginal research projects, programs, and/or strategies. The importance of sharing traditional Indigenous knowledge to cultural continuity, language, identity, health and wellbeing has already been well described elsewhere in this literature review. Aboriginal knowledge generation processes are part of their cultural ways of knowing and holistic world views (Estey et al, 2009; Smylie et al, 2003). Greenwood (2005) proposes that traditional knowledge is passed down through generations using three sources; traditional teachings, new understandings, and empirical observation. Hanson & Smylie (2006) describe a similar process called transformed knowledge. Transformed knowledge is when new connections are made between elements of knowledge; this can sometimes bring together old and new knowledge to be transformed into new knowledge. Chandler & Lalonde (2003) characterize Indigenous knowledge as problem solving strategies that have evolved in Aboriginal communities since time immemorial. These problem solving strategies can be relevant in a modern context. The best way to help Aboriginal communities, therefore, may be to help them help themselves (Chandler & Lalonde, 2003) by assisting in strategies based in the strengths of Aboriginal culture that can access and use these problem solving strategies in current situations.

Different contexts require different knowledge translation strategies (Bennett & Jessani, 2011). For knowledge translation to be effective, understanding local and cultural knowledge systems (Hanson & Smylie, 2006) and tailoring to the needs of the participants and the intended audience is required (Graham et al, 2006). Effective knowledge translation also requires a demonstration of respect for the unique cultural, historical, and geographical and demographics

of a community or group of people. Specifically, this includes local understanding of health and wellness (Smylie et al, 2009) and local mechanisms for transferring knowledge, including knowledge creation, dissemination and utilization (Smylie et al, 2009). Cultural understandings and respect are necessary in order to develop viable solutions, as well as possible intervention strategies, for community issues (Smylie et al, 2009). Research that fails to take into consideration local needs, priorities, knowledge, understandings, and ways of sharing information will lack depth and understanding of the community (Smylie et al, 2009) and will not meaningfully address specific community concerns (Hanson & Smylie, 2006).

Adapting knowledge to a local context involves using the right tools to disseminate the information in a “clear, concise and user friendly format” (Graham et al, 2006, p. 19). For Aboriginal peoples these tools could include traditional, culturally relevant forms of knowledge translation including stories, songs, (Greenwood, 2005) legends, totems, tattoos and Elders as carriers and sharers of wisdom (Estey et al, 2010). It is suggested that traditional language is also a valuable tool in the transmission of traditional knowledge, and thus the Indigenous knowledge translation process. Greenwood (2005) states that, “one cannot understate the role of Indigenous languages in the preservation, restoration and manifestation of new Indigenous knowledge” (p. 554). Hanson & Smylie (2006) further explain that language is the embodiment of traditional knowledge and culture. Without traditional language, critical aspects of culture are lost (Hanson & Smylie, 2006).

An essential component in the knowledge translation and knowledge to action processes is monitoring and evaluating the success of the activities. If knowledge translation is undertaken for the purpose of stimulating actions, evaluation would entail looking at the use of the knowledge, if the participants and the intended audience has received the knowledge, and

importantly, is using the knowledge (Hanson & Smylie, 2006). Evaluation of knowledge translation includes measuring the uptake of the information by the intended users, use, and sustainability of the use (Graham et al, 2006). Some suggested methods of measuring knowledge translation and knowledge to action success include feedback through word of mouth and requests from intended users for follow-up information, as well as more formal evaluation such as assessment of sharing, dissemination and distribution work undertaken (Hanson & Smylie, 2006).

The literature on Aboriginal evaluation of knowledge translation is limited. Evaluation criteria in an Aboriginal context would follow the same principles as knowledge translation activities. That is, the criteria would need to be developed with the Aboriginal group to ensure it is contextually relevant and in keeping with cultural methods to evaluate the effectiveness of the dissemination strategies. There is a need for further research in this area in order to establish culturally appropriate methods for evaluation. Knowledge translation is a growing and evolving field, and more research needs to be done on evaluation of knowledge translation actions in an Aboriginal context.

In summary, knowledge translation activities are generally done for the purpose of improving understanding in the intended audience, with the intent that the group will use this information, and mobilize it into actions for benefit. For knowledge translation activities to be successful, it is important to incorporate the needs and priorities of the intended users, the context of the user's lives, and culturally relevant knowledge translation tools into the knowledge translation process. In an Aboriginal context, the steps remain the same, yet there is an added dimension of the need to incorporate the particular worldview and ways of knowing of the people involved. Finally, evaluation is needed to monitor the success and sustainability of the

translation activities, but a gap exists in Aboriginal evaluation of knowledge translation that requires further research.

Conclusion

What is apparent from surveying these many bodies of literature is that greater attention is needed to integrate the many themes present, and I hope the connections made in this thesis will contribute to addressing this gap. The connection between some of the themes have been well established by the literature, such as that between cultural continuity and the revitalization of culture and language as a means to achieve positive effects on the health and wellbeing of Aboriginal peoples. There is also strong support in the literature, especially as it pertains to Aboriginal persons, that health and wellbeing is a complex concept influenced by factors that are both external and internal to an individual. What needs further elaboration is the notion that all of the themes in this literature review are interconnected factors that influence the overall health and wellbeing of Aboriginal peoples. This includes the connection between risk perspectives, traditional ways of knowing, connection to the land and culture as social determinants of health and wellbeing. In the next chapter, further information is provided about the history of the TLFN, the factors and experiences that have both contributed to their modern lifestyle today, as well as further information about the body of research knowledge that provides a contextual background to this current master's research.

CHAPTER THREE: STUDY CONTEXT

Introduction

In this chapter, I provide a brief overview of the social and cultural history of the TLFN people. The first section of the chapter provides information about the people of TLFN, the geography of the TLFN traditional territory, and how the reserve of Takla Landing came to be. The second part provides an overview of external pressures that have influenced Takla Landing, the community and its people. These external pressures have forced social, cultural and economic change on the TLFN that have inadvertently or intentionally altered a way of living. The historical external pressures that have affected the TLFN include the fur trade, gold rush, federal and BC government's policies, and missionaries. More recently, the TLFN have experienced an influx of industrial activity into their traditional territory, first from forestry and railway, and more recently from mining interests intent on extracting mineral resources from the TLFN traditional territory.

This review of the TLFN's social and cultural history provides the context for my thesis research. I have written this history using multiple sources of data, including personal communications, information from the Carrier Sekani Tribal Council (CSTC) website and the TLFN's website, several published historical accounts of the interior region of BC such as Furniss (1993a; 1993b), Hall (1992), and Larsen (2006), and unpublished reports written about the TLFN from The International Human Rights Clinic (IHRC) of Harvard University (a summary of written sources about the TLFN is provided in Table 2). This study context is in no way inclusive of the rich and extensive history of the TLFN, but instead is intended to be an overview only. In keeping with this, the chapter also provides a summary of research projects the TLFN have been involved with in recent years and the reasons for their participation in these

projects. This information is important as these research projects provide the baseline information and basic research direction the TLFN are interested in, and this may provide the foundation or starting place for future research projects, programs and initiatives.

The People of Takla Lake First Nation

The TLFN are a First Nations band from the north central interior of British Columbia (BC). There are approximately 750 registered band members and approximately 160 of these live in the main reserve of Takla Landing, or the North Takla Lake # 7 (Takla Lake First Nation (TLFN), n.d.). The TLFN belong to the Dakelh-ne (TLFN, n.d.), also called the Carrier, the Dakelh-ne are the original inhabitants of the north central region of BC (Carrier Sekani Tribal Council (CSTC), 2007; Furniss, 1993a; 1993b) since time immemorial (CSTC, 2007). The TLFN is a member of the CSTC, along with seven other member nations from the interior of BC.

The people of TLFN are predominantly Dakelh, with some Sekani and Gitskan as well (Tobin et al, 2010). The traditional language is also called Dakelh (words in Dakelh are indicated by italics throughout this thesis), and in the traditional language Dakelh means people who “travel upon water” (CSTC, 2011), or “on water travel” (Hall, 1992) depending on what source you read. The word ‘ne’ means people. The Takla Lake First Nation were called *tatl’ah’t’een* or the “headwaters people” to indicate their location at the farthest end of Takla Lake (Tobin, 2009) and at the head of three major watersheds (International Human Rights Clinic (IHRC), 2010) the Fraser, Skeena and Omenica.

The Geography of the Traditional Territory of the Takla Lake First Nation

The traditional territory of the Dakelh-ne is twice the size of Vancouver Island (CSTC, 2011) and ranges from the Rocky Mountains in the east to the Coastal Mountains in the west,

and from the Chilcotin plateau in the south to Takla Lake in the north (Furniss, 1993a; 1993b).

The TLFN traditional territory is located at the north end of the Dakelh people's territory (CSTC, 2007) on the north central plateau of BC (see Figure 1 for a map of BC and the TLFN territory).

The traditional territory of the TLFN is 27, 250 square km (CSTC, 2007) and this territory is bordered by the Skeena Mountains and the Tshimsham territory to the northwest, Tsay Keh Dene (TKD) to the northeast, the Mackenzie River to the south east, and the Tl'azt'en Nation to the southwest. The TLFN territory (see Figure 2, a map of TLFN traditional territory) incorporates a diverse and resource rich landscape of mountains, lakes, rivers, and valleys. As Cope (1998) explains, Takla Lake is also part of the Stuart-Takla watershed, the most northern extent of the Fraser River watershed (Cope, 1998), the most important salmon bearing river in the world (CSTC, 2011).

The main settlement on the TLFN traditional territory is Takla Landing. Takla Landing was established by 1937 (Larsen, 2006) and the First Nations in the area were called the North Takla Band. Prior to the establishment of the reserve, the geographic location Takla Landing occupies was an overnight camping spot used by the inhabitants of the area, not a permanent settlement (Julie Jacques, personal communication). Before the reserve was established, the permanent settlement in the area was a village located on the shores of Lake Babine, approximately 135 km away (TLFN-2011-10) to the southwest.

In 1959, the BC government amalgamated another reserve with Takla Landing. The government chose to close the Fort Connelly reserve, located at Bear Lake on what is now the north end of TLFN traditional territory, and move the population down to Takla Landing. The Bear Lake location has been a First Nations village site since time immemorial (Thomas Patrick,

personal communication) and the population was comprised of Dakelh, Sekani and Gitskan people (Ministry of Attorney General, 2011). The Bear Lake people, as the Fort Connelly band was called, were merged with the mainly Dakelh-ne North Takla band to form the Takla Lake Indian Band (in 1959), and later renamed the Takla Lake First Nation (CSTC, 2007; TLFN, n.d.).

Takla Landing is a rural reserve located on the east side of Takla Lake, the 5th largest lake in BC (BC Parks, 2011). Takla Landing is accessible year round by logging roads (CSTC, 2007; TLFN, n.d.) and is 215 km west of the nearest serviceable town of Fort St. James, BC (approximately 2.5 hours drive when the roads are clear. As the majority of the drive is on unpaved logging roads, this drive time can be substantially longer due to seasonality/weather issues, i.e., mud or snow impeding travel on the gravel roads), and 365 km northwest of the larger urban centre of Prince George, BC (approximately 5.5 hours drive) (TLFN, n.d.). There are also several smaller settlements on the TLFN territory including Buckley House, which is inhabited year round by one extended family (personal communication, Margo French), and Bear Lake, currently inhabited part of the year (personal communication, Thomas Patrick). Germansen Landing and Manson Creek are non-First Nations settlements in the southeast of the TLFN traditional territory. Takla Landing's remote location and distance to nearest amenities denote that many residents of Takla Landing still rely in part on a traditional lifestyle that includes a strong connection to the land (IHRC, 2010; Tobin, 2009), and the consumption of traditional foods as an important part of overall diet (Tobin, 2009).

Traditional Land Use, Economy and Social Organization

The traditional economy of the TLFN before European contact was based on hunting, fishing, trapping and gathering. The authors Furniss (1993a), Klippenstein (1992) and Larsen

(2006) explain how most pre-contact communities of Dakelh-ne in the northern interior were relatively small. People would live in a village during the long, cold, snow-covered winters. They would break into smaller groups and travel in the spring, summer and fall to different areas of the land to hunt, fish, trap and gather certain resources as they came into season. At certain harvest times, if resources were abundant, larger groups of people would meet in order to camp, harvest, and process the resources together.

Traditional land use and concepts of territoriality were flexible, based on dispersal and forming or re-forming of bands. Bands were several groups of extended family that harvested resources in the same general area (Larsen, 2006). All members of the band had rights to collect resources anywhere on the territory, but each family had special rights to their *Keyoh*, defined as an area of land that the family had stewardship over, and used repeatedly for hunting and gathering and provided them with their economic livelihood (CSTC, 2007). Non-band members wishing to access or travel through another's territory or *Keyoh* were expected to ask and receive permission first (Larsen, 2006; Furniss, 1993a). Hall (1992) writes in her book *The Carrier, My People* that there was no poaching on others trap lines, and nor was there indiscriminate killing of animals.

Band rights to a territory were proven by their ongoing use of the land and resources, and also reinforced through the *Bal'hat* system. *Bal'hat* means "by many people" (CSTC, 2011) and was a form of territorial governance that operated by using a system of "feasting, honorary crest affiliation and clan inheritance" (Larsen, 2006, p. 316) to organize land use, justice and traditions (CSTC, 2011). Each extended family had a respected member that represented and spoke for them during *Bal'hats* (CSTC, 2011). During *Bal'hats*, issues would be discussed amongst these family leaders and respected Elders (CSTC, 2011). The establishment of territoriality was

asserted through stories told at *Bal'hat* feasts, and also through the names given to places on the territory (Larsen, 2006).

Socially, the TLFN were organized in accordance to a matrilineal clan system (Morice, 1893), with all members of the clan related through their mothers. The TLFN's four clans are *Lohjuboo* (bear/wolf), *Lesillyoo* (frog), *Lhts'umusyoo* (beaver) and *Gil Lan T'en* (caribou) (Tobin et al, 2009). This clan system, as well as the Bal'hats system, is still an important part of the social organization of the TLFN, and the personal and family identities of its members.

In TLFN and other northern Dakelh cultures, there are several hereditary chiefs in each clan, and the hereditary chief of a *Keyoh* has a responsibility to be a guardian of the land. This system of hereditary chiefs exists today, as does their guardianship and authority over their *Keyoh* (CSTC, 2007). Guardianship means ensuring resource extraction and traditional activities are conducted sustainably to maintain balance in the environment. This is accomplished by environmental monitoring, observing the rise and decline of populations of different species, and taking measures for conservation when necessary. Conservation activities include leaving areas fallow to allow time for replenishment. Hall (1992) explains that “the head of the family decided which part of the trap line to use” (p. 25), how many animals to take, and which animals should be taken. This information is also present in ethnographic and social articles, books and documents written in the late 1800s by Father Adrien- Gabriel Morice. Father Morice was a Roman Catholic Missionary who was based in Fort St. James (Ministry of the Attorney General, 2011), and travelled and worked extensively in the northern Dakelh region, including in the TLFN territory and with the TLFN people. Father Morice (1889) wrote that the hereditary chief's power over people was limited, based more on persuasion than any obligation, “except when it was a question of territorial rights” (p. 143.). The hereditary chief's power over land and

resources use was absolute (Morice, 1889), and their ability to successfully manage the territory awarded them prestige (Ministry of the Attorney General, 2011). Father Morice (1889) and ethnographer Diamond Jenness (1943), whose research was conducted among the Wet'suwet'en, both state that it was socially acceptable for hereditary chiefs to deal with anyone who might disregard their decisions over land and resources, or took from the land without permission, with hostility, violence and even death.

Guardianship or stewardship of the land is explained as having always been directed by the belief that the people are an integral part of the environment and it is their responsibility to maintain and enhance the environment (CSTC, 2007). Many First Nations, including the TLFN, have traditionally held a more holistic idea of the world. Arquette et al (2002) and Jardine et al (2009) state that First Nations conceptualize the world around them holistically, based on notions that everything is interrelated. As a result, there is a deeply held belief amongst the members of the TLFN that individuals should live in balance both spiritually and physically with nature.

Influences on Culture and Traditional Economy

European and First Nations perceptions about the environment have directly contrasted since the time of initial European contact. As Larsen (2006) explains, colonizing Europeans believed that what is now BC was a vast, empty wilderness with seemingly endless possibilities for development and economic gain. The colonial governments of Canada and BC consistently viewed the environment in purely economic terms with goals for developing and extracting resources for monetary benefit. This view conflicted with the First Nations dynamic view of the environment as both a material and symbolic space that provided social, cultural and economic value, ideas (Harris, 2002; Larsen, 2006). More fundamentally, First Nations throughout most of the interior of BC, including the TLFN, have held that their rights to traditional territory were

never ceded, while federal and provincial governments have operated on the assumption that First Nations title was ceded when BC joined confederation in 1871 (Harris, 2002). These conflicting world views resulted in First Nations territories becoming contested spaces where struggles continue to ensue today over the social, cultural and economic production of the environment (Larsen, 2006).

The Fur Trade

The first contact the TLFN had with Europeans was through the fur trade, which began in the interior of BC in the early 1800s (Klippenstein, 1992; Larsen, 2006). In 1806, employees of the Northwest Company arrived at Stuart Lake, south of Takla Lake, to explore possible locations for a fur trading post, and Fort St. James was established (Union of BC Indian Chiefs (UBCIC), n.d.). The fur trading fort was built and began supplying the First Nations in the area with trade goods such as metal goods, blankets, cloth, food and tobacco in exchange for fur pelts (Hall, 1992), traditional food, information and assistance in times of stress (Furniss, 1993a). The fur trade pulled the First Nations into the business of trapping and trading furs in exchange for European trade goods (Klippenstein, 1992).

The early fur trade was a mutually beneficial exchange between Europeans and First Nations, but began to have had an influence on First Nations traditional lifestyle. The demand for fur and growing reliance on trade goods influenced the TLFN and other First Nation bands to alter their seasonal rounds of resource extraction and spend more time hunting and trapping species. Each hide brought a different price; the most coveted was the beaver hide (Hall, 1992; Klippenstein, 1992). Beaver was traditionally hunted twice a year in the spring and fall but the

fur trade company pushed the First Nations to hunt the beaver in the winter when its fur coat was the thickest and most desirable by clothiers in Europe (Klippenstein, 1992).

The fur trade employees cultivated relationships with 'Principal Indians' to better organize the collection of furs (Larsen, 2006), and try to develop loyalty in order to secure the First Nations trade against their competition (Furniss, 1993a). Fur traders developed a special relationship with certain male heads of families and awarded these men with favourable trade goods and other incentives. Larsen (2006) and Furniss (1993a) explain how over several decades the strategies undertaken by the fur trade employees influenced the way people accessed the land and resources. Families began to build distinct family hunting areas over land previously considered communal to the whole band, and exert rights to specific areas (Furniss, 1993a; Larsen, 2006). There were also increased instances of poaching on others hunting grounds (Ministry of the Attorney General, 2011)

Before European contact Dekalh bands had extensive trading relationships with neighbouring bands already. The TLFN had a trade agreement with the coastal First Nation group the Tsimshian to exchange food and materials (Klippenstein, 1992). TLFN traditional territory borders that of the Tsimshian First Nation to the northeast. Klippenstein (1992) explains there was already a well-established trade route from Stuart Lake up through Bear Lake to the Tsimshian before the Northwest Company arrived in the area. The Tsimshian had a trade monopoly over the Skeena River area and an established trade relationship with the Hudson Bay Company, the Northwest Companies rivals. The Northwest Company had fur trade posts at Prince George, Fort St. James, Fort Fraser, and Lake Babine. In an attempt to disrupt the trade with the Tsimshian, the Northwest Company built the Fort Connelly fur trading post in 1826 on

the TLFN territory at Bear Lake, and later another fur trading post at Takla Landing (Klippenstein, 1992).

The Gold Rush

In 1858, the Fraser River gold rush began in BC, bringing thousands of people into the interior (UBCIC, n.d.). In 1869, gold was discovered (Hall, 1992) in the Omineca River on the TLFN territory (Klippenstein, 1992). The discovery of gold later expanded on the TLFN territory to include the Germansen area, including Vital Creek (Hall, 1992) and Silver Creek. For two years, a pack train of mules that brought up the supplies the miners required travelled up the lakeshore from Fort St. James through TLFN territory to Manson and Tom Creek. After 1872, the gold rush ended in the area when gold was discovered north, out of the TLFN territory, up the Skeena River to the Cassiar Mountains (Klippenstein, 1992).

The influx of gold miners was a major challenge to TLFN's ideas of land ownership, specifically when some of the gold seekers chose to stay and settle in the area. Germansen Landing and Manson became the first permanent non-First Nation settlements on TLFN traditional territory (Klippenstein, 1992). Modern hydraulic gold mining operations continued to operate in the Omineca region throughout the 1900s (Stanwell-Fletcher, 2006).

Colonial Governments and Missionaries

Non-First Nations continued to enter the TLFN area after the gold rush, and resource industries began to develop. First Nations also experienced several devastating events that undermined their traditional lifestyle, including disease epidemics (Morice, 1889), and the end of the fur trade. The colonial government's view of First Nations land ownership also changed (Harris, 2002). During the fur trade, First Nations were vital for the collection of valuable furs,

and their traditional system of land use and management was accepted. This changed as the fur trade ended and BC joined confederation in 1871. The focus shifted to nation building, including European settlement and the development of new economies such as those based on agriculture and natural resources (Knight, 1996). As European settlers migrated into BC, and industries such as forestry and mining coveted land, First Nations traditional use of the land was increasingly seen as an obstacle to progress. The federal and provincial governments alike wanted First Nations peoples out of the way, and a series of colonial government laws and policies were enacted with the aim of removing First Nations from their traditional lands, and assimilating them into dominant Western culture (Harris, 2002).

The influence of dominant Western culture on the First Nations traditional lifestyle was exacerbated greatly by the well documented disease epidemics that swept through the First Nations populations of BC, including TLFN, from the mid-1800s to 1919 (CSTC, 2011). The Indigenous populations of the Americas were devastated by the diseases brought to the continents through colonization. It is understood that the total Indigenous population of the Americas declined by as much as 90% during the colonial period (Wadden, 2008) and most of the deaths were as a result of the disease epidemics (Harris, 2002; Wadden, 2008). The large number of First Nations who died as a result of these epidemics severely undermined the socio-economic system of the First Nations. Other factors that undermined the First Nations economy included the effective ending of the fur trade prior to the onset of World War I (Furniss, 1993a; Klippenstein, 1992).

In 1871, the province of BC joined federal confederation and this action changed the legal position of the First Nations in the province. The government fundamentally altered their view of First Nation land ownership. First Nations land became the property of the Crown and

the First Nations people became the responsibility of the federal government (Klippenstein, 1992). The Canadian government took the position that First Nations rights and title over the land had been extinguished with European contact (CSTC, 2011). The government did not want the First Nations of Canada to act as barriers to the colonial settlement of BC, or the extraction of resources from the land (Brody, 2004); instead they wanted the First Nations assimilated into dominant Western culture (Wotherspoon & Satzewich, 2000). The government's plan to accomplish this included a systematically imposed series of government laws and policies that further undermined First Nations traditional economy and culture, and their legal status in the country. These laws and policies included a ban on fishing weirs, the *Fisheries Act* and *Games Act* that imposed fishing and hunting restrictions on fish and certain animals (Furniss, 1993a), and outlawing the First Nations *Bah'lats* system of government (CSTC, 2011; Furniss, 1993). It was made illegal for First Nations to organize to discuss land claims, or for First Nations organizations to spend money on title claims (CSTC, 2011). First Nations could also not legally vote (CSTC, 2011).

During the 1920s and 1930s, the BC government enforced a system of registered trap lines (Brody, 2004) that interfered with the TLFN's *Keyoh* system of land use and management. CSTC (2007) emphasizes that trap lines are not *Keyoh*'s. There can be several trap lines in a *Keyoh*, and *Keyoh*'s cannot be bought or sold as trap lines can (CSTC, 2007). Brody (2004), Klippenstein (1992) and Larsen (2006) wrote about how these changes brought by the colonizing Europeans culminated in severe restrictions and hardships on the First Nations traditional lifestyle of hunting, fishing, trapping and gathering. First Nations people, including members of TLFN were increasingly pulled into wage labour (Brody, 2004; Klippenstein, 1992; Larsen,

2006). By the late 1930s, First Nations had also been forced on to reserve land that totalled only 3% of the total land mass of BC (Brody, 2004; Klippenstein, 1992).

The Roman Catholic Church has had a strong influence with the TLFN since Roman Catholic missionaries, such as Father Morice, came to the area beginning in the late 1800s to work with and convert the First Nations to Catholicism. The adoption of Roman Catholic beliefs occurred, albeit the worship was always infused with some of the traditional held spiritual beliefs and customs of the TLFN. This syncretism is an important example of the dynamic nature of culture. Catholicism was more or less imposed on the TLFN, and was intended by those imposing it, the missionaries and government officials, to supersede the traditionally held spiritual beliefs of the TLFN. Instead, the TLFN adapted their spiritual beliefs to incorporate both, and the Church became an important part of community life, and an important focal point for community unity.

Finally, the development and enforcement of residential schools, a separate school system for First Nations children, was developed to assimilate the First Nations children to Western culture. Residential schools had a devastating effect on First Nations people and culture, as did the entirety of the government's policies of assimilation (Wotherspoon & Satzewish, 2000). At residential school, children were separated from their family, forbidden to speak their traditional language or practice any part of their culture (NCCAH, 2010), and harshly punished for not following these, or any other rule (Harris, 2002). Children from TLFN were sent to Lejac Residential School, which operated from 1922-1976 (CSTC, 2011). Lejac Residential School was located at Fraser Lake, BC, a distance of over 300 km from Takla Landing.

The Emergence and Growth of Industrial Activity in the TLFN Territory

In the decades following the end of World War II, the BC government embarked on a massive expansion of the resource industries (Larsen, 2006). The goal of this economic policy was to open the interior and the north of the province to industry. Larsen (2006) and others argue that the BC government believed that First Nations culture was a thing of the past, that First Nations claims to their traditional territory were defunct, replaced, or soon to be replaced, by assimilated into the dominant Western culture. Therefore, the government and industrialists felt free to consider the interior of BC open for settlement and development (Furniss, 1993a; Larsen, 2006). Forestry operations specifically, and to a lesser extent mining operations, pushed into the TLFN traditional territory to access its timber and mineral reserves. These activities caused further economic and social changes to the TLFN lifestyle.

Industrial development in the TLFN territory began in the 1950s, aided by the *Forest Act* (Larsen, 2006) and the construction of railway lines into the interior (Rutherford & Tobin, 2009; Steidle, 2009). Under the *Forest Act*, the government offered long term leases of forested lands to large companies. Much of this land contained trap lines registered in the 1920s and 1930s by First Nations, but these areas were still considered Crown land and companies were allowed to harvest timber as they saw fit (Larsen, 2006). The British Columbia Railway Company (BC Rail) also constructing railway lines into the interior of BC for the purpose of opening the area up to industry. In 1974, the Takla Extension of the BC Railway line was completed (Steidle, 2009). The Takla Extension railway line ran north through the length of the TLFN territory and included five BC Rail logging camps. These BC Rail logging camps were located along the TLFN territory at Leo Creek, Lovell Cove, Buckley House, Driftwood, and Bear Lake (see Figure 2) (Steidle, 2009). The Silvacan creosote treatment plant and saw mill was also located at

Lovell Cove on the TLFN territory. These industries created some employment opportunities for TLFN members, but the jobs were often male dominated and seasonal (Steidle, 2009).

Mining in the TLFN territory included copper, zinc, lead, gold, silver, and mercury (IHRC, 2010). There was employment for members of TLFN at these mines, though increasingly mining employees were hired and brought in from far away (Place & Hanlon, 2011). Millions of dollars of minerals were extracted and removed from TLFN traditional territory with little benefit going to the TLFN. One TLFN member likened this extraction of minerals from the TLFN territory as like robbing someone's bank (IHRC, 2010). Today there are many abandoned an historic mines on the TLFN territory (IHRC, 2010). The TLFN were left with the long term effects of the environmentally detrimental industrial practices on their territory without receiving any of the monetary rewards (CSTC, 2007; Place & Hanlon, 2011).

This extensive industrial development interfered with the TLFN's traditional economy and further marginalized them from the land. Members of TLFN were not consulted as industrial development destroyed family Keyohs (Rutherford & Tobin, 2009), polluted soil and water, and disrupted areas of traditional land use. This includes destroyed harvest sites, hunting sites, campsites, habitation sites, ceremonial and burial sites, and trails (Rutherford & Tobin, 2009). Also affected were animal migration routes, feeding sites, mating sites, and bird nesting sites (Rutherford & Tobin, 2009). Industrial activity also has a devastating effect on fish as industrial waste and forest activity such as yarding, road building and road use significantly altered water bodies and negatively impacted fish habitats (Beaudry, 1998).

Industrial development had detrimental and extensive social effects on the members of TLFN also. The introduction of wage labour in the 1950s was identified by many members of

the community as a pivotal point when change began to occur in the community. Before wage labour, many Elders discussed how they made a living from the bush with their family, they were taught self-reliance, how to hunt and trap and take care of themselves by their parents and grandparents. Sawmills, and the wage labour economy, disrupted the strength and unity of the community (TL-2011-05). By the 1950s and 1960s First Nations participation in wage labour had increased substantially. When people started working for wages the traditional rounds of resource extraction, of hunting, trapping and gathering, were interrupted, the social hierarchy and traditional system of governance controlled by the Elders and the hereditary chiefs was undermined, and alcohol and drugs became a problem. This has culminated in many of the detrimental issues identified as existing in the TLFN community today.

The Takla Lake First Nation's Recent Research Projects

Against this historical backdrop, concerns in the community about the effects of industrial activity on the wellbeing of the TLFN and its territory have become paramount in recent years. As a result of these concerns, there has been much interest by the TLFN in engaging in environmental health research. The intent has been to build community capacity and gather evidence about the impacts of industrial activity on the traditional territory. Several community based research projects have recently been undertaken with and for the community of TLFN to address community member's concerns, specifically about environmental contamination (An overview of past TLFN research projects is provided in Table 1). These projects include qualitative interviews with community members about their concerns about environmental contamination as a result of industrial activity, as well as quantitative samples of soil, water, plants and animals collected for contaminant analysis (Rutherford & Tobin, 2009). The purpose of much of the research was to gather baseline data on the effects of industrial

activity on the environment and the people. Concerns about environmental contamination of the environment pose particular risk to the TLFN (Rutherford & Tobin, 2009) as they, along with many First Nations, rely on the land for traditional resources and activities. Having information about the health and wellbeing of the environment helps dispels concerns existing in the community about the environment. Having information about the health of the environment also facilitates a better position with which to make decisions about the future of the territory and negotiate with industry about current and future industrial activity (Kwiatkowski et al, 2009).

The TLFN still depend on a diet rich in traditional foods. In fact, recent community research initiatives have concluded that 100% of the inhabitants of Takla Landing still eat traditional food in their diet (Parkes, Shubair & Tobin, 2011; Rutherford & Tobin, 2009). This is evidence that the TLFN's cultural land use practices have remained strong despite the devastation and attempts at assimilation to Western culture brought since European contact (Rutherford & Tobin, 2009). Recent community research initiatives have also emphasized the important connection for the TLFN between physical and social health and wellbeing and the environment. Information collected for the TLFN for the *Healthy Communities: Defining Our Future Project* (Parkes et al, 2011) concluded that engaging in traditional activities, including acquiring and consuming traditional foods, is an important part of overall health, wellbeing, culture and personal identity. The project also reported that members of TLFN stated that eating traditional food makes a person feel healthy overall. Correspondingly, not eating enough traditional food or eating too much market food results in general ill health as well as increased susceptibility to sickness and disease. Further, the project reported that engaging in traditional activities also keeps a person healthy and was identified as an important part of personal identity.

Finally, cultural transmission of traditional activities is an important part of family bonding and cohesion (Parkes et al, 2011).

There is presently a renewed worldwide interest in mineral extraction and energy, and this has increased interest from industry on mining the natural resources of the TLFN traditional territory. The TLFN continues to fight to establish their rights and agency over their territory, to demand meaningful consultation in resource development on their land, and to demand jobs for TLFN members in these industries (Place & Hanlon, 2011). There is growing emphasis worldwide to incorporate First Nations' perspectives and concern for the environment in the industrial development process so as to ensure the health and wellbeing of the environment, and First Nations' continued access to traditional activities (Place & Hanlon, 2011).

There are many other challenges that currently face and affect the TLFN outside of the issues they have addressed in recent research projects. These further issues include striving to recover physically, mentally, spiritually and culturally from the pressures and lifestyle changes that have been brought about since European contact in general, and the devastating impacts of residential schooling and other overt acts of colonialism. In Canada, the results of these colonial pressures are devastatingly obvious in the health disparities between Aboriginal and non-Aboriginal peoples (de Leeuw, Maurice, Holyk, Greenwood & Adam, 2012). Aboriginal peoples are disproportionately affected by low socio-economic status, inequalities, poor health outcomes, chronic disease (Earle, 2011b), substance abuse (Greenwood, 2005), violence (Earle, 2011b; Wadden, 2008), and youth suicide (Chandler & Lalonde, 2003; 2008; Hallet et al, 2007). The members of the TLFN have not been immune to experiencing such detrimental issues. As with many Aboriginal groups, the TLFN are dealing with many concerns, many of which are a direct

result of their past history, and are striving to increase individual and community health and wellbeing.

Conclusion

An important component of any research undertaken with a specific group should be to understand the history and culture of the people you are engaging with. In this thesis research, this involves not only learning about the TLFN's traditional culture and history, but also changing colonial practices and the pressures, influences, and changes to the lifestyle and culture that result from an ongoing colonial relationship. The social, cultural and political and economic systems of the TLFN were all affected by the policies, laws and actions of the BC and Federal Canadian Governments, as well as by the influences brought by wage labour and the introduction and growth of industrial activity in the interior of BC. The recent research projects TLFN has engaged in were undertaken to investigate the results of this industrial activity on the TLFN's traditional territory. In turn, the choice of research topic for this master's research was a continuation of these research projects. This "bigger picture" is necessary to understand decisions about research methodology, design, data collection, and analysis. In the following chapter, these components of the thesis research are discussed in greater detail.

CHAPTER FOUR: METHODOLOGY

Introduction

The TLFN have engaged in research projects for many years, and community leaders have been very careful about the kinds of research they have agreed to allow in their community. To ensure this thesis research was acceptable to members of the TLFN, a post-colonial perspective was adopted, enacted by the methodology of participatory research and informed by the concept of appropriate engagement. The research undertaken was qualitative, based on focus groups conducted for the purpose of collecting data intended to develop research conclusions and recommendations for future actions. In this chapter, a description of the thesis methodology, data collection, methods, analysis, and the ethical considerations of cultural appropriateness, rigour and confidentiality are presented.

Methodology

I incorporated a post-colonial perspective with the methodological approach of participatory research to design this thesis research. A post-colonial perspective acknowledges that the recent history of the TLFN, and the history of all of Canada, is underpinned by colonialism, and that the impacts of colonialism are still present (Smith, 1999). That is, the impacts of colonialism are not something simply part of the past, but indeed continue to be articulated in social relations and experiences of the present (de Leeuw, Cameron, Greenwood, 2012).

Today, research with the Indigenous peoples is overshadowed by the legacy of this past and the legacy of research being done *on* rather than *with* (Castleden, Mulrennan & Godlewska, 2012) or *by* Indigenous peoples (de Leeuw et al, 2012). Using a post-colonial approach does not ensure that Indigenous ways of knowing, concerns and priorities are included in the research

(Smith, 1999); research can still be developed without being inclusive of Indigenous perspectives (Castleden et al, 2012) and ways of knowing. For this reason I have also designed this research in a participatory research methodology.

I believe participatory research, specifically when informed by appropriate engagement, is an appropriate approach for addressing and meeting community issues and needs, and ensuring the priorities, concerns and ways of knowing of the community remain at the forefront of the research (St. Denis, 1992). Dickson & Green (2001) argue that participatory research is the best way to ensure the experiences of marginalized, rural, and Aboriginal communities are represented accurately in research. Likewise, participatory research is regarded to be an ideal way to contextualize the research, and better understand the specifics of a rural research community (Markey, Halseth & Manson, 2009; Smylie et al, 2009) that may include geographic isolation and cultural difference (Smylie et al, 2009) such as my research area of Takla Landing.

Participatory research facilitates a collaborative relationship between researcher and participants and a mutual exchange of knowledge (Brush et al, 2011; Minore et al, 2004) and co-learning (Minkler, 2005). Through collaboration, partners do not just exchange resources; they combine individual perspectives, resources and skills to create something new and valuable (Minkler, 2005). Participatory research can be a good methodology to enable communities to use knowledge to develop programs appropriate to their community, and to integrate cultural wisdom with academic knowledge (St Denis, 1992). Lesser & Oscós-Sánchez (2007) state, that adopting a participatory approach can increase the accuracy, cultural relevance and effectiveness of the research results. Overall, participatory research is a methodology that helps to enable the research to remain culturally appropriate (Brush et al, 2011).

An additional step I took to ensure my research remained culturally appropriate was to follow the principles of appropriate engagement (Tobin et al, 2009). That is, following the principles of appropriate engagement enhances a participatory research project by adding extra dimensions of respect and understanding. This is accomplished by learning about the history and culture of the TLFN community, as well as to acknowledge the strengths of the community and its culture (Tobin et al, 2010), and respect the cultural resilience of the community (Castleden et al, 2012; Tobin et al, 2010). Following the principles of appropriate engagement was an essential part of my research approach, which was to work in partnership with the TLFN and maintain the community's perspectives and traditional ways of knowing at the forefront of the research (Tobin et al, 2010).

There were many steps in this thesis research to ensure that TLFN perspectives were upheld, and that reflected the intent of appropriate engagement. To begin with, I have a pre-existing research relationship established with the TLFN band. I have been employed by the TLFN band on three separate research projects starting from 2008, and consider this research a continuation of that relationship. I also did not begin any part of my research before I received a letter of support signed by the Chief of TLFN (see Appendix 1). After receiving this approval, I developed the research and data collection questions, but they were vetted by my supervisor, graduate committee, and key members of the TLFN community to ensure cultural sensitivity, appropriateness and benefit to the community. Additionally, at the initial community meeting where I introduced the research, several community members provided feedback on my thesis objectives and research questions. I incorporated this feedback into my research design. I also hired a research assistant from the TLFN community to assist me with organizing and facilitating the focus groups. This was done for both practical reasons, and to help me ensure that I

undertook my research activities with the proper respect for the TLFN community. This project included participant checking at the data analysis stage. I provided each participant with a verbatim transcript of the focus group they participated in to ensure that the information shared was accurately interpreted. I also provided each participant with a transcript that only contained their individual contributions to the focus group, and conversations they participated in, for convenience. I presented the preliminary results of the project as part of an all-day community meeting in Takla Landing, and distributed a 3-page newsletter summarizing the project and the preliminary results. I also visited some participants in their home who choose not to attend the community meeting. During the community presentation, the community members were given the opportunity to provide input, feedback, clarification, and identification of any gaps in the information. Importantly, they also provided verification of research results. At this time, I was also able to receive input from community members who had not attended my focus groups, but who had information they wanted to share.

Ethical Considerations

The ethical considerations of research are meant to be safeguards to ensure the safety and protection of the research participants and the researcher. Ethical considerations are intended to ensure that all aspects of research will remain transparent, respectful and honest, and that the data will be collected and used only for the stated and agreed upon purposes. More importantly, ethical considerations are intended to ensure that research is consistent with the expectations of all involved. The first ethical consideration I undertook was to obtain a letter of support signed by the Chief of TLFN, as mentioned in the previous paragraph concerning appropriate engagement (see Appendix 1). After this signed letter of support was received in March 2011, I applied for ethical approval from the UNBC research ethics board, which was granted in

September 2011 (see Appendix II). I also presented my proposed project at a community meeting in Takla Landing in June 2011, and asked for the community's approval, input and support. The attendees at the community meeting provided approval for the project and offered some valuable input into my thesis activities and data collection questions tools.

Before data collection began, I read through the information and consent form with the research participant. Every participant signed an information and consent form. I kept each participant's identity anonymous. The information provided was used to conduct the research, but the exact information shared by each participant has been kept anonymous. As Clifford & Valentine (2005) explain, it is important to specify to participants that confidentiality cannot be guaranteed in a focus group as a result of the group setting. It cannot be promised that the other participants will not speak about what was said in the focus group to others. I explained this in the information and consent form to the participants (Clifford & Valentine, 2005).

Data Collection

My research involved collecting primary and secondary qualitative data. It is important to acknowledge that this thesis includes the collection of two different types of data: Primary data in the form of new research data from Elder and adult participants and secondary data from information collected in past research, and a literature review of key concepts. These two types of primary and secondary data are valuable in their own right. My task during the data analysis process was to adequately synthesize the data to address my research questions. Primary data were collected through means of focus group interviews and informal conversations with TLFN community members. I recorded my thoughts and opinions on the data collected in a reflective field journal during my time in the community, including any ideas I had about important points or themes that had emerged. Secondary data were collected through document analysis of final

reports from previous research collected, the integration of past data with primary data collected, internet searches and review of literature about the TLFN (an overview of written sources referring to the TLFN is provided in Table 2), and a literature review of key terms and ideas.

The criteria I used to search for articles for the literature review included those focused on Aboriginal issues, and preferably based in the interior and north of BC, although I also used sources focused on other places in Canada. To a lesser extent, I also used articles based in America and Australia. I began the literature review by analyzing published articles about risk perception, analysis, and the EIA process, specifically related to Aboriginal peoples. The purpose of this review was to understand the TLFN's motivations for undertaking previous research projects that dealt with environmental health. Next, I reviewed literature in an Aboriginal context on knowledge translation and traditional ways of knowing. From this review, my interest turned to exploring the importance of Aboriginal culture, including cultural continuity, traditional language, individual and group identity, and sense of and connection to place. These were subjects that I previously knew little about.

Undertaking this literature review enabled me to better understand, with more clarity and depth, the results and conclusions that emerged from this research. Particularly, I gained a better understanding of the importance of Aboriginal traditional ways of knowing and culture in knowledge translation strategies. The information I learned from undertaking this literature review helped me realize the benefits of positive approaches based in the strength of Aboriginal traditional culture and ways of knowing for addressing many issues, including health and wellbeing.

To collect my primary data, I conducted two focus groups in the community of Takla Landing in October 2011. Kitzinger & Barbour (1999) explain that focus groups are a group discussion to explore specific issues (Kitzinger & Barbour, 1999). I chose to use focus groups to conduct my data collection because, as Goss (1996b) and Cameron (2005) explain, this method facilitates a dynamic interaction between participants as they present and discuss their own understandings, points of view (Cameron, 2005) experiences, values (Goss, 1996b) opinions, and concerns (Hopkins, 2007). Through this interaction, existing knowledge is uncovered and new knowledge can be produced that creates an in-depth understanding of issues discussed (Cameron, 2005). A final reason for choosing focus groups is that these are an effective way to gather the type of data that I wanted for my thesis objectives. As Goss (1996a) explains, focus groups can facilitate gathering the histories and collective experiences of a community, and provide insight into shared community concerns (Goss, 1996a).

The first focus group was held with Elders in Takla Landing as this is in keeping with the cultural norm in Takla Landing to speak to the Elders first. I asked the Elders certain questions that were not asked of the second focus group. An objective for the first focus group only was to discuss some of the history of the TLFN, and when and how Elders first noticed major changes in the community. Understanding the history of Takla Landing and how it has changed over time is important to contextualize the issues and concerns that members of TLFN feel are important now. I felt it was important and appropriate that the Elders had the opportunity to explain these changes, their thoughts and opinions on why these changes have occurred, and what they believe the results have been of these changes on the TLFN community.

I had originally planned to have two focus groups with Elders for the purpose of dividing up the research questions and discussion. This plan was altered for three reasons. The first was

that one of the Elders informed me after reading the focus group questions I had prepared that the Elders had already “talked about that,” referring to my questions about the history and social formation of Takla Landing. I later found out that, some years previously, the Elders had gotten together and discussed the history of Takla Landing with one of the band councillors for a report. As this subject had already been discussed, the Elders would not see the point in discussing it again. This was a lesson learned as, although my research questions had been vetted by my thesis committee and key members of the TLFN community, they had not been vetted by any Elders who could have provided me with this pertinent information. In future research projects I should make sure data collection questions are vetted well ahead of time by a more inclusive sample of people.

The second reason for altering the number of focus groups was Elders were only interested in discussing some of my focus group questions, not all of them. The Elders focus group conversation focused on the priority areas they identified and wanted to discuss. These priority areas included: how the community had changed over time, the problems Elders believed existed in the community now, and ideas they had to help fix these problems. This was an important example of how the purpose of this research is to reflect the priorities of the participants, not my priority areas as a researcher, and a lesson learned that I will be mindful of in future research.

The final reason for altering my initial plan and only holding one focus group with Elders was that all four of my research questions were discussed in the first focus group. Four of the participants from the Elders focus group decided to attend the second focus group that I was conducting with adults, so there was an opportunity to follow up with some Elders, if needed. For this reason, I decided that holding a second focus group with Elders was unnecessary.

Both the Elders and the adult focus groups were held at the potlatch house in Takla Landing and each took one hour or less to complete. The literature is inconsistent on the desired number of focus group participants (Cameron, 2005; Hopkins, 2007). Desired number is dependent on the study material, and other factors, such as social group dynamics. My aim was to have between four and eight participants at each focus group of mixed gender. I had almost an equal number of male and female participants in both focus groups. In practice, there were nine participants at the first focus group with the Elders, and twelve participants at the second focus group comprised of Elders and adults. The focus group discussions went well, and they were not impeded in any way by the larger size of the group.

A stipend of \$30 was paid to each participant as reimbursement. I also gave each participant a thank you card to express my gratitude further for providing their time and information. Additionally, I gave each Elder who participated in the first focus group a \$30 stipend, and a gift. The gift was a culturally relevant way to thank Elders further for sharing their time and knowledge with me.

Adult participants were recruited by purposive sampling. Purposive sampling is an attempt to invite interested participants who have knowledge about the subject matter that is being discussed. As mentioned earlier, I hired a research assistant from the community. I had previously received some recommendations from key members of the TLFN community on who I should invite to the focus group. The invitations were based on my discussions with key members of the TLFN community on who would be interested in participating, and was also influenced by who was in Takla Landing at the time and who was available to meet at the scheduled time. I discussed these recommendations with the research assistant. The research assistant also provided her input on possible participants she felt would be interested in the

subject matter, and would be available to attend the focus group. The research assistant then either telephoned or personally invited each participant we had together, decided to invite to attend the focus group. Many households in Takla Landing do not have telephones, so it was imperative that the research assistant was in the community and able to go to the homes in person to issue invitations. Cameron (2005) explains that the advantage of purposive sampling is that the knowledgeable participants allow for an in-depth analysis of the issues being studied. The disadvantage of purposive sampling is that the results are biased and cannot be generalized to be indicative of the larger community (Cameron, 2005).

Every Elder in Takla Landing was invited to participate in the focus group. As mentioned above, my thesis research was presented to the Elders during the initial community meeting to introduce the project in June 2011. Closer to the time of the focus groups, the research assistant personally invited every Elder that resides in Takla Landing to participate in the focus groups.

The focus group questions were semi structured to facilitate dialogue (see Appendix III for a list of focus group questions). I began the focus group with an overview of the project. I had eight prepared questions and some additional prompts, but was willing to allow the conversation to go its own way as long as the general theme was followed. I had no experience in moderating focus groups, so shortly before travelling to Takla Landing to conduct my data collection, I had a meeting with the research manager from the Rural and Small Town Studies Program at UNBC about how to conduct successful focus groups. This meeting was informative and helpful, and provided some valuable tips on running focus groups.

The focus groups were video recorded with the participants consent. Clifford & Valentine (2005) and Dunn (2005) explain that video recording focus groups ensures all of the information

discussed is documented, content is recorded accurately, and that the information contributed by each participant is captured. Another reason to make a video recording of the first focus group held (i.e., with the Elders) was that, with the participant's permission I will donate the video recording to the TLFN archives located at the UNBC library.

Each focus group was also digitally recorded with the participant's consent. I used two digital recorders, placing one at each end of the table the participants were sitting around. This additional digital recording was done to ensure that I captured every participant's voices clearly so I would be able to transcribe them accurately later. I was concerned that, if participant were sitting too far away from a recording device, their voices would not be picked up well and I would not be able to do an adequate transcription. I also wanted to ensure that, if one form of data recording malfunctioned for any reason, I would have two other machines recording the data.

Informal conversations with community members were accomplished through snowball sampling. Snowball sampling occurs when research participant' suggest future research participants to the researcher from out of their acquaintances (Hay, 2005). I conducted informal conversations with TLFN community members who focus group participants suggested I speak to about the research objectives. I recorded the information from these conversations shortly after in my reflective field journal. The process of reflective journaling aided me in processing the focus groups, writing down initial thoughts and impressions about the data, and ultimately helped in developing research themes.

Much of the secondary data collected for this project was obtained directly from the final reports of recent research initiatives the TLFN have engaged in and the valuable knowledge

collected from them. It was important to incorporate and synthesize this information into my primary data collection and study context, where relevant. Additional forms of secondary data included an internet search and review of literature about the TLFN. I read published historical accounts of the Northern Carrier First Nation history and culture, historical accounts of the fur trade in the Fort St. James area inclusive of TLFN traditional territory, cultural and historical information about the Carrier Sekani Tribal Council of which TLFN is a member, a government report reviewing the historical and ethnographic literature about the TLFN, and a report written about the effects of mining on the TLFN. I also read two UNBC Master's research projects recently conducted with the TLFN (see Table 2). Finally, I conducted a literature review of key concepts and themes that inform this thesis research, which I have described earlier in this chapter.

Data Analysis

To assist organization of the data at the beginning of each focus group, I drew a seating plan so I would remember where everyone sat around the table. During the focus group, I made notes to indicate who was speaking and a brief description of the participant's contribution. This proved invaluable while transcribing as I could follow my notes as I listened to the digital recording to determine who was speaking at any time. Without my notes, it would have been difficult to know at several times exactly who was speaking as some participant's voices sound similar and some participants would be speaking at the same time. Immediately after the focus group, I also wrote down my own notes, thoughts, and observations about the focus groups in my reflective journal.

I transcribed the two focus groups verbatim using the computer program Express Scribe. Transcribing the focus groups helped me become familiar with the data. I was glad I had used

three separate recording devices as they all proved instrumental in ensuring I accurately transcribed all participants' contributions. If I could not properly hear something a participant said, it invariably was clearer on a different recording device that most likely had been sitting closer to them during the focus group. Also, during the second focus group, one participant arrived late and chose to sit off to the side instead of joining the rest of the focus group around the table. Luckily the participant sat near the video camera and it recorded their voice clearly, as they were too far away from the digital recorders to be picked up well. After transcribing the words, I watched the video tapes again and inserted into the transcription non-verbal communications such as shrugs, hand gestures, and nodding or shaking heads that people use to emphasize their conversations.

Each participant was provided a hard copy of the focus group transcription so they could verify the contents and ensure accuracy. I also provided each participant with a hard copy transcription that contained only their contributions, including the conversations they contributed too. I did this so it would be easier for them to read and verify their data, as I thought that not everyone might want to read the entire transcription just to find their own contributions. I double spaced these transcriptions, and increased the font size used to 14pt to aid in readability. Approximately four weeks after the focus groups in November, 2011, I met with the research assistant in Prince George, BC and gave her the transcriptions to take to Takla Landing and personally hand out to participants. The research assistant also sat with some participants and read through the transcriptions with them. She did this with the Elders, as well as one of the adult research participants who had indicated they had problems with literacy.

I used content analysis based on thematic coding to analyze the data collected. As Cope (2005) explains, content analysis refers to systematically identifying important words or phrases

in the data, counting how many times they appear and in what context. Cope (2005) goes on to explain that thematic coding is a process to further make sense of the data by interpreting and organizing it into key themes. Themes help provide meaning to the data and formulate research conclusions. I used Microsoft Word and Excel to organise and analyze research data, as well as a colour coded process of highlighting hard copies of the focus group transcriptions. Different ideas were highlighted in different colours. I began coding participant quotes by highlighting quotes that had to do with the same subject/idea and grouping them together. I also read my reflective journal, and the notes, thoughts and observations I had written down immediately after the focus groups. These notes helped me to confirm connections I was making with the data, including ideas about main themes. Finally, I incorporated comments made to me during informal conversations in the community with people who did not attend either focus group, but wanted to discuss the study topics.

General ideas began to emerge from the data first. These ideas were descriptive codes, themes that emerged from patterns that are obvious (Cope, 2005). I made headings of the main ideas in Microsoft Excel and Words, and placed relevant participant's quotes under these headings. Often the same quote would fit under more than one heading as main ideas were interrelated, and some of the main ideas were discussed together during the focus groups.

Next, as I repeatedly read through the transcriptions and organized the data, the final four themes emerged. These included analytic codes, that is, codes that dig deeper into the context of the data collected (Cope, 2005). I also used concept mapping to show the interrelationships between the data. Concept mapping is an effective way to visually display linkages between data (Novac & Canas, 2008). Concept mapping was especially helpful when synthesizing secondary data sources such as previously collected research data with primary research data from the focus

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groups. I discussed the themes that emerged with my supervisor, including their internal consistency, to ensure he agreed and would have come to similar conclusions. I then confirmed these themes through participant checking when I returned to the community to present my research results, receive feedback and validation.

Ensuring Rigour

I used several qualitative techniques to ensure rigour and improve the reliability, accuracy, and credibility of the research data. These included source triangulation, method triangulation, investigator checking and participant checking (Baxter & Eyles, 1997). As Baxter & Eyles (1997, 1999) explain, triangulation involves strengthening the research findings by using multiple sources that may provide similar findings (Baxter & Eyles, 1997, 1999). The qualitative methods used included focus groups, informal conversations with participants, document analysis of previously collected data, integration and synthesis of past data with primary data collected, and a literature review of key themes and concepts. Source triangulation occurs when more than one participant provides approximately the same response. Methods triangulation occurs when similar or corroborating data is collected from more than one method. Investigator checking involves checking my methods and findings with my supervisor and committee for scrutiny, and to assess if they would derive the same interpretations (Baxter & Eyles, 1997, 1999).

As previously stated, this thesis research included participant checking to ensure validity of my data interpretation, and community verification of research conclusions. Participant checking and reporting back of research results for validation are also ethical issues regarding informing the participants of how I am using the information they provide (Baxter & Eyles, 1997; Bradshaw & Stratford, 2005). Participant checking also allows the participants to provide

feedback, and confirm or disagree with the interpretations. This ensures confirmability; that is, that the research results are derived from the participant and not from my bias as a researcher (Baxter & Eyles, 1997, 1999; Bradford & Stratford, 2005).

Finally, to ensure the accuracy and credibility of the research data, I included direct participant quotes in the thesis. I did not change or correct the grammar of the quotes. The way a person speaks can be just as important, and convey as much meaning, as what they are saying. Using direct quotes was also a way to show my respect. The participants, particularly the Elders, shared their information with me, and I felt it was my responsibility to present their quotes exactly as they stated them, not to presume that any corrections I made would make them in any way better.

Confidentiality

The confidentiality of the participants was protected by assigning identification coded numbers as identifiers instead of using their real names. Each participant's identification code began with 'TL-2011', and ended with a number that was unique to them. For instance, one participant's identification code was TL-2011-5. I am the only one who saw the un-coded data. All physical data collected from this project, such as video recordings and notes, were kept in a locked drawer in my home office. All electronic data were kept on a flash drive and external hard drive that were password protected and kept locked in a filing cabinet in my UNBC office when not in use. I will keep the un-coded data for five years after the duration of the project and then it will be destroyed. The exception to this will be the video recording of the focus group with Elders. I have received permission from participants, and Chief and Council, to archive these recordings in the TLFN collection located at the UNBC library.

Positionality

It is important that I understand the power relations involved in my thesis research. Self-reflection can help me become aware of the power relations existing in the research process, my own perspective and how others may view me. England (1994) defines critical self-reflection as “self-critical sympathetic introspection and the self-conscious analytical scrutiny of the self as researcher” (p. 82). To assist in self-reflection, I wrote a reflective journal during my research project. Maintaining a journal facilitated my ongoing critical analysis of my thoughts, ideas, and actions throughout my research project.

Self-reflection helped me understand my own positionality and how it may have affected the research process. My positionality is a combination of my life experiences (Dickson & Green, 2001), cultural background, and motivations for undertaking the thesis research. Some of these features influenced how I designed the thesis research, collected and analysed data. These features include that I am not First Nation, I am female, and an adult University student. The culture I grew up in differs from that of the TLFN. I do not have a strong connection to the land as the TLFN do; my family moved to northern BC in the early 1970s, the TLFN have been on their territory since time immemorial. I do not view the environment in a holistic terms, it was difficult for me to understand the ideas discussed by the TLFN Elders and adults based fundamentally on the belief that all things about the environment, community and the people are interconnected, and the health and wellbeing of one affects the others. My purpose for completing this thesis research is to benefit the community of TLFN, but also to attain a master’s degree that will facilitate my future career goals.

My positionality also includes that I am an outside researcher in TLFN, but my relationship as an outside researcher is complex. There are many reasons why I am not just an

outsider in TLFN. I have worked for TLFN for three years as a project coordinator on several research projects and I have developed several different roles, responsibilities, and different levels of social relations with members of TLFN. There are points of commonality, differences, shared experiences, shared meanings, and shared points of view (England, 1994; Nast, 1994). Innes (2009) explains that the very nature of doing research makes an individual an outsider. Innes (2009) extrapolates that we will always work with others who are different than ourselves in any research project because the different aspects of researcher's identities are points of differences and similarities they have with the participants.

When I understand the power relations in the research process, I can attempt to minimize the impact they may have. This is accomplished by negotiating the similarities and differences between the research participants and myself as the researcher (England, 1994), and developing rapport. Developing rapport is an essential component in a research project (Dickson & Green, 2001; England, 1994) and ideally should lead to developing research relationships based on mutual respect, trust and credibility (Dickson & Green, 2001; England, 1994; Lesson & Ocos-Sanchez, 2007). This is facilitated by making transparent the research methods and my positionality in the research (Baxter & Eyles, 1999). This includes my motivations for conducting the research, potential benefits from the research to the community, and to me. In the spirit of transparency, relationship building, and developing rapport at all stages of this project, I was straightforward with research participants as well as other TLFN community members when I spoke about the objectives of the research I was undertaking, why I was undertaking it, and what I hoped to accomplish. Importantly, I was also committed to listening to the research participants, as well as other TLFN community members, during all stages of the research. I wanted to hear, and take into consideration, their thoughts and opinions.

Flexibility

A degree of flexibility is natural in most qualitative studies. As more is learned about the study community and themes emerge from the data, new research directions can develop (Baxter & Eyles, 1999). As Dickson & Green (2001) explain, participatory research is an ideal methodology for allowing the flexibility this thesis research required. I initially anticipated that I would need flexibility in my project to make adjustments in accordance with new information or challenges as my project proceeded. This initial assumption proved correct and I did have to adjust timelines in accordance with activities in the community such as a band election in the summer, and a band general meeting in the fall. On several occasions before planning events or finalizing travel into the community, I was advised by community members of events I was previously unaware of that would interfere with my plans, and should best be avoided. I also adjusted my proposed number of focus groups from three to two when I found out that one of my proposed questions had already been discussed by the Elders, and they would not want to do so again. Finally my research assistant moved out of community shortly after conducting the focus groups, and I had to hire a second research assistant to bring the transcripts to the participants to be verified. Dependability is the degree to which my project can deal with instability and change (Baxter & Eyles, 1997), and I believe this thesis research was flexible enough to handle all changes without affecting the quality of the finished product.

Conclusion

There is a long history of research done on Indigenous peoples in Canada. Indigenous communities, including the TLFN, have extensive experience and/or knowledge of what could be termed “one sided” research projects. As a result, many Indigenous communities, including the TLFN, approach research with the question foremost in their minds of whether the research

will benefit them. The TLFN have specific ideas of how they are willing to engage with researchers, what kind of research they want, and the type of research outcomes they expect in mind. This thesis research was designed to correspond with these criteria in order to undertake a project that incorporated collaboration, mutual benefit, and importantly, was culturally appropriate. The participants identified the issues and concerns they have regarding the current dynamics of the community, what research directions, and what next steps they want to be put in place to address these concerns and improve the health and wellbeing of the community. In the following two chapters, the information provided by the participants, and my analysis of the research data, will be presented and discussed.

CHAPTER FIVE: RESULTS

Introduction

The main objective of this thesis was to work with the TLFN to inform strategies on ways to translate the knowledge obtained from recent research initiatives into actions that will be of greatest benefit to the TLFN. Other goals of this research were to learn about the history of the TLFN community, and explore the TLFN's sense of place and risk to this sense of place. The data collected during this research varied from what I had anticipated receiving. I had expected more of a discussion during the focus groups of the past research data that the TLFN had collected in previous research projects. Instead, in neither of my focus groups was there any discussion of past research data collected. I had expected focus group discussions to begin with this discussion, and then continue from there. The participants did not have an interest in discussing the previous research initiatives. Only three participants indicated they had prior knowledge about the previous research and/or had participated in it. The Elders wanted to discuss how things had changed, and what they wanted to see differently in Takla Landing today. All participants, Elders and adults, were only interested in discussing what future next steps, projects, programs and initiatives they wanted to see in the Takla Landing. This highlighted for me that what is important to the researcher is not necessarily important to the participant.

Four key themes emerged from the two focus groups. The first theme, which emerged solely from the Elders focus group, was the *changes brought by wage labour*. This theme included the subthemes of loss of community unity, the undermining of traditional power structures, loss of spirituality, and alcohol and drug issues. The second theme, identified by both focus groups, was *strengthening connection to culture, language and identity*, which included the subthemes of teaching culture and language, and opportunities to engage in traditional

activities. The third theme was *increasing community labour*, and also emerged from both focus groups. Finally, the fourth theme, which emerged only from the second focus group, was *environmental cleanup and monitoring*. Each theme is discussed below.

The Changes Brought by Wage Labour

As previously mentioned, I conducted two separate focus groups in Takla Landing to collect my primary data, one with Elders and the other with Elders and adults from the community. The two focus groups had slightly different aims and, as a result, one theme emerged only from the first focus group with the Elders. *Changes brought by wage labour* came from discussions during the Elders focus group of the history of the TLFN, when the Elders first began noticing changes in the TLFN community, and what these changes entailed for the community.

The Elders focus group began with one participant saying the understated words “Well time has changed as we journey through life” (TL-2011-12). Throughout the Elders’ lifetimes, they have seen dramatic changes to their social, cultural, political and economic systems. These changes occurred as a result of the influence of dominant Western culture, beginning with industrial expansion into the TLFN’s traditional territory. Many Elders felt that change began in the TLFN community in the 1950s when industry moved into the area and members of TLFN started working in the wage labour economy.

The changes the Elders identified as having occurred to the TLFN community as a result of wage labour, and the influence of dominant Western culture, are not only closely interconnected, but are considered by the Elders to be the basis for many of the problems that persist in the TLFN community today. The problems identified by the Elders include the loss of

community unity, undermining of the traditional power structure, loss of spirituality, and alcohol and drug abuse. Each of these are considered below.

Loss of Community Unity

The development of resource industries in the interior of BC, and the introduction and growth of wage labour, brought changes to the economic system of the TLFN that also caused profound effects to the overall social, cultural, and political lifestyle of people. The traditional territory of the TLFN is rich in natural resources, and early industrial interests that moved into the area included forestry and mining. As a result of a multitude of factors, members of the TLFN were pulled into wage labour and, with it, the influences of dominant Western culture. The Elders identified the loss of community unity as a key result of the changes brought by the encroachment of industrial activity and wage labour onto the TLFN territory.

A key topic of discussion by all of the Elders during the focus group was what their traditional lifestyle had been like before the introduction of wage labour to the community. The Elder's stories of their past are described positively, in comparison to how younger generations live today, and the Elders expressed great disappointment that the lives of their members are so different today. For instance, one participant stated, "It's the young people that it's going to be a hard time" (TL-2011-07). The Elders concern for, and desire to take care of, the younger generation was a thread throughout the whole focus group.

The Elders explained that, before wage labour, people were reliant on the land and their family to make a living. Connection to the land and social bonds were at the centre of their traditional lifestyle. As one participant explained, "We used to be trapping a long time ago. That's how we'd get money, groceries and clothes" (TL-2011-07). The Elder went on to explain that, "There was no welfare back then, nothing. Just trapping, that's how we'd get our money"

(TL-2011-07). Family and community were an important part of this traditional lifestyle. People lived together on the land, worked together and relied on each other for their collective success. Living collectively is expressed in the way every Elder's story about their past was a story about how they and their family lived; they never spoke about their own individual experiences. The knowledge needed to make a living was transmitted through experiences and from family members, passed down to children from parents and grandparents. As one Elder explained, they learned how to live off the land because they grew up in the bush. Their dad taught their siblings and them to set traps, their grandfather taught them to set traps, and they all travelled around the bush together (TL-2011-07).

Another Elder shared a similar story, explaining that "long time ago us we didn't go to school" (TL-2011-08), instead they would go in the bush with their father and he would teach them what they needed to know. When they were out in the bush with their father, they would "Set trap. Set net. Do everything" (TL-2011-08). The participant went on to explain what life was like and how they made a living, explaining the traditional lifestyle of undertaking seasonal rounds of resource extraction:

When it's winter we stay long time in a spot, no truck, no power saw, just canuck saw we use. You going to make salmon you're going to go to Babine to make salmon, for winter. When we come back we go in the mountains. After we live and he teach us, my dad, my mom, my grandpa, my grandma. What they said was put in my head and is still in there, I never forget. (TL-2011-08)

The Elders explained that, in the 1950s, sawmills were built on and near the TLFN traditional territory, and people began working for wages. As a result, "time started to change. It disrupts the community, the spirit" (TL-2011-05). When people began working for wages the traditional economy of the individuals and the community was interrupted. As a result, the traditional social, cultural and political systems were also altered. The Elder explained that wage

labour had an affect “beyond the community, the strength of the community, and the unity of the community” (TL-2011-05). The social unity that had formerly united the community and that existed when they lived and worked together collectively, had been undermined and altered by the coming of wage labour

Although loss of community unity was a key change identified by the Elders, there were other related factors that contributed to the loss of community unity, and the overall changes that occurred to the TLFN’s lifestyle. These contributing factors were identified as the undermining of the traditional power structures within the social system, the widespread loss of spirituality by the members of the community, and the increased use of alcohol and drugs by the TLFN members.

Undermining of the Traditional Power Structure

The loss of community unity was facilitated by the undermining of the traditional power structures that had existed in the TLFN social system since time immemorial. One Elder explained that, “before that (wage labour) took place the community was controlled by Elders and hereditary chiefs. Then as time goes, the community started to change” (TL-2011-05), people stopped working together as much (TL-2011-05). The hierarchical chiefs and Elders, who were the established social and political leaders of the community, began to lose their status and power.

Some of the Elders do not feel that they are given the proper level of respect by the younger generation in the community today. As a result, Elders feel they do not have the opportunity to fulfill their cultural roles as providers of wisdom and guidance to the young. Traditionally, hereditary chiefs and Elders would lead through persuasion and respect rather than

obligation (Morice, 1889). Some of the Elders now feel that the knowledge and advice they provide to the younger generation remains largely unheeded. One Elder talked repeatedly about the younger generation “running away” from them, adding that, “this is where we can’t take care of the new generation. We can’t keep up with them” (TL-2011-01). This Elder further explained that “we (the Elders) have respect for the kids” (TL-2011-01) but the kids do not have respect for the Elders. An example provided by one Elder of this type of situation was:

Elders talked to one young man, and talked to them for one hour. Next time I look out the window there’s that young man carrying a whole bunch of beer. That’s the same guy we’re talking too. It’s not going to help. (TL-2011-01)

This was one example of a situation that the Elders described as happening often where by the Elders offer wisdom and guidance that is seemingly ignored, and many of the Elders who spoke with me feel powerless to help the younger generation in the face of social problems facing the community.

The Loss of Spirituality

The Elders felt that loss of spirituality and respect for the church by many of the community members was also a major contributing factor to the loss of community. One Elder explained the connection between the loss of respect towards Elders, and diminished belief in spirituality, “We stand up for our rights in this town; we stand up for our rights but there are people pushing, pushing, pushing, even in church they’re swearing in church” (TL-2011-01).

The Elder also expressed concerns about the consequences of the loss of spirituality amongst the youth of the community, saying about one individual, “there is not enough power of our lord in his heart but the evil spirit pushed him. That’s how it is when you don’t believe in God. If you don’t believe in God you have somebody else behind you that can help you go to hell” (TL-

2011-01). Overall, the Elders feel this focal point of community unity, i.e., the spiritual beliefs that helped unite the community and act as a moral guide, has lost much of its influence and strength.

Alcohol and Drugs Issues

Finally, the Elders identified alcohol and drug use in the TLFN community as a key problem that they want to see addressed in order for the community to become stronger and move forward. Almost every Elder made some comment about how widespread and damaging drug and alcohol use is in the community. It is felt these issues have to be addressed specifically to enhance the care, and improve and protect the health and wellbeing, of the children in the community.

Comments made by Elders about the prevalence of alcohol and drugs in the TLFN community included: “like they all say, it’s true, too much drugs and alcohol all over the place (TL-2011-03).” “We’re a little village, in a little village like ours there’s still so much dope” (TL-2011-01). “We’re chasing them, we’re chasing the new generation that smoke dope and alcohol” (TL-2011-01). Of concern also were the effects of alcohol and drugs in the health and wellbeing of the children. One Elder explained that the children “have to be taken care of really good. That’s what we want in this village here” (TL-2011-01). The issue was summarized by an adult participant who had brought his aunt to the Elders focus group and sat listening to the discussion:

...now a days there is just too much drugs, cocaine and alcohol, it’s driving away all the people from the church and its killing all our people. That’s what their telling you (the Elders) the big change, it was drugs and alcohol. It’s turning away our people from the church. So that’s what’s turning them the alcohol and drugs. The devil is grabbing them. (TL-2011-09)

There were two major barriers identified by the Elders that prevent individuals from giving up alcohol and drugs. These are peer pressure from members of the community still using alcohol and drugs, and bootleggers coming into the community to sell alcohol:

One guy gets drunk, then the other guys they run out (to join him). Then those trucks come, the bootlegger, that's how they start. They can't quit the other guys they can't quit. That's why they can't quit drinking some of them, they just can't. (TL-2011-02)

Elders did not just discuss these problems in conjunction with TLFN, they spoke of the problems of alcohol and drug abuse occurring “All over Canada it's like that not, not Takla, not only Takla” (TL-2011-01). They also spoke specifically of the tragedy of recent suicides, overdose deaths and chronic disease brought by alcohol and drug abuse in neighbouring communities. Finally, the Elders spoke about their own feelings of anger, futility and hopelessness that accompany such issues. On speaking of a recent overdose death in Takla Landing, one Elder stated “see this is where we can't do nothing” (TL-2011-01). The same participant stated it is “very hard for us people to run the in the background of the new generation. No you can't catch up with them” (TL-2011-01).

The changes that have occurred in the TLFN community, and the issues identified by the Elders, are interconnected, as previously mentioned. The way the issues interconnect was explained by one of the Elders:

As time goes, the community start to change. And there's that drinking start. With the wages of work. People tried to control but hardly there was control left. People start to go on their own. So today our religion [...] the young people they forget to participate. Just very few Elders of us left, we still go out to church and thank the lord for the days and our lives. The air we breathe. (TL-2011-05)

Methods suggested by the Elders for both addressing these issues, and the next steps they want to see taken in the community, correspond with findings arising during the second focus

group with adult participants. These ideas revolve around strengthening the TLFN's connection to culture, language and identity. These are discussed in the following section.

Strengthening Connection to Culture, Language and Identity

The second theme of *strengthening connection to culture, language and identity* emerged in both focus groups. One of the purposes of knowledge translation is to turn knowledge into practical actions (Estey et al, 2010), and to apply knowledge to improve health (Estey et al, 2009) and wellbeing. During both focus groups, the participants discussed the types of practical actions they wanted in the TLFN community. Participants stated that many of the next steps in the community should include programs and strategies that build directly on the strengths of TLFN traditional culture, and revolve around increasing community member's connection to their traditional culture. Ideas suggested by participants included having a variety of teaching and learning opportunities, holding cultural camps, increasing the number of cultural activities in the community, and increasing community members opportunities and abilities to engage in traditional activities.

Teaching Culture and Language

The Elders identified the disruption, undermining, and erosion of traditional lifestyle and culture in their lifetime as the primary cause of problems existing in the community today. Ideas suggested by Elders were to address these problems by drawing on the strengths of the TLFN's traditional culture, by increasing community member's traditional knowledge, enhancing connections to each other, and connections to a revived and shared cultural identity. These ideas

were specifically discussed in relation to teaching children. One Elder stated:

How can we control, get back in control with our community for the sake of our young people? We sort of lost touch somewhere. Have to travel back again and relocate somehow. Time has changed we don't work together no more. Those avenues we have to look at very closely and come together. So that the understand takes place, and respect. That's how I can look at things today and maybe we're come closer together as a community, more together. We might get somewhere for the young people. Show them the example. (TL-2011-05)

The Elders comment in the quote above resonates with a recent report on knowledge translation in an Aboriginal context from Estey et al (2009), which speaks of "sharing what we know about living a good life" (p. 3). The Elder and adult participants discussions revolved around teaching and learning about TLFN culture and language, and engaging in traditional activities as a means to share with people the knowledge of how to live a good life. One Elder explained:

I went to an Elders meeting somewhere. Every reserve they teach them kids language and work-sewing and whatever we do when we're raised up they teach them youth. All the Elders they work with them. We should do that up here so that they will change. (TL-2011-06)

Another Elder agreed that the next steps should include transmission of cultural knowledge from Elders or other family members to the younger generation, just as had happened in TLFN culture when the Elders were younger. The Elder stated, "That way is a good way. His mom and his kid, and they're going to talk to him, or Elders, other people's kids. You're going to learn something" (TL-2011-08). Adult participants also discussed the relevance of learning traditional knowledge:

If you're talking culture and stuff it would be something really good to have a program to show how it's done properly, and the process. It would be good for the kids and the younger generation. Also others, I would go and probably someone younger than me would probably go. I wouldn't mind bringing my kids to learn something. (TL-2011-11)

Many adult participants also discussed developing programs in which Elders taught traditional knowledge and activities. An adult participant described an Elders teaching program from another First Nation community, and how they would like to see a similar program begun in Takla Landing. The participant explained how this particular program was organized:

Separate them (the Elders) into groups based on what the Elders are interested in doing....Elders there teach the younger generation, from older people down to the younger ones. They teach them how to do their dry fish, how to catch and cut and do their smoking and what kind of wood they use, and all of those things. And then another group of Elders can do a moose hide. They go and get the moose, show people how to start the process of getting the moose hide. They show them the finished part, so what are going to come out of this and this is where it comes from. (TL-2011-11)

The participant further explained the benefits of this program, and the programs popularity and success in the community: "it's done wonders for the kids. And it's not only the younger ones that come, it's the parents and the people like me. I wouldn't mind going, that's something that I really wouldn't mind doing myself" (TL-2011-11).

There was also discussion about the importance of the Elders teaching the traditional Carrier language to the younger generations. One Elder stated: "Language is really lost. Yes, it's hard. Kids, little kids, it's hard for them. From today they go to school, they come back home we teach them. No they can't learn" (TL-2011-06). As another participant explained, "(We used to sing) the Indian songs, and camp songs, and (also songs) at Christmas time, (but) I never hear that anymore. That's pretty sad, to not hear Carrier songs, that aren't being sang in church" (TL-2011-15).

Participants wanted other types of teaching and learning opportunities in the TLFN community as well, including more opportunities to learn and engage in traditional activities. One adult participant, who had been taught traditional knowledge from their grandparents,

wanted opportunities to share the knowledge with other members of the community. The participant explained:

I'd like to teach that to the young guys how to make Indian drum and moccasin and stuff, snowshoes. There all kinds of stuff that we could be making within this community with the younger generation. That would be probably the best thing I would see in this community that could happen. (TL-2011-15)

The participant suggested developing programs in the local Nus Wadeezulh School to teach the students:

It would be nice to set traps, and teach the younger generation in school how to go trapping. We will set out traps, and then we will teach the kids how to skin it and stretch the hide and all the rest of it. (TL-2011-15)

Finally the same participant explained that they would also like opportunities to pass on traditional medicines that they learned from their grandparents:

It hurts me not to see anybody at my age that doesn't know about this medicine, why is that?...I would like to get that into the community.it's pretty hard; my grandparents taught me all these medicines ever since I was a child. Now I'm bringing it on down to my younger kids, but now they go to Edmonton to go to school for higher education.... (TL-2011-15)

Participants had many different suggestions for teaching and learning opportunities and programs they would like to see implemented in the community. These programs included Elders, but also knowledgeable adults sharing what they know about living a good life with any community member who wanted to learn.

Opportunities to Engage in Cultural Activities

Participants in both focus groups expressed a wish for a variety of activities and events to take place in the TLFN community revolving around traditional culture. This included cultural camps, community wide games, events, and activities. Participants wanted more opportunities

and/or access to enable engagement in traditional activities, such as building facilities in Takla Landing, and cabins on the land.

The idea of holding a cultural camp was discussed in both focus groups. Cultural camps were described as an activity that “really unites the whole community” (TL-2011-12) and to undertake cultural teaching and learning. A cultural camp would be a good way for youth and adults to camp on the land together and engage in traditional activities. Camps also offer an opportunity to learn traditional knowledge from Elders. An Elder explained their experiences at another First Nation community’s cultural camp, where youth were taught traditional activities while camping on the land, “They ask me to go up to a culture camp last fall, I went to stay with them for two weeks. The students, they make them work, they make them work and teach them... (TL-2011-03).”

One participant explained that everyone in Takla Landing should have the time off to attend cultural activities such as a cultural camp, as when there are cultural events people sometimes cannot attend. They should “shut the schools down, band office and everything. Take the families out and show them how to hunt” (TL-2011-04). The participant based this opinion on what happened in another First Nations community, “they take 10 days off; everybody takes 10 days off and go out to what they call a culture camp” (TL-2011-04). To help ensure the success of the camp, it was recommended that it be located on the land a distance from Takla Landing so that participants would stay camped out at the location. Also, one Elder suggested a talking stick should be used daily as an effective means to diffuse and work through any issues or problems that may arise, and ensure the best success for the camp.

Several other ideas were mentioned by participants. Some discussed bringing back community wide traditional games, as there had been in TLFN in the past, “I see a lot of pictures of back in the day, of all the cultural games” (TL-2011-12) that used to take place. Suggestions included snowshoeing races, ice skating races, and the gambling game lahal. Participants also discussed undertaking projects to improve access to the land, such as opening trap lines, building cabins, and re-opening old grease trails. Opening trap lines and building cabins out on the land would provide community members the opportunity to travel and stay on different areas of the territory. One participant explained:

...they are giving grants for opening up your trap lines, your parents if they used to do trapping there are grants now for yourself to open those lines up and utilize them. ...What they're saying is there was more healthy living in the past and that's why their giving back our rights and ways and their giving us money to do that. But I think what they need here is just more, someone to do grants proposals. (TL-2011-14)

The participant brought up an important point that it is necessary that more people be trained and acquire the skills necessary to write and submit successful proposals in order to access funding that is available to return to traditional community practices.

Grease trails were the main transportation routes in the past, vitally important not only for the transport of people and the connection between communities, but also the transport of trade and information. Several other participants discussed opening some of the old grease trails so that community members could once again travel through the traditional territory along the routes and access other communities. Specific routes mentioned included the trail from Takla Landing to Fort Babine. One participant said “it would be a good idea to open that old trail to Fort Babine” (TL-2011-15), and another participant agreed “it would be nice to open that trail” (TL-2011-07), a distance of 135 km (TL-2011-10). Other suggestions for opening grease trails included from Babine Lake to Bear Lake to Akin Lake, and Takla Landing to Hazelton.

A final suggestion was to start a food exchange system with other First Nations communities to acquire items that are not available on the TLFN traditional territory. This included a fish delivery or trade system specifically for sockeye salmon. Developing a food exchange system with other First Nations groups would be a good method to develop and strengthen relationships, and improve solidarity between different communities. A food exchange system would also be a food security issue, as it would provide access to desired and culturally relevant food to TLFN members that they may have difficulty accessing otherwise.

Overall, Elder and adult participants want next steps in the form of future actions in the community to aid in strengthening community members connection to culture, language and traditional identity. The participants believe that increasing culture, language and traditional identity would be effective methods to improving community unity, health and wellbeing. These ideas are supported by a great deal of literature on Aboriginal cultural continuity, language, and cultural identity that confirms the many benefits of strengthening connection to traditional culture.

Increasing Community Labour

The third theme of *increasing community labour* emerged in both focus groups. The Elders and adult participants discussed different projects, programs, and activities that would require collective labour. Increasing collective labour was linked to promoting collective responsibility, sense of pride and ownership, and thus, increasing community unity. Ideas suggested included building different structures in Takla Landing for traditional activities, engaging in community wide activities, and planting and maintaining a community garden.

The suggestions for types of structures to build in Takla Landing for traditional use included a cultural centre, and a community smoke house. Having a large cultural centre in Takla Landing would provide the space necessary for multiple activities to be undertaken at the same time, with many different participants. There would be many benefits to building a specific structure for the purpose of cultural activities. First, building such a structure might offer incentive for people to get more involved with cultural activities. By developing a sense of ownership in the community centre, and having a space set aside to engage in cultural projects, more people may feel compelled to participate. Another benefit to having a cultural centre is practical, as it will be a designated space for cultural activities so that longer-term projects could be undertaken. Many cultural activities, such as tanning hides, take a period of time to finish.

The participants also discussed the need to build a large community smoke house. Earlier studies (see Parkes et al, 2011 & Rutherford & Tobin, 2009) in TLFN identified that the acquisition, preparation, and consumption of traditional food is important to the TLFN as part of overall diet. A smoke house is a necessary item for the preparation of many traditional foods in the community. In Takla Landing, many people have personal smoke houses in their own yards. Participants said they would like a large community smoke house that is big enough for many people to work inside of it at once, and equipped with electricity to extend the amount of time that can be spent in it. Not only would a community smoke house make possible community wide traditional food preparation for events, it would also be an excellent facility to undertake teaching and learning activities.

Many of the other cultural activities discussed would require increased community labour to be successfully undertaken. This included holding community games in Takla Landing, undertaking cultural activities such as building a canoe, tanning hides to make traditional crafts,

and developing and undertaking cultural camps. These activities would also require large numbers of community members working together to be successful. A cultural camp in particular would be an ideal way to teach and learn traditional knowledge, and also strengthen camp participants connection to the land, and the community.

During the adult focus group, there was a lot of discussion about planting and maintaining a large community garden in Takla Landing. This project was started in the past but not completed. As one participant stated, “I think that should be done, that way our kids could be healthier up here” (TL-2011-10). The nearest serviceable town and grocery store is 215km away from Takla Landing in Fort St. James. Having a community garden would help ensure a reliable source of fresh fruits and vegetables in Takla Landing, at least during the growing season. Growing fruits and vegetables also provides a measure of protection against the possibility that one day climate change will alter the growing habits of the wild plants and traditional foods relied upon by the inhabitants of Takla Landing (Rutherford & Tobin, 2009). As one participant stated, building a community garden will be good “for future generations because our weather is getting really bad and God knows maybe we won’t have any wild berries one day” (TL-2011-10). Finally, having a community garden would be educational, as the children could grow their own food “from spring right from a little seed and they could watch it grow and then in the fall time they could harvest it” (TL-2011-10). Children could learn the entire process of growing and harvesting vegetables, and at the same time learn about healthy eating.

In general, participants want projects, programs, and activities that not only strengthen community members’ connections to culture, but also increase the relationships and bonds between the community members. Elders in particular want to counteract the erosion of community unity that they had perceived as a major issue in the TLFN. Participants state that

this can be accomplished by undertaking activities that increase community labour, unity, and sense of collective responsibility, within the TLFN.

Environmental Cleanup and Monitoring

The final theme of *environmental cleanup and monitoring* emerged only in the second focus group. For a long time, members of TLFN have had concerns about the possibility of environmental contamination from industry on their territory, and the health of the environment as a result of this industrial activity (Rutherford & Tobin, 2009). These concerns have fueled past environmental health research initiatives with, and by, the TLFN (see Table 1). Participants had no interest in discussing past research initiatives at the beginning of the focus groups. At the start of the second focus group with adults I asked four questions about previous environmental health projects, but these questions received limited answers from a few of the participants only, and did not generate any conversation amongst the focus group. Participants did express concerns about the health of the environment though, as the focus group progressed. Participants discussed places on their traditional territory where they wanted past industrial waste cleaned up. They also pointed out current industrial operations taking place on the traditional territory that they had concerns about. This included calls to monitor these operations to ensure they were being conducted in an environmentally sound manner.

Participants also provided a list of industrial waste they wanted removed from their traditional territory and, in many cases, the areas they want the waste removed from. The industrial waste items left on the traditional territory that participants identified included railway ties, industrial drums, logging camp waste, and barrels. Each of the items is discussed below.

BC Railway operated a railway line through the TLFN traditional territory from 1974-2006 (Steidle, 2009). The railway ties, which have been treated with creosote, were left behind on the land and need to be removed. Participants want the railway ties removed all the way from Fort St James up to Minaret camp all to be removed off the territory. “Get them to bring it back to wherever and put it in their backyard if you’d like” (TL-2011-10).

Many industrial drums of varying sizes were left on the territory by former industry. Locations identified by participants included drums left at Buckley House, Leo Creek, and by Driftwood. Participants wanted to “try to find funding to dig up that old logging camp” (TL-2011-10), referring to the former Driftwood logging camp, much of which was buried at the site by the company when it closed. Participants also wanted a number of barrels cleaned up from behind the Takla Landing store, and other places along the BC Railway rail line.

Participants had concerns about the animals in the environment as well. They wanted to ensure that the culverts located on the territory were large enough for fish to get through. As one participant explained, “at 123km (on the Driftwood Forest Service Road located in the TLFN traditional territory) in the spring time that culvert is so small those fish barely get up” (TL-2011-10). Another important issue was beaver dams on the territory. If left unchecked, beaver dams can affect water ways, fish runs, culverts, and cause flooding on the roads.

Finally, participants had concerns about the way current industry operating on the territory was being conducted. Two specific examples were discussed. One was about the possible accumulation of industrial waste at Leo Creek:

I don't know where they're bringing these big piles of dirt? I haven't tested it so I need somebody to go in there and test it, what sort of soil, where's it coming from? Why are they bringing it there? And if it's contaminated well we have to find the company that's

doing that because it's not far away from Leo creek. That used to be a salmon spawning area. (TL-2011-10)

The second example of participants' concerns over current industrial activity was the discussion of mining operations on the traditional territory. One participant stated that "there's too much mining going on all over the place" (TL-2011-13). The participant continued to explain what they had recently witnessed; that at one mining operation, the employees were operating large excavator directly beside Kenny Creek. Kenny Creek is a fish spawning creek that connects to the important Ominica River. There are also abundant berries in the vicinity, and as the *Healthy Land, Healthy Future II* study conducted confirmed, berries are an important traditional food source for TLFN (Rutherford & Tobin, 2009). The participant had concerns about the damage they believed the excavator was causing to the creek.

The issues raised indicate that the members of TLFN still have to be vigilant and monitor how current industry operates on their territory. The TLFN are still dealing with the effects of past industrial activity on their territory, from environmental contamination and industrial waste left on the land. Even today, with better government regulations, greater awareness of the effects of detrimental industrial practices on the environment, and an increase in political power and rights for the First Nations in BC, it is still up to the TLFN to monitor and ensure that current industry operating on their territory is conducted in a proper and environmentally sound manner.

Conclusion

The results from both focus groups were very similar. During both focus groups, participants indicated next steps in the TLFN community should lie in developing teaching and learning opportunities, and activities that strengthen connection to culture, language and identity, community unity, and the TLFN's connection to and control over their traditional territory. The

four themes that emerged from the focus groups are inter-connected, and are fundamentally about ways to increase the health and wellbeing of TLFN members, the community as a whole, and the environment. These ideas, their interconnectedness, and what they mean for the TLFN, are subjects I will discuss at length in the following chapter, in relation to the themes identified in the literature review.

CHAPTER SIX: DISCUSSION

Introduction

My research explored how the participants wanted to translate previous research into actions for community benefit. The findings suggest that participants were not interested in the translation of previous research results into actions, at least at the time the research was conducted. Rather, participants wanted future community actions to be based on sharing of traditional knowledge already existing in the community as part of an approach focused on rebuilding TLFN's culture and traditions. The next steps participants envisioned are interconnected and aimed at improving the holistic health and wellbeing of the people through sharing knowledge about how to live a good life. The Elders identified weakened community unity and unhealthy relationships as the most important issues facing the TLFN. Future projects, programs and strategies identified are to focus on teaching TLFN's traditional culture, language and sense of identity. The information provided by the adult participants corroborated much of the data provided by the Elders; that is, participants advocated for collective activities that will connect youth with traditional knowledge, and values, and re-engage systems of intergenerational respect and reciprocity.

In this chapter, I discuss and synthesize the different perspectives that influenced this thesis, including primary and secondary data. I also discuss the ideas provided by participants for future actions in the community that will form the basis for undertaking a strength-based approach to re-establish cultural values. This strength-based approach includes the recreation of unity through community labour, improving holistic health and wellbeing through cultural teaching and a revitalization of sharing of community knowledge, and taking control of management over the economic activities undertaken on the traditional TLFN territory.

Reflections on the Two Different Perspectives in the Research Process

The research methodology of participatory research informed by appropriate engagement was important in shaping the terms of the research. This research involved both Western scientific and traditional forms of knowledge. The participants and I had different ways of framing concepts about environmental health. After reflecting on the research, I realized that, during the focus group conversations, I compartmentalized issues without seeing the connections between them, and envisioned a distinct dichotomy between nature and culture, which is common in Western scientific thought (Berkes, 1999). This differs from the participants, whose cultural background is based in traditional knowledge systems, where there is no separation between nature and culture (Berkes, 1999) or, for that matter, between nature, culture and the importance of community (Berkes, 1999). Often, dominant ideas about the environment tend to have a negative focus such as associations of risk from environment contamination (Parkes, 2011), and I realized I had thought this way and framed focus group questions about environmental health in this manner. That is, asking questions about the environment solely in relation to concerns about contamination or other industrial affects.

This difference in perspective was overcome by maintaining the TLFN's perspectives at the forefront of the research, taking a participatory research approach, and adhering to the principles of appropriate engagement. As a participatory research exercise, it was important to discuss topics that the participants felt were relevant, and thereby let the focus group conversations flow in directions the participants wanted. The focus group discussions differed somewhat from what I had envisioned they would be, but participatory research must be relevant to both the researcher and the participants (Lesser & Oscós-Sánchez, 2007). This means combining perspectives (Minkler, 2005) to uncover new knowledge (Lesser & Oscós-Sánchez, 2007).

An important principle of appropriate engagement is respecting and acknowledging First Nation's knowledge systems as fundamental to the research process (Tobin et al, 2009). This is important for understanding the needs and concerns of the community (Jack et al, 2010), and identifying strategies to address these concerns. This thesis was a learning journey, and the difference in perspectives was negotiated by following the lead of the participants in focus group conversations, incorporating feedback from TLFN members when I presented my preliminary research results, discussing the research results with my supervisor and committee, and engaging in ongoing critical self-reflection, to help me identify and examine my own biases (Lesser & Oscós-Sánchez, 2007). This research also incorporated flexibility to adjust as I learned more about the research community, and as new themes emerged from the data.

In summary, the research process included perspectives from two different belief systems, Western scientific and traditional ecological knowledge. By ensuring the research followed the principles of both participatory research and appropriate engagement, the issues that were of greatest importance to the participants were accurately identified. The research design also enabled the identification of next steps that participants would like to see take place in their community.

Strengthening the Unity of the Community

A key message from participants during both focus groups was the need to strengthen the unity of the TLFN community. The suggested means to do this was through collective projects in which traditional skills, collective enterprise, and greater intergenerational reverence and reciprocity are utilized. There have been many changes in the TLFN as a result of federal and BC government policies and practices aimed ultimately at replacing a traditional lifestyle and way of life with that of a dominant Western culture. The outward manifestation of this was the

engagement of TLFN members in a wage labour economic system, which reverberated through the whole lifestyle of the TLFN, including the disruption of social bonds based on traditional values. It is these social bonds based on traditional values that the participants wish to re-establish.

When the government implemented the reserve system, the allotment of reserve lands were purposely small so the First Nations could no longer subsist on traditional practices of their subsistence lifestyle, and instead would be pulled into wage labour off reserve (Harris, 2002; Wotherspoon & Satzewich, 2000). Reserves still gave First Nations access to some of their previous lands, so some did maintain hunting, trapping and gathering activities. These activities were jeopardized not only by the small size of the reserve land, but also by a series of government laws restricting hunting, fishing and trapping activities (Harris, 2002; Wotherspoon & Satzewich, 2000). Continuing to live and have access to traditional territory, albeit significantly reduced in size, was still a significant connection to First Nations culture and identity (Harris, 2002; Wotherspoon & Satzewich, 2000). Many First Nations, including the TLFN, became reliant on a mixed economic system, moving in and out of the wage economy, and still being reliant on the land partially for subsistence (Wotherspoon & Satzewich, 2000). Unfortunately, the wage labour opportunities for First Nations people were often limited by racist or socially discriminatory hiring policies of larger society (Harris, 2002; Wotherspoon & Satzewich, 2000). This mixed economic system had negative effects on the lifestyle of the TLFN, as a traditional and a capitalist economic system have contrasting ideals. The increase in wage labour, and with it increased pressure of dominant Western culture, challenged existing values, norms and practices in the community. A traditional economic system is based on extended familial ties and community labour for collective success. The results of labour in a traditional

economy are tangible. People work together to acquire necessary resources; it is a very personal system that emphasizes reciprocal exchanges of resources and communal ownership. A capitalist economic system operates in contrast to these ideas. Capitalism is based on an individual selling their labour to a third party in exchange for wages (Kanth, 1992). The more an individual works, the more they gain personally, as workers use the wages earned to purchase the products they want. Capitalism is impersonal, and promotes ideals of individualism, materialism, personal ownership and inequality (Stanford, 2008).

Further disruption of the social system came from TLFN members leaving the community to engage in wage labour, forcing people to be apart from extended family which functioned as their social support systems (Wotherspoon & Satzewich, 2000). Harris (2002) argues that the government had wanted the First Nations traditional family, kinship, and political systems to be replaced with Western models. The culmination of government policies and the influences of Western culture did influence the social, cultural, political and economic life of the people. As one Elder explained, there was concern about disruption to “the strength of the community, and the unity of the community”.... “time has changed, we don’t work together no more” (TL-2011-05).

Many jobs in the developing industries in BC, which increased substantially during the second half of the 20th century, were seasonal (Brody, 2004; Harris, 2002), fluctuating (Knight, 1996) and, in the interior and north of BC in particular, for men only (Furniss, 1993a; Harris, 2002). Engaging in wage labour became incorporated as another part of the seasonal rounds of subsistence activities (Knight, 1996), along with traditional activities on their greatly diminished territories. As one participant stated, a long time ago they got any money they needed for things such as groceries and clothes from trapping, “we would take anything we could trap and (there

was) no welfare back then” (TL-2011-07). With the increasing government pressures on the First Nations to assimilate, many people found themselves economically marginalized, straddling two very different economic systems, often in positions of unemployment and increasingly reliant on the government’s social security system (Wotherspoon & Satzewich, 2000).

The economic activities in the interior of BC were based on the resource extraction industry, such as forestry, and the dominant Western ideas about the environment were based on the commodification of environmental resources. This contrasted with traditionally held TLFN’s ideas about the environment, not just about living life in balance, but also specifically how TLFN members made an economic living. The relationship of TLFN members and the environment has changed. Instead of collecting resources through hunting, fishing, trapping, and gathering, they were engaged in wage labour to harvest the resources of the environment on a scale that was well beyond that needed for subsistence. TLFN members later started their own resource extraction companies, such as the Takla Development Corporation. The TLFN members were also pulled into the objectification of resources for economic gain.

The Elder and adult participants want to embark on strategies, projects and programs that will re-establish a sense of community that was seen to exist in the past, strengthen the TLFN members’ social bonds, and revitalize knowledge of, and connection to, the TLFN culture, language, and traditional identity. The negative factors that undermine community unity, such as alcohol, drug abuse, and disjointed social relations, create barriers that prevent the community from moving forward (Wadden, 2008). Embarking on the type of strategies that will increase community holistic health and wellbeing is an effective means to addressing detrimental, unhealthy practices, such as alcohol and drug abuse, and allow the community to be more united

and work cohesively together to focus on addressing bigger issues which will lead to social and economic renewal (Wadden, 2008).

Re-establishing the sense of community unity and cohesive social relationships means establishing and receiving community buy-in of norms of community labour and collective effort. One participant stated that the community activities and events should revolve around actions “with the whole community involved (because right now) People don’t come out anymore unless they are getting paid” (TL-2011-12). Another participant agreed “Yes, get more people working together. Get the kids working” (TL-2011-08). Ideas suggested for community initiatives that would both require community labour to build, and then have a place and a foundation for continued community activities to occur included building and maintaining a community garden, building a large community smoke house and cultural centre. The idea to hold a yearly cultural camp, discussed by both Elders and the adults, would also require a large community undertaking to plan, organize, and run. A yearly cultural camp would be a powerful connection to family, community, culture and the land. Suggestions to reintroduce community games and events, and develop programs for the Elders to teach the younger generations’ culture and language, are also actions that would strengthen social relationships and the unity of the community.

Strengthening Connection to Culture, Language & Identity

This research with the TLFN has provided new insights into the themes I explored while conducting the literature review for this thesis. The themes in the literature review were reinforced by research results, and the participant’s ideas for community initiatives and next steps. The research results concluded that participants want future actions in the community to revolve around strengthening the community’s connection to language, culture, and identity. These are not

only methods for strengthening community unity and social relationships; they are also fundamentally about ways to improve holistic health and wellbeing. Culture, identity, and wellbeing are all interconnected (Parkes, 2011). Arquette et al (2004) argue that it is “impossible to consider physical, mental, spiritual, and social wellbeing in isolation” (p. 262) or without the connection between individuals and their family and community (NCCAH, 2010; Parlee et al, 2007). In fact, it has been said that, from a traditional perspective, the health of the family and community directly determines the health of the individual (Warne, 2005). These holistic perspectives about health and wellbeing, and its connection to all aspects of life, are at the forefront of ideas discussed by the participants for future projects, programs and strategies.

What became apparent during this research is that neither knowledge translation nor knowledge to action adequately encompasses the knowledge transmission that took place. Knowledge transmission is at the root of many of the ideas the participants expressed. Knowledge translation in a participatory, First Nations context must include a knowledge to action component, but the participants wanted more than this. Sharing what is known about living a good life incorporates yet an even wider understanding of what knowledge is and what knowledge sharing processes are about. It is important that participatory research gives value to many different types of knowledge; this can include knowledge learned through research, but also traditional knowledge held by the community (e.g., Elders’ knowledge).

This research also revealed that knowledge translation is not the correct term for the sharing of Elders knowledge. Implicit in the term knowledge translation is an exchange of ideas and understanding. Yet knowledge transmission is not an exchange; it is a one way transfer of traditional knowledge from Elders to community members. The Elder and adult participants in this research want increased opportunities for knowledge transmission within their community. The

participants had specific ideas about the ways they wanted knowledge shared, and also the type of knowledge they wanted shared. That is, through teaching and learning opportunities, the Elders and knowledgeable adults see it as a priority to engage in knowledge transmission and pass on traditional knowledge to younger generations.

The Elders provided a lot of information about what their lives had been like before the introduction of wage labour and dominant Western culture caused so many changes in the TLFN's lives. The Elders spoke of close family and community ties, living a successful traditional subsistence lifestyle on the land, working together with their family members, and importantly, being taught everything they needed to know about how to live a good life by their family. This is exactly the type of knowledge that Elders want to pass on to the younger generations; that is, the traditional life lessons they learned from their families about how to live a good life. The Elders want to teach these lessons to the younger generation through transmission of cultural knowledge and language by way of programs and activities, at the same time helping community members to strengthen their connection to their cultural sense of identity. The adult participant's information corroborated what the Elders had said; adult participants also wanted teaching and learning opportunities so the Elders could pass on important traditional knowledge about culture and language to the younger generation. The process of engaging in teaching and learning opportunities is an effective means to facilitate relationship building (Willows, 2005), and strengthen already existing bonds between the people involved.

There are many benefits to strengthening connection to culture and language. Cultural and language revitalization is described as the way to celebrate "the self, the family, the community, and the landIt is about renewal and regeneration" (NCCA, 2010, p. 3). Connection to culture is an important part of personal and community identity (NCCA, 2010), and connects people to

their heritage, and the process of passing on traditional knowledge aids in group and family cohesion (Willows, 2005).

Participants stated they wanted the Elders and knowledgeable adults to teach the children the culture and language. Effective knowledge translation takes place within the unique cultural, historical, and geographical and demographic context of the community (Smylie et al, 2009). Elders are traditional carriers and transmitters of wisdom in TLFN, as is common in many other First Nations groups (Estey et al, 2010), therefore participants suggested that the Elders to teach language and cultural activities to the younger generation because this is the traditional way of doing knowledge dissemination, and a successful method that has been used in TLFN culture since time immemorial. This was reinforced during the focus group when Elders discussed how, when they were young themselves, they were taught by their family members; how they have never forgotten the knowledge they learned from their families, and how they would now like to pass knowledge down to the younger generations. Being taught by your family “is a good way.....my dad, my mom, my grandpa, my grandma. What they said put my head is still in there, I never forget” (TL-2011-08).

In keeping with the discussion of teaching and sharing traditional culture with the younger generation, one Elder explained about Elders programs they had heard of in other First Nation groups. In some other communities, the Elders “teach them kids language and work sewing and whatever we do when we’re raised up they teach them youth” (TL-2011-06), and they would like the Elders in Takla Landing to do the same with the children in the community. Muirhead & de Leeuw (2012) state that in Canada, engaging in art and cultural expression is an important part of strength-based approaches to health and wellbeing grounded in First Nations culture. Art is a form of cultural expression that can enhance social bonds, strengthen individual

and group identity, and promote health, wellbeing and healing. Participants stated they wanted Elders and knowledgeable adults to teach many different traditional crafts, and they wanted the community to engage more in traditional types of cultural expressions. Generally, First Nations concepts of artistic expression include a wider range of what is considered art than is the case in dominant Western culture. The former include, for instance, such forms as rituals, feasting, singing, dancing, and storytelling (Muirhead & de Leeuw, 2012). Creative expression can also have many meanings, other than art; they can be part of religious practice, markers of territorial heritage, or “maps of individual and community identity and lineage” (Muirhead & de Leeuw, 2012, p. 2). When groups participate in artistic expression, social bonds can be strengthened, and a greater sense of belonging can be achieved. Art also has positive effects on group identity as individual and groups engage in the very thing that makes them unique, their cultural expression. This can have a positive effect on self-esteem and self-confidence, and all of these factors therefore may improve health, wellbeing and promote healing (Chandler & Lalonde, 2008).

The NCCAH (2010) describes language as a “conveyor of culture” (p. 1), and further explains that reclaiming language is an important part of cultural revitalization, because language is an important expression of culture (NCCAH, 2010) and identity (Chandler and Lalonde, 2008). Recent literature also supports the importance of investing in children by implementing early childhood development programs that include culture and language as solutions to improving First Nations health and wellbeing (Greenwood, 2005; NCCAH, 2010). One Elder stated that “language is really lost” (TL-2011-06), and too many children are not being raised learning their traditional language in the home or at school. The participant further explained that “it’s hard. Kids, little kids, it’s hard for them. From today they go to school, they come back

home, we teach them. No they can't learn" (TL-2011-06). That is why many participants stated the need for more structured and consistent ways of teaching the language in the community.

Acquiring and consuming traditional foods is an important part of culture, and many traditional activities revolve around the acquisition, preparation, and consumption of traditional foods. Participants in the adult focus group discussed programs where the Elders would teach the younger generations "how to do their dry fish, how to catch and cut and do their smoking and what kind of wood they use, and all of those things" (TL-2011-11) . The participant wanted the Elders to teach "how it's done properly, and the process" (TL-2011-11). Another participant wanted the opportunity to teach traditional knowledge he had learned from his grandparents to other members of the community. The participant discussed "teach(ing) the younger generation in school how to go trapping" (TL-2011-15). As Willows (2005) explains, consuming traditional foods is a display of cultural expressions, it is an "anchor to culture" (p. S33), and is also an important symbol of cultural identity. Consuming traditional foods is also an important method for passing on cultural values such as sharing and cooperation (Earle, 2011a).

Addressing Drug and Alcohol Issues

In the literature there are linkages between cultural continuity and building individual and community resilience (NCCA, 2010), achieving positive health status for Indigenous peoples (Greenwood & de Leeuw, 2007), increasing the health and wellbeing of Aboriginal youths (Hallet et al, 2007), and diminishing poor health outcomes (NCCA, 2010). There are also many examples of success stories of improving the health and wellbeing of individuals and communities using traditional methods of healing and conflict resolutions such as circle work, Elders councils (Wadden, 2008), drumming, dancing, ceremonies, and athleticism (Napoleon & Dickie, 2009).

The Elders identified drugs and alcohol abuse as a paramount issue that needs to be addressed in the community. Elders stated that there was “too much drugs and alcohol” (TL-2011-04), and that drugs and alcohol are “killing all our people” (TL-2011-09). The discussions about helping community members in their struggles against alcohol and drugs also derived from ideas about larger social responsibility of the community to assist individuals in their fight against self-deprecating behavior and addiction. One Elder said that people who had lost control and “start(ed) to go on their own” (TL-2011-05), in reference to that some of the Elders discussed the success of pledge papers, of having individuals sign pledge papers promising to stop drinking alcohol and/or using drugs for a specific length of time. The power behind signing a pledge paper in order to stop abusing alcohol and/or drugs is based on the strength of social support, and community rather than individual strengths. The process includes another member of the community witnessing an individual signing the pledge paper, that witness holding the pledge paper for the individual, and praying for the individual to complete their pledge. The holder of the pledge paper is offering their support and strength to the signee to assist in their struggle and to show they are not alone. The individual, in return, understands they are not entering the struggle alone and that they have asked for the support of other members of the community. This whole exchange is based on the fundamental understanding that an individual is a part of a larger community.

Overall, there are many benefits to increased connection to culture, language and identity. Through increased teaching and learning opportunities in the community, these benefits include strengthened community unity, social bonds, and holistic health and wellbeing. All of these contribute to aiding individuals in their struggles against alcohol and drug use.

The Interconnection of Sense of Place and Culture

The relationship between the TLFN to their traditional territory is part of their personal, cultural and political identity, and increasing the connection to land was an integral thread through many of the ideas for next steps suggested by participants. There are many connections in the literature about the importance of the connection to place for Aboriginal peoples, and these themes were reiterated in the results of this research. Further connections were also apparent from the research results that were not obvious in the literature. These included the connections between sense of place and Aboriginal culture, the interconnectedness of environmental and social health and wellbeing, and how risk perception is culturally constructed, based on traditional holistic beliefs about health. The information provided suggests that participants want to move away from the Western, objectified view of land, to reincorporate more traditional knowledge concepts about the need for balance between people and nature. This included participant's wishes for the TLFN to exert more control over the resource industry that operates on the TLFN territory.

A subsistence lifestyle, which by definition is inextricably linked to the land, can be argued as being at the core of wellbeing (Napoleon & Dickie, 2009) for the TLFN. Previous research studies with the TLFN concluded that the members of TLFN link ideas of increased health and wellbeing to their ability to spend time on the land (Parkes et al, 2011). The results of this project also connected participants' ideas of individual and community wellbeing with spending more time on the land. As stated previously, most of the cultural activities suggested by the participants took place on the land, including traditional games and activities such as snowshoe races and ice-skating races, and traditional crafts such as tanning hides. Participants' suggestions were also to improve community members' access to the land, such as opening

family trap lines, building cabins on these trap lines and on lakes, opening grease trails, and undertaking cultural camps.

Part of the message the Elders shared was that traditional lifestyle consisted of balance. An important part of the Elders description of their life in the past is that it was fundamentally based in strong relationships between family, community, and nature. Balance is explained as being in harmony with the physical, emotional, mental, and spiritual, as well as family, community and all other living things including the natural world (Tagalik, 2010). The Elders described their traditional lifestyle before the changes brought by dominant Western culture, including traveling around the land in seasonal rounds of resource extraction with their families. They relied on the community for mutual success, and lived lives in balance with the environment.

Although the traditional territory is an important part of the culture and identity of the TLFN, identities of places are socially constructed and constantly changing (Massey, 2004). The environment is commonly viewed in terms of resource extraction. Many members of TLFN have themselves been pulled into resource extraction work which could not help but have an effect on their relationship with the land. This has put them in a position of spanning two different perspectives. Fundamentally, the members of TLFN are stewards of their land, and knowledge shared by participants demonstrates they want to exert more control over current and future industrial activity on their territory.

Knowledge about the health and wellbeing of the environment contributes to increased control, capacity, and community empowerment to make decisions about current and future industry functioning in the traditional territory (Earle, 2011a). The TLFN also have data from previous environmental health research initiatives that show the effects of industrial activity on

their traditional territory (see Table 1), and accurate lists compiled from community member interviews about many of the sites where industrial waste was left. During the second focus group participant's referred to this information when they stated they want their traditional territory cleaned up and they want all the industrial waste removed, including sites that had been identified as containing industrial waste in previous research. Participants also stated they want to closely monitor current industry operating on their territory to ensure it is undertaken in an environmentally sound manner.

In general, many of the suggestions put forth for future projects, programs and strategies took place on the land. This indicates not only how important the land is to the TLFN's culture and sense of identity, but also how being on the land and engaging in traditional activities is viewed as a vital component of health and wellbeing. The participants want to clean up and protect the environment and ensure future economic development is undertaken in a manner that respects the relationship between the environment and community health and wellbeing.

Study Limitations

It is important to identify the limitations, as well as the strengths of any research project. This is an important step to ensuring the rigour of the research, in order to improve the reliability, accuracy, and credibility of the research data. The limitations of this thesis research that I have identified were that I engaged in only one round of data collection, opting not to engage in iterative rounds of further data collection. Also, there can be limitations to using focus groups as a data collection technique.

The first limitation I identified was that I only engaged in one round of data dissemination and collection. Had I gone back to the community and had further discussions

about the data, engaged in a longer iterative process with community members about my data analysis and conclusion, I might have collected different data. I might possibly have received some information from participants' on opinions about previous research initiatives, and the environmental health data. During my second focus group with adults I asked four questions about the previous environmental health research projects that TLFN had engaged in, but these were subjects the participants of the focus groups were not interested in discussing.

My project was limited by time and money, which is unfortunately a common limitation for many master's theses, so I chose not to engage in further rounds of iterative data dissemination and collection. I was under constraints financially and also committed to finishing my master's in a timely fashion. I was also concerned that the participants, specifically the Elders, would not see the merit in an iterative process of data collection seemingly about the same topics, when instead they expected to see actions produced from the information they had already provided. This is the same reason I altered my original data collection plan from three focus groups to two. The Elders stated they had already discussed some of my focus group questions about the history and social formation of Takla Landing, and saw no point in discussing it again.

Finally, there are limitations to using focus groups as data collection techniques. Participants have different personalities and, in a group setting, some participants may not be as confident as others to speak and provide information (Hopkins, 2007). In a focus group setting where the participants are well known to each other, there may be previously established relationships and power dynamics between the participants that could affect conversation. Pre-existing relationships and power dynamics (e.g., peer pressure) could inhibit certain participant's willingness to contribute (Cameron, 2005). There may also be particular participants who

dominate conversation (Hopkins, 2007). Finally, confidentiality of the research participants can be jeopardized in a focus group setting (Cameron, 2005), as the researcher cannot guarantee that participants will not speak outside of the focus group of what was said.

I chose to use focus groups to collect my data because I felt it was a culturally appropriate form of data collection with the TLFN, and I believe that the benefits outweigh any possible limitations. Focus groups facilitate the type of dynamic exchange between participants that can provide insights that other data collection techniques such as individual interviews might not (Cameron, 2005). I felt that a focus group would provide an excellent setting for interactive exchanges between peers in which they could explore each other's perspectives and experiences (Goss, 1996a), which in turn could enhance participants' own ideas and understandings (Cameron, 2005), thus helping produce, value and share new knowledge. I also believed that the pre-existing relationships and the familiarity the participants had with each other would be beneficial in the facilitation of dialogue. Having pre-existing relationships might also make the participants more at ease to agree or disagree with one another (Hopkins, 2007). As the facilitator, it was my job to try to ensure that all participants were given the opportunity to speak, and that no one individual dominated the entire focus group (Goss, 1996a). Finally, although the possibility of confidentiality being broken by research participants was a concern, I feel that we did not discuss any subjects that were too controversial or sensitive (Cameron, 2005).

Conclusion

I believe there were important lessons learned from this thesis about the TLFN's community priorities. My findings might indicate that a better understanding of research expectations and ideas is needed to guide future knowledge exchange, translation and knowledge to action efforts in research done in partnership with First Nations. Specifically, in an Aboriginal

context these terms are more appropriately understood as the things that researchers should do to help ensure that knowledge about living a good life is shared. The members of TLFN had their own unique perspectives, priorities, and ideas that they want to see acted on. This reiterates the necessity of framing research with communities using participatory methods, and utilizing appropriate engagement when working with First Nations so that the research will meet with the community's needs, be meaningful to and benefit the participants.

At the core of this research were the participants' knowledge of the interconnections between the health and wellbeing of individuals, their sense of community, and the interconnectedness of culture, identity, and nature. The next steps are to devise ways to move this research forward and find ways to implement many of the projects, programs and strategies the participants suggested, strengthen these inter-connections and improve the overall health and wellbeing of the members of the Takla Lake First Nation.

CHAPTER SEVEN: CONCLUSION

Introduction

The thesis began in response to the strong body of research data already collected by the TLFN, specifically in the area of environmental health. I determined that study participants want the next steps taken by the TLFN to focus on the community, and be informed by the traditional knowledge held within the community. This finding is not inconsistent with the objectives or content of prior research in the TLFN community; rather it is a continuation of community concerns for overall health and wellbeing. In response to my research questions outlined in chapter one, I argue that the participants want to develop knowledge translation and knowledge to actions techniques that are based in a strength-based approach and focused on renewing the traditional culture of the TLFN community. Participants want future actions to promote resurgence in the traditional values and principles of the TLFN that have acted as an effective lifestyle guides since time immemorial. The ideas for future actions to improve overall health and wellbeing are also deeply rooted in participant and community knowledge of and ties to community, sense of place, and connection to the land, as is apparent in the ideas for future projects, programs and activities.

Summary of Key Findings

There are four main themes that emerged from the data, these themes were: changes brought by wage labour; strengthening connection to culture, language and identity; increasing community labour; and environmental cleanup and monitoring. These four themes all reflect the strengths of community knowledge and revolve around different ways of improving overall holistic health and wellbeing in the TLFN community.

Understanding the history of the TLFN, and how the lifestyle of the TLFN has changed over time is an important source of knowledge and part of understanding the dynamics of the community now, and the directions the TLFN want the community to go in the future. The post-colonial framework of this research project focuses on the fact that the historical pressures and influences that shaped the TLFN community, continue to have an effect on the community today. This is consistent with the idea that Canada continues to be a country whose roots lies in colonialism (Haig-Brown, 2008).

The TLFN's history is not only a history of colonization; the TLFN's past is also a rich tapestry of traditional culture. It is this culture, and the values, ideas, beliefs, principles and knowledge that comprise it that the participants want to draw from in the undertaking of future projects, programs and strategies. The TLFN want to embark on strategies for community health and wellbeing rooted in the strengths of their traditional culture. Indeed, there is much support in the literature for strategies that recognize the strength of First Nations culture as an effective tool for increasing community health and wellbeing.

It was essential that the viewpoint and knowledge of the TLFN remained at the forefront of future research for the research to be relevant. This thesis was framed by participatory research and informed by appropriate engagement. This was the correct approach to take in order to ensure the priorities of the participants directed the research, and the thesis had the flexibility to change as new priorities emerged from the data collection. The participatory nature of the research was also important for knowledge translation and exchange activities to be effective.

The purpose of pursuing knowledge translation and knowledge to action as a topic was to help bridge the gap between knowledge and action (Estey et al, 2010) and to provide a link

between more academic health and wellbeing research and improving health outcomes (Smylie et al, 2009) in the TLFN community. For knowledge translation to be effective, it is necessary to understand the community's concept of, and knowledge about, what health and wellbeing is, and to know what traditional knowledge translation and transmission strategies exist in the community. What emerged from the research was that the TLFN ideas of health and wellbeing incorporate a holistic view of life, and an important component is the strength of the community, and the strength of social bonds that connect and unify the entire community to each other. The TLFN always have the best interests of children, and the wellbeing of future generations, in mind in any decisions they make. Traditional knowledge sharing and transmission techniques include traditional knowledge being passed down from Elders, and also knowledgeable adults, in the course of community members working together, towards collective goals. Participants want these social bonds, and overall community unity, strengthened.

Themes that emerged from the literature review were reinforced by the research results. This provided me with a new understanding of interconnection between the social and environmental determinants of health, as well as the realization that there is a gap existing in the literature that fails to connect risk perceptions, traditional ways of knowing, connection to place, lifestyle and culture, as all part of the same interconnected whole. A better understanding of these connections, as well as a greater focus on all of the determinants of health and wellbeing are needed to reduce health inequalities experienced disproportionately by Aboriginal peoples in Canada, and improve health outcomes.

The TLFN understand that the land is always productive, regardless of whether there is industrial activity taking place on it or not. The TLFN's connection to the land is an important part of overall health and wellbeing, as well as instrumental to their sense of place. Connection to

the land and engaging in traditional activities are important components of many of the suggestions provided for strengthening the TLFN community connection to culture, language and identity, increasing community labour and strengthening community unity. The land is a major part of establishing, building and/or maintaining social bonds between family and community members. Their ability to spend time on the land, and undertaking traditional activities, are all part of the TLFN's ideas of health and wellbeing. Risks to the TLFN sense of place include loss of access to land, or inability to spend enough time on the land. This loss of access can come from a variety of sources, but a major concern is still the effects of past, current and future industrial activity.

None of the research results focused on risk of environment contamination as I had thought they would. I realized that my ideas about environmental risk were different than the members of TLFN. The members of TLFN do not compartmentalize risk of environmental health as separate from human health; they perceive social and environmental risk as the same thing. The results of this research were the participants desire to focus on community health and wellbeing, but the health of the environment is included as a part of overall health. The TLFN want to focus on strengths-based approaches based in the traditional culture and traditions to help improve the health and wellbeing of the overall community. Included in this is strengthening TLFN members connection to the land by engaging in activities on the land. A part of strengthening this connection is also gaining more control over the health and wellbeing of the environment.

The TLFN should have more say in the EIA process, and risk assessment of industrial activity and development on their traditional territory. In order to achieve greater control over the health and wellbeing of the environment, they have to be allowed to regain their traditional role

as stewards of the land. The EIA process in Canada has been criticized for not adequately taking into consideration all of the risk factors when assessing the potential impact of a proposed development. The TLFN understanding of health and wellbeing includes a more holistic assessment of the linkages between social, environmental, cultural health and wellbeing. This holistic understanding coupled with their vested interest in the health and wellbeing of their land means they should have more control over what happens on their territory.

Future research directions identified by this research should focus on participatory action approaches that help the community to develop ways to value community knowledge and to implement participants' suggestions for future projects, programs and strategies. The participants stated they want teaching and learning opportunities in the TLFN community of traditional crafts and cultural activities, such as preparing and tanning animal hides, sewing, making moccasins, traditional drums, snowshoes, and learning about traditional medicines, as well as general knowledge sharing about traditional methods of trapping, fishing and hunting. These are all opportunities for sharing community knowledge and engaging in knowledge transmission. The participants also spoke of holding a yearly cultural camp, organizing community-wide games such as snowshoe races, ice skating races and lahal, building a community cultural centre, smoke house, and community garden, re-opening old grease trails and trap lines, building cabins on the land, and starting a food exchange system with other First Nations groups. There is much to be learned about the therapeutic potential that accompanies the processes by which a community mobilizes to undertake such activities.

Future research directions also include exploring some of the challenges the participants identified in the community, such as the Elders feeling that there is a lack of respect awarded them by the younger generation. Also, utilizing the research data collected in the past

environmental health research projects, and also the capacity built undertaking these projects, to campaign for cleanup of former industrial activity on their traditional territory, and closely monitor current industry. The recent environmental health research projects that the TLFN have engaged with have also given the TLFN valuable knowledge about the effects of past industrial activities on their land. This knowledge will be instrumental in future risk analysis and decision making about industry that petitions to operate on the TLFN traditional territory. The findings of this thesis suggest that cumulative social and cultural impacts reflecting community knowledge and concerns must also be taken into consideration in the EIA process.

Conclusion

The next steps, after the completion of this thesis include striving to realize not only the suggestions provided by the participants, but the directions they want the next steps to go. This means the next steps for individual projects and programs suggested, but also strategies to help strengthen connection to culture, language and identity, increase community labour, enhance community intergenerational unity, and enhance environmental cleanup and monitoring. These strategies would also prove effective in facilitating traditional knowledge transmission in the TLFN community. Although Aboriginal knowledge translation and transmission are constantly taking place as knowledge is shared between community members, it is aided greatly by strong social cohesion and bonds between community members. Finally, it is important that future participatory research take place, and that it is guided by appropriate engagement. More importantly, researchers must understand that knowledge translation and knowledge to action are academic concerns, and that these concepts must respect, if not defer to, Aboriginal ways of sharing what is known about living a good life (i.e., knowledge transmission).

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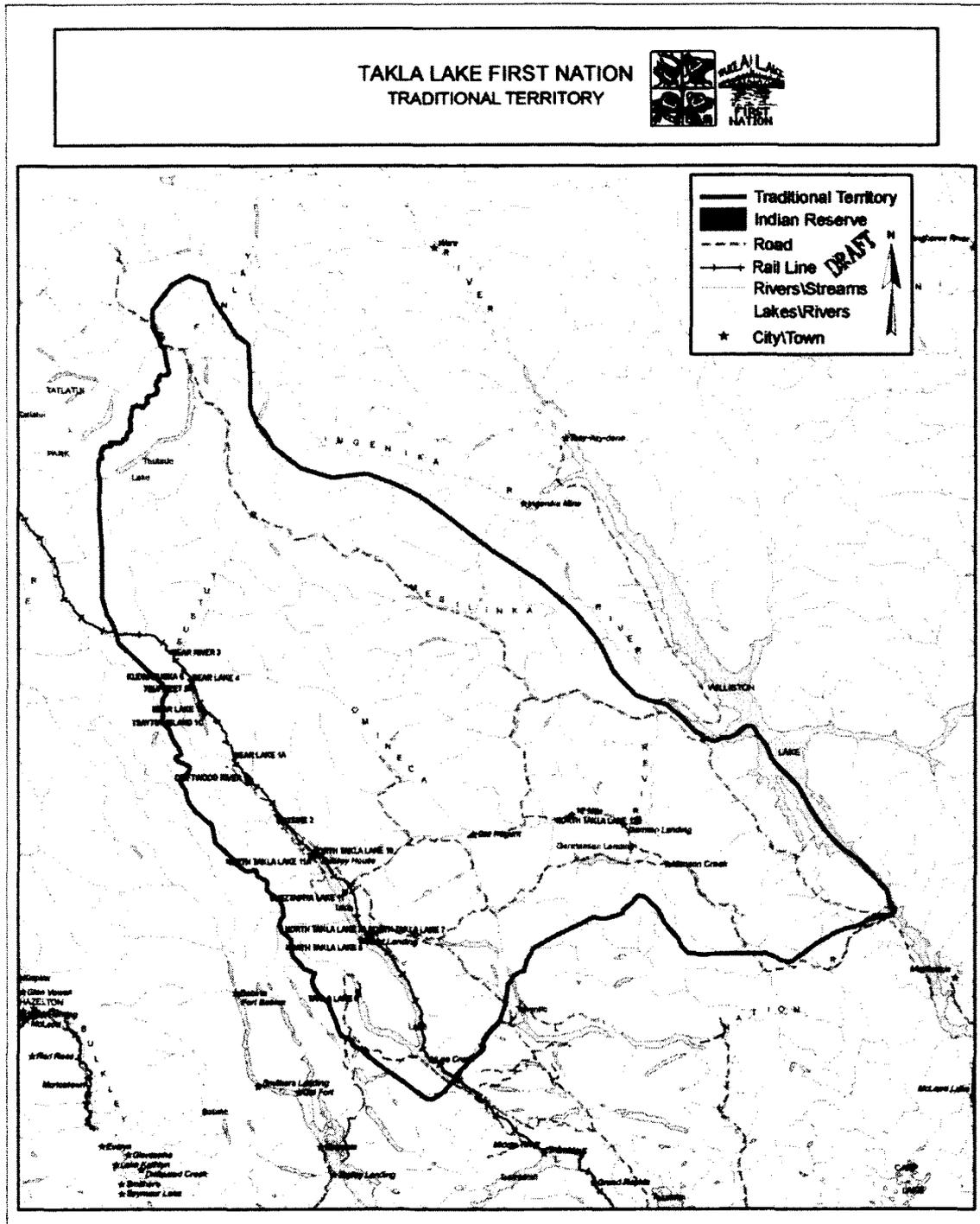
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Figure 1: Map of Takla Lake First Nation Traditional Territory



TLFN (n.d.). *Maps*. Retrieved January 18 2013, from
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Figure 2: Map of Takla Lake First Nation Traditional Territory



TLFN (n.d.) *Maps*. Retrieved Jan 18 2013 from http://www.taklafn.ca/downloads/location_bc.pdf

Table 1: Past Research Conducted with the TLFN

Date	Project Title	Sponsored By	Key Research and Findings
2006/ 2007	Healthy Land, Healthy Future Phase I	Health Canada	Qualitative interviews with community members, quantitative samples of soil and water for environmental contamination analysis. Findings Community members are concerned about the effects of environmental contamination, and some samples of soil and water had elevated levels of environmental contaminants Interviews, soil and water samples
2007	Master's Thesis: The social and cultural experiences of food security in Takla Lake First Nation	Tobin, P. University of Northern British Columbia	Qualitative interviews with TLFN community members on the issue of food security and the importance of traditional foods
2007	Master's Thesis: Expanding a mine, killing a lake: A case study of First Nations environmental values, perceptions of risk and health	Place, J. University of Northern British Columbia	Qualitative interviews with members of the TLFN and the Tsay Keh Dene, as well as employees of the band about the effects of mining on the territories. Case study of the possible effects of the (then) proposed mine on Amazay Lake.
2008/ 2009	Healthy Land, Healthy Future Phase II	Health Canada	Qualitative interviews with community members, quantitative samples of soil, water, plants, berries, animals and fish for environmental contamination analysis. Findings Community members are concerned about environmental contaminants working up through the food chain, and some samples of soil, water, plants, berries, animals and fish had elevated levels of environmental contaminants.
2009/ 2010	The Environmental Effects of BC Rail Activity on TLFN Traditional Territory	Health Canada	Qualitative interviews with community members about the effects of BC rail activity on TLFN Territory, quantitative samples of soil for creosote (PAHs & chlorinated phenols) analysis. Findings: 18 of 36 soil samples had levels of PAHs or chlorinated phenols
2009/ 2010	Human Environmental Health Impact Assessment-TLFN & Stellat'en First Nations	BC Leadership Chair for Aboriginal Environmental Health	Qualitative interviews with community members in regard to concerns about human health aspects of environmental assessments (EA) and other major resource development decisions. Findings: health impact assessment model was developed that incorporates concerns with health and wellbeing
2010	Harvard Report: Bearing the Burden, the Effects of Mining on First Nations in BC	International Human Rights Program, Harvard University, USA	Qualitative interviews with community members about their lived experiences and the social, cultural and environmental effects of mining on the TLFN traditional territory
2010/ 2011	Healthy Communities: Defining Our Future TLFN & TKD	Health Canada	Qualitative interviews with community members, Food frequency questionnaires and quantitative human hair sampling for mercury analysis
2010/ 2011	Water Resource Management: An analysis of drinking water quality	Health Canada	Quantitative samples of water at two reserves on the TLFN traditional Territory: Bear Lake and Takla Landing

Adapted from: Parkes, M., Shubair, M., & Tobin, P. (2011). *Healthy Communities: Defining Our Future Final Report*. Takla Lake First Nation

Table 2: Written Sources Referring to the TLFN

Date	Title	Author(s)	Type of Source
2006/2007	Healthy Land, Healthy Future Phase I TLFN & TKD	Mitchell, S. & Tobin, P.	Unpublished Final Report
2007	Master's Thesis: The social and cultural experiences of food security in Takla Lake First Nation	Tobin, P. University of Northern British Columbia	Unpublished master's thesis
2007	Master's Thesis: Expanding a mine, killing a lake: A case study of First Nations environmental values, perceptions of risk and health	Place, J. University of Northern British Columbia	Unpublished master's thesis
2007	Background Paper	Carrier Sekani Tribal Council	Website
2009	Healthy Land, Healthy Future Final Report	Rutherford, M. & Tobin, P	Unpublished Final Report
2009	Making railroad ties in the hinterland: The contamination and remediation of the Silvacan mill site at Lovell Cove, Takla Lake 1971-2007	Steidle, J	Unpublished Report
2009	Food security in the Takla Lake First Nation: Informing Public Health.	Tobin, P	Published master's thesis
2010	Appropriate engagement and nutrition education on reserve: Lessons learned from the Takla Lake First Nation in northern BC	Tobin, P., French, M., & Hanlon, N	Published academic article
2010	Bearing the Burden: The effects of mining on First Nations in BC.	International Human Rights Clinic, Harvard University	Unpublished Report
2011	Healthy Communities: Defining Our Future Final Report	Parkes, M. Shubair, M, & Tobin,P	Unpublished Final Report
2011	Kill the lake? Kill the proposal: Accommodating First Nations' environmental values as a first step on the road to wellness	Place, J. & Hanlon, H.	Published Academic Article
2011	Takla Lake First Nation: Review of historic and ethnographic sources.	Ministry of Attorney General	Unpublished Report
2011	About Carrier Sekani Tribal Council	Carrier Sekani Tribal Council	Website

Appendix III-Focus Group Questions

Questions to Guide Focus Group Interviews

Focus Group #1:

1. What changes have you seen happen in the TLFN community during your lifetime?
 - a. What caused these changes?
 - b. What were the effects of these changes?
 - c. When did these changes happen?
 - d. How are things different now?
1. Have you noticed changes in the land over time?
 - a. When did you begin to notice these changes?
 - b. What caused them, what were the effects/what happened because of the changes?
 - c. Are you aware of the recent research projects that have been conducted by the TLFN? If yes, did you participate in the projects?
2. How would you like to see happen in the TLFN community in the future?
 - a. What projects, programs, next steps you would like to see developed in Takla Landing?
3. Is there anything else you would like to add?

Focus Group #2

4. Are you aware of the recent research projects that have been conducted by the TLFN?
 - a. Did you participate in any of these projects? If yes, how?
5. What effects do you believe came from this research?
6. What would you like to see done with the research data that has been collected?
 - a. How can the data and information be used by the community?
7. Are there other areas you think would warrant more study?
 - a. If yes what types of studies?
 - b. Why do you think these studies need to be done?
8. What would you like to see happen in Takla Landing in the future?
 - a. What kind of projects, programs, or activities or next steps would you like to see happen?
 - b. Who should be involved with these projects, programs, or activities?
9. Can you suggest how this would be accomplished?
 - a. How could these ideas be practically accomplished?
10. Is there anything else you would like to add?