CONNECTIONS BETWEEN LAND AND WELLBEING: PERSPECTIVES OF FIRST NATIONS YOUTH IN THE COMMUNITY OF SAIK'UZ

by

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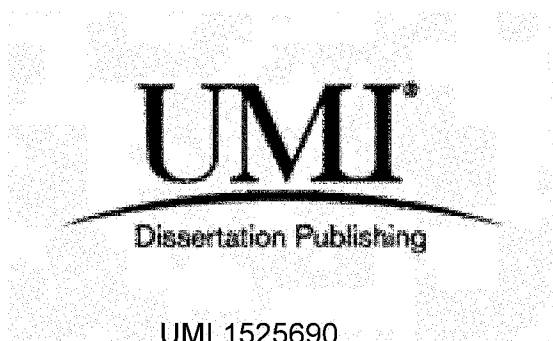
ABSTRACT

Guided by decolonizing methodologies and ecosystem approaches to health, this thesis explores Saik'uz First Nation (SFN) youth perspectives about the connections between land, health and well-being. The project engaged a small group of youth (ages 14-27) in a modified Photovoice project, embedded within a qualitative study. Their experience and photos were discussed through the Indigenous method of sharing circles, guided by two Elders, followed by semi-structured interviews. The research process was developed with a community research advisor designated by the Chief and Council. Qualitative data was analyzed using thematic analysis. Four themes emerged that represented how these SFN youth saw the land, health and well-being as connected and relational. Additionally, the youth described two main drivers of change that were impacting these relationships. The youth and Elders' insights have provided fertile ground for ideas about how to progress ecohealth and First Nations health throughout the Northern BC landscape.

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The research and writing of this thesis was not done in isolation; I was surrounded by strong support networks of mentors, friends, family, colleagues and peers at every step. An amazing group of people helped to make this thesis what it is, or were there to support, encourage me and make me smile along the way.

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To Justin, thank you for listening to my ramblings, reminding me to relax and exercise! But mostly for being a warm sense of love and calm in my life. And finally to my mom and dad, thank you for your continuous support for learning and growing.

DEDICATION

I dedicate this thesis to Jasmine, Elijah, Gabriel, Adam, SQ and Marlene and the Saik'uz First Nation.

CHAPTER 1: INTRODUCTION

This thesis documents a community-based project called the Saik'uz Photovoice

Project, embedded within a qualitative study about the connections among land, health and

well-being for First Nations[1] youth. The research process was informed by decolonizing

methodologies and ecosystem approaches to health (ecohealth), which guided the use of

Photovoice and sharing circle methods.

1.1 Study Objectives and Rationale

The health status of Indigenous people in Canada has improved considerably in the

last several decades, nevertheless, health disparities persist; Indigenous people consistently

experience poorer health than non-Indigenous people in Canada for multiple reasons and

these issues are especially pronounced for youth and children (NCCAH, 2012). Working to

find solutions, policy-makers, practitioners and researchers are often confronted with a

complex web of interwoven and inextricably linked factors which together have far reaching

implications for the health of Indigenous youth and their communities. Thus, the health and

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[1] **A note on language:** I am predisposed to using the term 'First Nation(s)' as a term to represent one of the three groups of Aboriginal peoples recognized by the Canadian constitution (Indians, Métis and Inuit) with which I was working through the course of this project. According to the Aboriginal Affairs and Northern Development Canada, (2012) First Nations is "a term that came into common usage in the 1970s to replace the word "Indian", which some people found offensive. Although the term First Nation is widely used, no legal definition of it exists. Among its uses, the term "First Nations peoples" refers to the Indian peoples in Canada, both Status and non-Status". The term can also replace the word "band" in the name of a First Nations community. However, in order to preserve the integrity of citations I will maintain whatever terminology is used therein; e.g. Aboriginal, Native, or Indigenous. When referring directly to the participants in this project, I may also use the terminology "Saik'uz First Nation" (SFN) or Saik'uz youth in order to acknowledge their distinct, place-based identity. Indigenous will also sometimes be used as an umbrella term in order to represent groups that have a "historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them" (UN Commission on Human Rights, 1988). However, the usage of this term is not meant to pan-Indigenize or erase or disregard the great diversity between Indigenous groups.

well-being challenges faced by Indigenous children and youth in Canada calls for a holistic[2] understanding, an awareness and recognition of these as serious complex problems, and a commitment to the rectification of inequities through innovative and culturally appropriate means (Greenwood & de Leeuw, 2012).

Among the many complex factors influencing Indigenous youth[3] health, an emerging body of literature is recognizing the important role of the "land", "nature" or "ecosystems" as they relate to health and well-being at physical, mental, social, spiritual, political, and economic levels. As Simpson (2002) argues "our spiritualties, identities, languages, and systems of governance come from the land. The sustenance of our wisdom, worldviews, philosophies, and values comes from the land. The source of our knowledge and our teachers themselves come from the land and the spirit-world it encompasses" (p. 15). These considerations demand recognition of the environment beyond being a source of hazards (Parkes, 2011). Connections among land, health and well-being have been underexplored in the literature, especially for Indigenous youth, and this represents a missed opportunity in terms of ways to improve Indigenous youth health, social equity and ecosystem sustainability.

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[2] According to The American Heritage Dictionary of the English Language (2000), holistic is defined as "incorporating or identifying with the principles of holism". According to Sunde (2008) "in Western philosophy, holism is understood as the process of whole-making; the emphasis is on the dynamics of the whole and the interconnections between things as constitutive participants of a whole that is more that the sum of its parts" (p.354).

[3] **Youth:** There is much indecision on the part of governing bodies about the role of youth in society. This indecision is reflected in the differing definitions and nuances of the term 'youth' in legal, economic, political and socio-cultural realms, within and between countries, as well as between genders (UNICEF, 2011). For the purposes of this thesis, 'youth' was community-defined as those persons between the ages of 13 and 30 years.

Alongside the increasing realization that ecosystems are "indispensable to the

wellbeing of all people, everywhere in the world" (MEA, 2005, p.1), ecosystems are also

facing unprecedented pressure worldwide. According to the UN's Millennium Ecosystem

Assessment (2005):

> Human activity is putting such a strain on the natural functions of Earth that the
> ability of the planet's ecosystems to sustain future generations can no longer be taken
> for granted... Nearly two thirds of the services provided by nature to humankind are
> found to be in decline worldwide (p. 5).

Informed by global attention to ecosystem change, Howard (2006) also highlights the

importance of the environment for the health of younger generations: "for many of us, the

environment is something abstract or far away, whereas for our children, its disintegration

will be the single greatest determinant of their health" (p. 215). These ideas are echoed in

key international sustainable development processes such as the United Nations Earth

Summit Agenda 21 (1992) which accepts that, ultimately, the younger generations inherit the

responsibility for taking care of our world and each other, and the decisions made today will

greatly impact their lives into the future.

However, despite their key role and what is at stake, young people are frequently

overlooked when it comes to research, policy development and health and environment

agendas (Blanchet-Cohen et al., 2011; Harper, MacDonald, & Cunsolo Willox, 2010). In the

context of these health challenges, rapidly changing landscapes, societies and communities,

and given the fact that half the Indigenous population in Canada is under 25, the need to

understand and support youth perspectives is becoming more and more urgent (Blanchet-

Cohen et al., 2011). Undertaking initiatives, actions and decision-making in ways that value

Indigenous youth and affirm their role as determiners of their own health and well-being can help to support their influence in shaping the future of Indigenous health in Canada. The involvement of youth and their positive contributions merit even more attention with the imminent establishment of the BC First Nations Health Authority (FNHA) (see also Chapter 3 for more on the FNHA). The establishment of the FNHA involves the delegation of health-related decision-making powers to communities, where First Nations will participate directly in the governance, management, and delivery of First Nations health services (Blanchet-Cohen et al., 2011).

As one step to addressing these challenges and responding to a notable gap in the literature, the objectives of the research presented in this thesis were to:

I. Explore and identify strengths and gaps in the literature in relation to First Nations youth, health, well-being and the land.

II. Undertake engaged, empirical work with Saik'uz First Nation (SFN) youth to discover and explore perspectives on the connections among land, health and well-being at a community-level, guided by the following research questions:

- How do Saik'uz youth view their relationship with the land and its influence on individual and community well-being?

- What pathways and opportunities exist for SFN youth to heal, foster and improve connections to the land?

III.   Synthesize insights garnered from Objective I and II to identify strategies for bridging

land, health and well-being at multiple levels (community, provincial, national and

international).

This study was made possible through a timely connection between two people with

common concerns, supported by the institutional contexts of the University of Northern BC

(UNBC) and the Saik'uz Chief and Council. In August 2011 I was connected with Jasmine

Thomas, a member of the Saik'uz First Nation and former UNBC student. Jasmine was

eager to find opportunities for Saik'uz youth to participate in environmental stewardship[4]

activities and activism as well as to connect to the land[5]. She felt that it was imperative for

youth to gain skills, capacity and knowledge in order to meet community challenges head on.

She also wished for change at the level of health systems, programs and policy, where land is

often absent or not seen as an important component of health and well-being, despite its

central role (J. Thomas, personal communication, August 16, 2011).   Our first meetings

informed the development of this research and laid the groundwork for an agreement to

undertake partnered work and to co-design a Photovoice project with Saik'uz youth that

explored the connections between land and health, that would serve as a catalyst for future

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[4] **Environmental stewardship:** "a societal response to the decline of natural systems" (Wolf, Blahna, Brinkley, & Romolini, 2011, p.14).

[5] **Land:** The preference of the term 'land' (instead of words like environment, nature, wilderness) is strategically chosen for this thesis. For Indigenous people in Canada, the word 'land' is used differently with various meanings. However, this thesis will lean on the RCAP's all-encompassing biophysical definition of land for Indigenous peoples: "land is – not just the surface of the land, but the subsurface, as well as the rivers, lakes (and in winter, ice), shorelines, the marine environment and the air" (RCAP, 1996, p. 439), while recognizing that Canadian Indigenous peoples' conceptualization of the land usually includes ecological *and* socio-cultural aspects. Additionally, terms like "nature" and "wilderness" have often been used in problematic ways by settlers and Western science, contributing to marginalization of Indigenous people from their lands.

projects planned in the community. As the project unfolded, Jasmine adopted a dual role. In addition to being designated as an advisor on the project by Chief and Council, as a youth herself, it was agreed that Jasmine would also participate in the iterative process of this research along with a small group of youth and Elders (these dynamics will be described in more detail in Chapter 4 and discussed in later chapters).

This thesis therefore brings together perspectives from a range of authors and literatures; from a UNBC graduate student; and from a small group of Saik'uz youth who, in combination, informed the development of the Saik'uz Youth Photovoice Project. This project was designed to explore the relationship of Saik'uz youth and the land, and how they see the connection or loss of connection to the land relating to their health and well-being. To achieve the research objectives, the study combined insights from the literature with the use of an innovative method (Photovoice) for engaging First Nations youth in the complex and cross cutting themes of youth, land, health and well-being. In addition, the research process was informed by my own background and orientation to learning and research, which is introduced in the next section.

1.2 Locating Myself as a Learner and a Researcher

Although meeting Jasmine and the opportunities and experiences that arose through that partnership were in some ways governed by chance, we found that we did share a common ground that was significantly influenced by our own very distinct values and life experiences: "we carry with us the memory of many fabrics, a self soaked in our history, our culture; a memory, sometimes scattered, sometimes sharp and clear, of the streets of our

childhood" (Freire & Freire, 2004, p.23). In research with Indigenous peoples, it is important to be explicit about those "many fabrics" because it allows for greater transparency in the research process. One way to do so is by "locating" yourself; explaining who you are, where you come from, your intentions and why you are investing in the research, as well as "relationships to the land, language, spiritual, cosmological, political, economical, environmental and social elements in one's life" (Absolon & Willett, 2005, p. 98). For these reasons, the following introductory text is provided in an effort to "locate myself" and provide context to the learning and research presented in this thesis.

I am a Caucasian woman, 28 years old, raised in a middle class family and I come from humble beginnings. My life began in a yellow single-wide trailer in a sub-arctic and somewhat isolated community, Yellowknife, Northwest Territories. My childhood was vibrant and rich. I have always appreciated the beauty and wonder of the natural world and its healing capabilities. My backyard, which I called "the mountain", was more like an expansive protruding rock rich with forest life and history. Most of my early life seemed to be spent up there. From age 12, I had the privilege of spending all of my spare time at my best friends' cabin on Prosperous Lake. Summer or winter we would be on our dingy or snowmobile exploring the crevices of the lake. Coming from a northern, resource-driven town, situated in a vast and beautiful land, I have often reflected on the complexity of such a setting and its effect on the social, economic, cultural, and political worlds. I feel that because of my early experiences and origins, I have a clear sense of and orientation towards understanding the ways in which we as human beings are connected to the land, mentally,

physically, spiritually and emotionally as well as the vulnerability of that connection in a changing world.

Immediately after high school, I began a biology degree at the University of Alberta. Becoming quickly disenchanted with the biological sciences, I decided to tweak my schedule to include as many arts-based courses as possible, which allowed me to begin to appreciate multiple disciplines. I took courses that allowed me to explore the wonders of the ecosystem, like parasitology and entomology but I also yearned to learn about our place in it, through the sociology of equality, and the sociology of social and economic development. It was through the latter course that I was paired with Ainembabazi through a community-service learning program. This Uganda-based health and education project took me under their wing, and soon, I was flying to Kampala as their first Canadian intern. Working with a small village, I learned about holistic approaches to health and education, the value of participatory approaches, and the rewarding experience of working with youth.

I returned home with a new perspective, and immediately relocated to the Arctic. There, I coordinated a community-based nutrition and chronic disease prevention program in Inuvik and Tuktoyaktuk, in the Beaufort Delta Region of the Northwest Territories. The promotion of brand-name sugar-free drinks owned by multi-nationals, bananas from the tropics and country foods, some threatened by climate change – lead to many discussions about the broader implications of health programming with members of the community and our program team. I came to realize that missing from the program was a more explicit awareness of the socioecological system and the importance of considering how the decisions of a health program can affect the ecosystem and the land, which in turn largely supports the

identities, cultures, livelihoods and ultimately health of those we were 'targeting,' as well as future generations. Karen Houle's opening remarks at a 2009 Waterloo Institute for Complexity and Innovation seminar entitled: "Is our Concept of Moral Responsibility Newtonian?" sum up the challenges I was witnessing at the time. Houle (2009) asserts, "many disease control programs are no longer effective. In fact, one could argue that health promotion and disease treatments are causing disease". Houle goes on to observe that everything is connected and that there are linkages across scales: "some of the old tools work at one level or at one scale, to produce one desired outcome for one original complaint but these positive outcomes can exacerbate another linked problem at a different scale producing long-term negative outcomes and collateral damage".

Throughout the course of my work in the Arctic, I asked myself: surely there are approaches out there dealing with such complexity? After speaking with several colleagues I was nudged towards the field of ecohealth, which I felt provided a platform for grappling with the many questions, challenges, and contradictions with which I was being faced. Finding ecohealth was a turning point for me. After connecting with Dr. Margot Parkes (my current supervisor) I decided to move to Prince George, BC to undertake a Master's degree in Community Health Sciences at the UNBC and endeavored to find ways to build on lessons from my experience in the Arctic using the ecohealth lens. Early exposure to courses and readings in ecohealth continued to shape my thinking as I was introduced to 10 Carrier-Sekani First Nations communities in the central interior of BC, as a research assistant for Carrier Sekani Family Services (CSFS). CSFS was conducting a study that aimed to explore patterns of food and nutrient intake in 11 communities. The impetus of the CSFS study was

that a number of communities had raised concerns about environmental deterioration (the

contamination of traditional[6] food sources) as well as the loss of traditional lifestyles and

eating patterns in their communities, related to the ongoing environmental, economic, and

sociocultural changes (Holyk, 2009). The experience of the CSFS study reinforced for me

that (re)connection to the land through traditional foods is one of the most direct pathways

for promoting links between the environment and health of Indigenous peoples. However,

fostering the connection requires approaches that account for the interconnectedness,

interdependencies and reciprocal relationships that exist between people and their

environments and the broader society (Parkes & Horwitz, 2009).

At the beginning of my Master's program I contributed to a discussion document for

the National Collaborating Centre for Aboriginal Health (NCCAH), which explored the

connections between Aboriginal health, land, children and identity. This experience

ultimately shaped my thesis project by opening up new spaces of intellectual inquiry,

highlighting the many intersections between environment and youth health and well-being,

the dearth of studies on the issue (especially for Indigenous youth), and the many

opportunities for theoretical considerations as well as community-based, action-oriented

research. Although food remained an interest of mine, I wanted to explore the linkages more

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[6] **Traditional:** In this thesis, the use of the term 'traditional' (i.e. traditional cultures, practices), although
problematic and contested, is crucial to understanding the current and past interconnections between land,
health, and Indigenous youth. Too often the concept of 'traditional' has been used to relegate Indigenous
peoples to non-forward looking static places from which they cannot progress (Greenwood, Tagalik, & de
Leeuw, 2005). In this proposal, traditional will be used to indicate dynamic, changing strategies, rooted in pre-
contact times, that belong to Indigenous people as opposed to colonial/settler societies (Greenwood et al., 2005).

broadly, knowing that food would likely emerge as a key component in the web of connections between land and health.

Locating myself in relation to my background provides an important introduction to the research process and lessons described in this thesis. Ultimately, this context has impacted and informed every aspect of this work, most notably my approach to research, why I have chosen the objectives and research questions in this study and how I have addressed them, throughout the forthcoming chapters.

1.3 Outline of Chapters

The project presented in this thesis, informed by the literature and my background, was made possible through the support and collaboration with members of the SFN, alongside guidance from the UNBC community. The research process that addressed the objectives and research questions is described in this thesis through the following structure:

Chapter two provides an overview of the literature and draws from a variety of fields and disciplines to discuss areas of knowledge and concepts related to the health and well-being of First Nations youth in relation to the land. Chapter three, study context, includes an introduction to the Dakelh people and their territory as well as the Saik'uz First Nation itself, including various key historical events and contemporary drivers of change that have ongoing effects in the region. Chapter four explores the methodological foundations of my research including decolonizing methodologies and ecohealth. This chapter also introduces the main method employed for the study – modified Photovoice, and presents in detail various stages undertaken in this research, including the sources and types of data collected

in the research process. Chapter five presents the results of the main data from the sharing circles, captions and interviews and includes many examples of the youth's photographs to support the themes. Discussion of the study findings in relation to the literature is woven throughout this chapter. Chapter five also includes reflections and lessons learned from the research process, including study limitations. Chapter 6 brings the thesis to a close with a synthesis of the findings as well as some key pathways forward that consider the interconnections, interrelationships and reciprocities among land, health and well-being and how these may inform our approaches to addressing the health disparities facing First Nations youth in Canada.

CHAPTER 2: LITERATURE REVIEW

Objective I of this study was to explore and identify gaps in the literature in relation to First Nations youth, health, well-being and the land. In this chapter I present a review of the literature that informed and provided the scholarly background to both asking and responding to the research questions presented in Chapter 1. The review presents overlapping areas of knowledge and concepts in relation to the overarching themes of youth, health and well-being and the land. The aim of this chapter is to introduce key terms used throughout the research as well as to provide a critical reflection on the literature that explores these themes and why it was necessary to bring these bodies of literature together in the context of this study. The nexus of First Nations youth, health and well-being and the land requires an engagement with notions that aim to disrupt the prevalent binary approach to understanding the world in terms of biophysical *or* social considerations, and demands exploration of what Jones and Demerritt (2009) describe as "complex interplays, or entanglements, between all manner of processes and elements – bio-physical, economic, cultural, technological, human and non-human" (p.294). By seeing ecosystems and society as intimately interconnected, an exciting conceptual landscape emerges which involves relational ways for thinking about the land, nature, society and culture.

This literature review provides background on First Nations youth health and well-being and the extent to which land-culture-identity considerations are explicitly addressed. This is followed by an exploration of emerging efforts and innovations that are seeking to explore the interrelationships of land and ecosystems with health and well-being. The next section explores broad considerations of the land for First Nations in BC, as well as land

meanings, colonization and the land in BC, and ends with a discussion of contemporary land considerations. Literature that relates more specifically to methodology and methods is outlined in Chapter 4. In Chapter 5 and 6, this literature will be examined, discussed and further explored in relation to the study findings.

Because of the iterative nature of qualitative research, it has been suggested that writing the literature review should be an ongoing process, as opposed to a one-time effort. Doing so can be a valuable approach - not least because it allows for "a creative interplay among the processes of data collection, literature review, and researcher introspection" (Patton, 1990, p.226). To capture this interplay, some of the literature review was written prior to beginning the project, but I also remained open to other areas of knowledge that were inspired by involvement in the project. This approach to the literature review continued until December 2012 (see below).

In order to gather the literature that informs this review, electronic databases were employed including MEDLINE, CINAHL and Google Scholar. Search terms were tailored for each database to ensure a comprehensive and inclusive search. The literature referenced includes articles and books located by searching variations on the terms 'land', 'environment', or 'nature', plus 'health' or 'well-being', plus 'First Nations' or 'Aboriginal' or 'Indigenous', plus 'youth' in multiple databases as well as my personal archives. Additional search methods such as reference list searching within relevant articles and Internet searching were also employed. The studies selected for this literature review included both reports of original research and syntheses of existing research. Grey literature was included because of the scarcity of peer-reviewed journals that examine the linkages

described above. There were no limits placed on publication date, but most publications

ranged from 1983 to December 2012. Although other areas of knowledge informed the

project as it evolved, I attempted to limit the inclusion of literature in this review to those

published up to December 2012. With a few exceptions (BCTC, 2013; Brazzoni, 2013; Idle

no More, 2013; McMichael, 2013; Peters & Anderson, 2013), literature identified as relevant

from 2013 was considered as points of reference for Chapter 5 and 6 rather than included in

the review of the literature.

2.1 Health and Well-Being of First Nations and their Youth

There are multiple conceptualizations of Indigenous health and healing and each

nation has their own process. Over the last forty years, a process of re-emergence and re-

claiming of philosophies and healing paradigms has been occurring among Indigenous

people throughout Canada and around the world, with goals of improving health and

wellbeing (Brazzoni, 2013). Progress has been made to characterize individual First Nation-

specific conceptualizations of health and well-being in the literature, see for example

Hoffman (2010) and (Adelson, 1998). A recent study determined that 'wellness' for BC First

Nations encompassed "a person feeling well emotionally, physically and spiritually and

leading a healthy lifestyle, which involved connection to the land and one's culture and

beliefs" (FNHC, 2010, p.37). The BC Tripartite First Nations Health Plan (2007), which set

out a series of principles to guide implementation/development of health services related to

the First Nations Health Authority (expanded in Chapter 3), also recognizes that addressing

health and wellness from a holistic perspective encompasses the "physical, spiritual, mental,

economical, emotional, environmental, social and cultural wellness of the individual, family and community" while addressing "root causes and structural issues" (p. 4). Dakelh-specific conceptualizations of health are not readily available in the public domain, but I was able to find two sources. In her study with Dakelh healers and knowledge holders, Brazzoni (2013) found that the research participant's worldview of wellness was based on "the self, body, mind, and spirit as being interdependent" and the participants held a philosophy that "they live interdependently with their community, the environment, and the spirit world" (p.194). According to Carrier Sekani Family Services, the Dakelh concept of illness "is closely related to spiritual beliefs. Illness exists within a holistic framework in which both spiritual and physical ailment must be treated…Various plants are used to cure physical illness and healers are used to deal with spiritual aspects of wellness" (CSFS, n.d., p.8).

Traditional medicine, which refers to health practices, approaches, knowledge and beliefs that incorporate plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises (FNHC, 2010), is considered to be "a vital dimension of Indigenous knowledge, and is also central to cultural continuity and connectedness to the land" (Pilgrim, Samson, & Pretty, 2010, p.240). Traditional healers themselves embody traditional models of healing and are strongly connected with the land, which forms the basis of their practice (FNHC, 2010).

When considering Indigenous youth in particular, it should be noted that this population suffers a greater burden of health inequities when compared with all other youth across Canada (UNICEF, 2009). The colonial legacy, notably residential schools, exclusion and government control, has sown the seeds of intergenerational hardships, which still

greatly affect the health and well-being of Indigenous youth in Canada. Blanchet-Cohen, McMillan, & Greenwood (2011) observe that "colonization and modernity have displaced indigenous children and youth, and some have lost their role and place in society" (p.91). The community's role in youth socialization has also changed considerably (Kirmayer, Simpson, & Cargo, 2003). As a result, Indigenous youth in Canada are experiencing obvious gaps and inequities in health.

The health status indicators and determinants of health and wellbeing for Indigenous children fall greatly below the national averages for non-Indigenous Canadian children (UNICEF, 2009), indicating that the current system, despite several improvements, is still failing them. For example, socio-economic and environmental factors are leading to poorer diets, which are linked to chronic, non-communicable diseases such as diabetes (Willows, Hanley, & Delormier, 2012). While there are wide variations in rates of youth suicide between First Nations bands/communities, in 1999 First Nations youth lost 3-7 times more years of potential life compared to Canadians overall (Cutcliffe, 2005; UNICEF, 2009). Among First Nations communities in British Columbia, suicide rates from 1993 to 2000 varied from zero to 120/100,000, where 12% cent of communities accounted for 90 per cent of all First Nations suicides (Kirmayer, Simpson, & Cargo, 2003). Sexually transmitted diseases are 5-10 times the national average, and there is also an indication of the rise in HIV and AIDS among First Nations youth (UNICEF, 2009). However, despite this grim statistical portrait, Nigel Fisher, the President and CEO of UNICEF Canada argues that "we are truly on the cusp of a social renaissance in this country as Aboriginal peoples gather renewed strength" (UNICEF, 2009, p.ii).

2.1.1 The Social Determinants of Health

The 'social determinants of health approach' (SDOH), which espouses a more holistic understanding of health and well-being (compared to the dominant reductionist biomedical approach), is gaining prominence and showing promise as a way to address the greater burden of ill health that Indigenous youth experience compared to other youth in Canada (Greenwood & de Leeuw, 2012). A strength of the SDOH approach is that in addition to its upstream focus, the SDOH have also been conceptualized in Indigenous-specific ways, forming the basis for more culturally appropriate solutions to health issues (Loppie-Reading & Wien, 2009).

The need to address the SDOH for improved health outcomes is rooted in the Constitution of the World Health Organization, which states:

> Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, and that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition (WHO, 1946).

In 2008, the WHO defined the SDOH as "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" (p.26). Approaches informed by the SDOH recognize that there are structural, non-biomedical and non-behavioural factors that impact health. These are now widely recognized as having a strong influence on the health of individuals and populations (Raphael, 2006). Greenwood & de Leeuw (2012) describe that the SDOH approach takes into account the "causes of the causes of disparities and the causes that underlie the causes of the causes" (p.381). The SDOH approach was sealed into Canadian health policy in the late

1990s, and the prominent WHO publication 'Commission on the Social Determinants of Health Final Report' (2008) further solidified the SDOH concept among policy-makers, health researchers and professionals worldwide (Manzano & Raphael, 2010; Richmond & Ross, 2009).

To make the SDOH more manageable, agencies such as Health Canada, the WHO and health researchers have identified what constitutes 'key' health determinants that deserve special attention (Dyck, 2008); sometimes these are also lined up to match governmental policy areas or the existing government organizational structures (ministries and departments) (Raphael, Bryant, & Curry-Stevens, 2004). In many ways the SDOH revisit what was outlined in the Ottawa Charter for Health Promotion (1986): "peace, income, shelter, education, food, a stable ecosystem, sustainable resources, and social justice and equity" as key determinants of health. Other organizations have since expanded the lists of key health determinants in the Canadian context, many are still key components of the dominant discourse (e.g. Evans, Barer, & Marmor, 1994; Raphael, 2004).

Through the growth of the SDOH approach, several researchers and policy-makers have advocated the need for Indigenous-specific determinants, given the difference in cultural health perceptions and aspirations as well as enduring health inequities between Indigenous and non-Indigenous peoples (Beavon, White, Wingert, & Maxim, 2007; Czyzewski, 2011; Dyck, 2008; Greenwood & de Leeuw, 2012; Mowbray, 2007). In the Canadian Indigenous context, models of the determinants of Aboriginal health that represent holistic ways of conceptualizing health such as the "Web of being: Social Determinants and Aboriginal Peoples' Well-Being" (see Greenwood & de Leeuw, 2012, p.382) highlight the

interwoven and inextricably linked factors which together, have far reaching implications for the health of Indigenous youth and their communities. Loppie-Reading & Wien (2009) also outline the SDOH across the life course and links SDOH at proximal, intermediate and distal levels to health inequalities.

Blanchet-Cohen et al., (2011) highlight the far-reaching and important connections between land, culture[7], identity, health and well-being for Indigenous youth: "youth consider culture as foundational to this well-being, fostering and nurturing identity, and enhancing opportunities to connect with their community, Elders, and land" (p.106). Yet these interrelated considerations are also often overlooked in the dominant health discourse including the SDOH. Assaults on Indigenous culture and rapid changes due to colonization have challenged Indigenous culture and identity (Kirmayer, Brass, & Tait, (2000). Kirmayer, Brass, & Tait, (2000), point out that "it is likely that the mediating mechanisms contributing to high levels of emotional distress and problems like depression, anxiety, substance abuse, and suicide are closely related to issues of individual identity. These, in turn, are strongly influenced by collective processes at the level of band, community, or larger political entities" (p.611). Lalonde (2006) found that when intact, the intertwined notions of personal and cultural continuity serve as a connection to one's past and present as well as commitment to the future and "when communities succeed in promoting their cultural heritage and in

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[7] According to the NCCAH, "culture is a dynamic and adaptive system of meaning that is learned, shared, and transmitted from one generation to the next and is reflected in the values, norms, practices, symbols, ways of life, and other social interactions of a given culture" (2010, p.1). But there is much variation in practices, knowledge and attitudes between individuals within local cultures. Local cultures are constantly evolving and embedded within larger cultural systems and these also interact and influence each other. Interactions and influences have been growing in intensity with the power and extent of globalization (e.g. through mass media, migration) (Kirmayer et al., 2003).

securing control of their own collective future - in claiming ownership over their past and future - the positive effects reverberate across many measures of youth health and well-being" (p.67).

In the emerging Indigenous SDOH literature and international dialogue, the "land", "environment", "place" or "country" are starting to be seen as a important determinants of Aboriginal and Indigenous health (Carson, Dunbar, Chenhall, & Bailie, 2007; Ganesharajah, 2009; King, Smith, & Gracey, 2009; Mowbray, 2007). Although relationships to the land are recognized as being of great importance to the health of Indigenous people, only relatively recently has connection to land, place or country been explicitly incorporated into health literature and discussions around the SDOH (Ganesharajah, 2009). Discussions are beginning to acknowledge the cross-cutting nature of the "land" that relates to health and well-being in holistic ways, at physical, mental, social, spiritual, political, and economic levels. Yet so far these concepts are often underdeveloped and mostly do not go beyond broad inferences. Oftentimes, the word land (or related terms) is mentioned or included in a framework, but the land-health considerations are one-dimensional, not expanded nor carefully explored. According to Nettleton, Napolitano, and Stephens, (2007), very few studies aim to examine the impacts of Indigenous peoples relationship with the land on their health, or as Parlee, Berkes, & Teetl'it Gwich'in Renewable Resources Council (2005) point out, the health consequences of severed ties with the land.

Although SDOH approaches are making important advances at addressing 'upstream' health challenges and are beginning to address ecosystem considerations, they continue to dichotomize the world in unhelpful ways that can result in considering complex health issues

within a narrow frame that foregrounds the social and neglects the ecological context.

Berkes, Colding, & Folke (2003) describe that creating a dichotomy between social systems and ecosystems (as opposed to recognizing their deep interconnections and reciprocities) is artificial and arbitrary. As Parkes (2011) adds, the tendency to separate the social and the ecological can be limiting, unhelpful or even harmful for those working towards holistic solutions to addressing Indigenous health.

Thus, when seeking literature that addresses First Nations youth, health, well-being and the land, it can be seen that the dominant discourse of the SDOH approach still does not fully engage with complexities and the cross-cutting nature of the connections between land, identity, culture and health and well-being. This disconnect is especially notable for those seeking holistic approaches to addressing pressing health challenges for Indigenous youth. To address these gaps, other literatures and fields are emerging with a clear focus on a linked social and ecological context for health, including ecohealth approaches and emerging research on the health generating and restorative properties of nature that are considered in the next section.

2.1.2 Efforts at Linkages: Health, and Socioecological Systems

Although the World Health Organization's Ottawa Charter for Health Promotion proposed a socioecological[8] approach to health in 1986, the challenges of explicitly linking

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[8] For consistency throughout this thesis, reference is made to 'socioecological' approaches, perspectives (as per Ottawa Charter, 1986) and systems (Waltner-Toews, Kay, & Lister, 2008) "as a way to explicitly link environment and society as a context for health" (Northern Health, 2012). Other authors use related terms such as "social-ecological system" (Berkes & Folke, 1998) or "eco-social system" (Neudoerffer, Waltner-Toews, Kay, Joshi, & Tamang, 2005) to emphasize the integrated concept of humans in nature; the ecological and the social.

social processes with ecological dynamics, is challenging conceptually and methodologically, not least since it requires an engagement with complexity and systems understandings. International efforts to explicitly address the ecological and ecosystems context of health, including large-scale contributions such as the Millennium Ecosystem Assessment (MEA, 2005) have been especially oriented to the contribution of ecosystem services to health and well-being (Corvalan, Hales, & McMichael, 2005). Building from precedents including the Ottawa Charter and the MEA, ecosystem approaches to health (often abbreviated to ecohealth) is an emerging field of research, education and practice that has proposed both conceptual and methodological responses to these challenges of linking social processes with ecological dynamics (Charron, 2012a; Dakubo, 2011a; Webb et al., 2010). Despite the diversity of this field, and the multitude of conceptualizations, ecohealth is rooted in complexity, systemic understandings and participation. These form critical points of reference when seeking to address long-standing challenges of health, equity and ecosystem sustainability (Waltner-Toews, 2011). The relatively young field has distinct epistemological and historical roots reflecting not least a strong influence of applied and development oriented research. Ecohealth approaches have been applied by a variety of researchers, policy-makers and decision-makers worldwide as a way to engage with complexity, and offer a set of principles to guide both research and action with regards to health in the context of socioecological systems.

The ecohealth literature explicitly engages many concepts that are relevant for Indigenous health research, most notably for informing approaches to holistic health that see ecosystems and social worlds as interconnected and interrelated, and recognizing that the

determinants of Indigenous health are tremendously complex, with explicit connections with both ecological and social dynamics that operate at local, regional and global levels (Parkes, 2011).

Ecohealth puts forward both conceptual and methodological considerations for "understanding and promoting heath and wellbeing in the context of social and ecological interactions" (Waltner-Toews, 2009, p.87) that have potential relevance to holistic approaches to health for First Nations youth. In addition to the methodological features described in Chapter 4, key conceptual features of ecohealth include the importance of understanding that social and ecological systems are nested and interdependent. As Waltner-Toews (2011) describes "any eco-social unit, e.g. person, family, pond, watershed, can be seen both as a whole, with it's own internal rules and interactions, and as part of multiple, self-perpetuating nested hierarchies" (p.18). Waltner-Toews (2011) goes on to explain that the boundaries between the units are permeable, and their description or formulation is value and "observer-dependendant", contingent on the questions we are asking and the socio-cultural context through which they are being explored (p.18). Ecohealth is also informed by other fundamental precepts of ecology that recognize that "everything is connected (at least weakly) to everything else" (Kay, 2003, p. 15). This encourages us to see that changes to one part of the system can have unintended consequences in other parts at different levels and scales, in ways that have been represented as a complex web in the context of Aboriginal health (Greenwood & de Leeuw, 2012). These concepts resonate with Indigenous youth health challenges that share the complex characteristics of many health issues including embeddedness within dynamic systems operating at multiple levels (Parkes et al., 2005)

In terms of conceptualizing the interconnectedness of socioecological systems, David

Walter-Toews' description is helpful:

> In its most general formulation...We can say that the people and other organisms in a
> system become more connected and organized over time; at some point the
> connections become so rigid and complex that any outside stress causes the whole
> system to collapse; it is then renewed when the elements (organisms, people)
> reorganize themselves into new ways of sharing nutrients, energy and information
> (2011, p.36) .

Ultimately, this thinking complements the longstanding (but often forgotten) idea that

humans are connected to the land, not separate from it and "that changes in the ecological

structure alter the context for the societal systems" while "societal systems not only change

the structure of the ecological systems, but also the context for the self-organizing processes

of ecological systems" (Waltner-Toews & Kay, 2005, p.10). These ideas harmonize with the

relational nature of Indigenous epistemologies which is fluid and nonlinear and recognizes

the interconnectedness of the physical, mental, emotional, and spiritual aspects of individuals

with all living things, the land and the universe (Kovach, 2005). This type of thinking calls

attention to the need for inclusion of expertise across various types of knowledge, from

Indigenous[9] to academic and across disciplines (Parkes et al., 2005).

Complementing the conceptual contributions of ecohealth, a second emerging and

related body of research is exploring the interrelationships between land and health in ways

not addressed by the dominant SDOH discourse. This area of research explores how health

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[9] Castellano (2000) distinguishes between three interrelated Indigenous knowledge sources: *traditional
knowledge* (passed from generation to generation), *revealed knowledge* (gained spiritually through ceremony
and ritual visions) and *empirical knowledge* (gained through observation). Indigenous scholar Cajete also adds
contemporary knowledge (gained through experience and problem solving- linked to higher education) (Upham,
2010).

and nature (ecosystem, land, environment) are not separate, and points to the vital role that nature plays in human health, well-being and development. Charles, Louv, Bodner, Guns, & Stahl (2009) synthesized a vast array of literature that found associations between children's disconnection from nature and a range of contemporary health concerns, including the childhood obesity epidemic, childhood diabetes, behaviour disorders, depression, and higher stress. Research across a range of disciplines has also focused on the physiological and psychological benefits of contact with the natural environment (Berry et al., 2010; Hansen-Ketchum & Halpenny, 2010; Maller, Townsend, Pryor, Brown, & St Leger, 2006; Muñoz, 2009; Pretty, 2004). Specifically for children and young people, researchers have documented numerous links between contact with nature and positive social, cognitive and developmental effects, improved mental health outcomes (i.e. ADHD), increased physical activity, and decreased chronic diseases (i.e. asthma) (Hinkley, Crawford, Salmon, Okely, & Hesketh, 2008; Kellert, 2005; Townsend & Weerasuriya, 2010).

Despite the obvious relevance of this research to Indigenous peoples, specific literature on the benefits of contact with nature for the health of Indigenous populations is almost non-existent (Parlee et al., 2005; Townsend & Weerasuriya, 2010). It appears there is a lack of literature that examines similar linkages for Indigenous people; how connections to the land/nature play out in terms of physical, emotional, mental or spiritual health of First Nations youth. Additionally, studies have largely been focused on urban-based people in industrialized countries (Pretty, 2004). Thus, while literature focused on health generating and restorative properties of nature are emerging, many gaps still remain in relation to the connections among First Nations youth, health, well-being and the land.

There is also a growing trend toward Indigenous-youth focused outdoor education programming and wilderness camps, for example, Outward Bound's Giwaykiwin program (Lowan, 2009), Igloolik's Paariaqtuqtut (Takano, 2005), Tribal Journeys (Smethurst, 2012) and Rediscovery camps (Rediscovery, 2013). These programs focus on land-skills, building self-esteem, culture, identity and (re)connection to the land. Of these, Rediscovery camps were specifically identified as a model program initiative in the Royal Commission on Aboriginal Peoples Report on Health and Healing (Lane, Bopp, Bopp, & Norris, 2002). In many Indigenous communities throughout Canada, there has been a surge of interest in 'culture camps' as a way to revive cultural practices and connection to the land (Lane et al., 2002).

This thesis has an explicit focus on the determinants and factors contributing to health and well-being, with less focus on healthcare and clinical interventions. However, it is important to acknowledge that the many linkages described in this section overlap with work around the "therapeutic" uses of nature. For example, there is a growing movement towards green care, which is at the interface of healthcare on one side and agriculture, gardening, landscape and nature conservation, animal keeping on the other (Haubenhofer, Elings, Hassink, & Hine, 2010). Green care is used in many contexts and for various conditions, such as therapeutic applications of green exercise activities (green exercise as a treatment option), Ecotherapy, and Healing Gardens (iCES, 2011). Ecotherapy is described as "the practice of supporting vulnerable people (e.g., those with disabilities or mental health needs), to work with nature (both plants and wildlife), with the specific aim of the conservation or establishment of a local habitat or green space as a form of therapy (Hine, Peacock, & Pretty,

2008, p.29). Healing Gardens combine a garden within a healthcare setting that is designed to improve health on a physical, mental, or social level for people in a healthcare facility (Haubenhofer et al., 2010).

2.2 Expanding on the Land: Broad Considerations for First Nations in B.C

This next section will outline in some detail important considerations and conceptualizations of the 'land' in order to better understand the complex historical, environmental, political, and social aspects of this central concept and to set the scene for how it relates to the health and well-being of First Nations youth in BC.

2.2.1 'Land' meanings

Goeman (2008) points out the complex facets of the land definition, by acknowledging that "Indigenous artists, storytellers, word warriors, elders, youth, medicine men and women, and scholars utilize the word land differently with vital and various meanings. With the overlapping roles many Indigenous peoples' undertake, land is also deployed strategically" (p. 24). The term 'land' is likewise strategically chosen for this thesis. The primary and favoured use of the word "land" (instead of words like ecosystem, environment[10], nature, wilderness) is intentional as it encompasses the ecological and the social-cultural and tends to connote a more holistic view of our natural environment, a view that contains us as human beings. Additionally, terms like "nature" and "wilderness" have

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[10] The use of the word 'land' also helps to eliminate unhelpful associations and patterns that come with the word 'environment' such as the environment tending to refer to the 'built' environment or the 'social' environment.

often been conceptualized and used in somewhat problematic ways contributing to marginalization of Indigenous people from their lands (Willems-Braun, 1997).

In this section, the review of the literature elaborates on and examines the concept of land (in relation to similar terms) as explored in this thesis. Focusing in particular on the Canadian context, the intent of this section is not to fix the relationship to the land into a static categorization, but rather, to acknowledge that Indigenous people have a unique relationship, historically and in contemporary life, that differs from most forms of settler relationship to the environment or ecosystem. There is much diversity among Canadian Indigenous cultures and Indigenous cultures worldwide in relation to the land. Nevertheless, Canadian Indigenous people's conception of land does seem to be characterized by some commonalities.

One important point of reference for understanding the relationship between land and Indigenous peoples in Canada is the Royal Commission on Aboriginal Peoples report (1996). This report is described as "a touchstone with reference to the histories of Indigenous peoples in Canada, the impacts of colonization, and the sociocultural, economic and political requirements for healthy futures" (de Leeuw & Greenwood, 2012, p.5). The RCAP also offers an all-encompassing biophysical definition of land: for Indigenous peoples, land is – "not just the surface of the land, but the subsurface, as well as the rivers, lakes (and in winter, ice), shorelines, the marine environment and the air" (RCAP, 1996, p. 439). De Leeuw (2007) points out that for Indigenous peoples in British Columbia, "the land is inextricably tied to their presence and they are inextricably tied to the land, descendants of it" (p.42). One aspect contributing to this relationship is the fact that, prior to European contact, most

Indigenous groups in Canada were subsistence cultures and obtained their nourishment from the land (Dickason, 1997). Wilson (2003) also states that for some First Nations people, the land does not just represent a physical space but rather, "the interconnected physical, symbolic, spiritual and social aspects of First Nations cultures" (p. 83). For many, the centrality of the land plays out through identity in terms of physical, spiritual, cultural and emotional bonds (Hudson-Rodd, 1998; Kirmayer et al., 2000; Root, 2011). These meanings, representations and histories have informed the extensive use of the word 'land' in this thesis and in the research design.

There is also an extensive literature base encompassing the worldviews, philosophies and perspectives of 'nature' and it is important to explore these in order to help paint a picture of the multiple constructed and sometimes problematic understandings of our world. The very word 'nature,' as observed by Williams (1983) "is perhaps the most complex in the [English] language" (p. 219) and the "apparent self-evidence and ontological fixity of nature" is increasingly being contested within the academy and beyond (Demeritt, 2002, p.768). Likewise, according to Willems-Braun (1997), "many approaches all too often allow nature to stand as unproblematized, ahistorical 'object'" (p. 5). Willems-Braun (1997) argues that especially in the context of the connections between nature and health for Indigenous peoples, it is critical to decolonize 'common sense' notions of nature. Nature as socially constructed and historically, geographically and culturally situated is becoming a diverse and prominent, albeit disputed, conceptualization of the human-nature dyad (Demeritt, 2002; Whatmore, 2002).

The 'social construction of nature' has been used to contradict and critique

conventional understandings of nature and society (Demeritt, 2002). There is recognition that

'what counts' as nature, is constructed in many ways (nature is never a pure category), and it

is the political effects of each construction that is most important (Willems-Braun, 1997).

Willems-Braun (1997) asserts that the general approach of the natural sciences has

compounded the tendency to create a discrete entity called 'nature' or 'wilderness' which has

often been conceptualized as separate from colonized peoples and their cultures, allowing for

continued marginalization of Indigenous people from their lands. The problematic notions of

"nature" and "wilderness" provide further insights that inform the understanding of the word

'land' throughout this thesis.

2.2.2 Colonization and the Land in British Columbia

To engage with and understand First Nations peoples' relationship with the land in

contemporary British Columbia, we must grapple with the legacy of colonization where

"patterns of colonization have always exploited both *people* and the *land*" (Root, 2010).

Although the following discussion is rooted in the past, land considerations are still deeply

entrenched in cross-cutting social, cultural, political and environmental domains throughout

BC and the rest of Canada. In the words of Corntassel (2012), "despite Prime Minister

Harper's assertions, that "we" in Canada "have no history of colonialism", contemporary

colonialism continues to disrupt Indigenous relationships with their homelands, cultures and

communities" (p.88).

A number of factors contributed to widespread dispossession of First Nations people

from their lands in BC, including pervasive and taken for granted settler discourses and

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imperial ideologies, self-interest, extreme imbalances in power, and the momentum of commercial capital and geopolitical claims (Harris, 2002). Settler discourse centered around BC as an unoccupied, empty, undeveloped, culturally absent "wilderness" that was theirs for the taking (Willems-Braun, 1997). Areas that did have some evidence of land use or cultural markers by First Nations people were thought of as inferior to settler uses (Harris, 2002). First Nations peoples were excluded for failing to "improve or cultivate wilderness nature" (Demeritt, 2002, p.778; Willems-Braun, 1997).

Through the processes of colonization and land dispossession, Indigenous people "often became disconnected from the land in which their cultures, traditional knowledges, and languages were rooted" (Root, 2010, p.3). Missionary activity, the Indian Act, disenfranchisement, residential schools and the outlawing of cultural practices (i.e. potlatches) continued the breaking of ties between Indigenous peoples and the land (Richmond et al., 2005; Richmond & Ross, 2009).

Historically, Canada has attempted to gain access, sovereignty and authority over Indigenous lands through a variety of treaty processes and other means. Canada's land-base was divided into eleven historic (numbered treaties) and twenty-four modern day treaties (comprehensive land claim settlements) (AANDC, 2010). However, in BC, with the exception of the 14 Douglas Purchase Treaties (which cover parts of Coast Salish territories on Vancouver Island) and Treaty Eight (which covers some northeastern Dene territories), historical treaties were absent in BC (Government of British Columbia, 2007).

Despite unceded sovereignty over their lands, by the 1920s, First Nations were translocated and allocated to small reserves that were scattered all over the province, located

within restricted ranges of their traditional territories (Harris, 2002). The emerging regime of private property and orientation towards the market restricted First Nations from accessing large tracts of their traditional territories where they formerly accessed a variety of ecological goods and services (Harris, 2002; Loppie Reading & Wien, 2009; Richmond & Ross, 2009).

Another example of the ongoing interplay between social processes and the land for First Nations people is the complex landscape that continues to characterize Indigenous settlement, urbanization and mobility patterns in Canada today. According to Aboriginal Affairs and Northern Development Canada website, a 'reserve' is a "tract of land, the legal title to which is held by the Crown, set apart for the use and benefit of an Indian band" thus 'off reserve' is "a term used to describe people, services or objects that are not part of a reserve, but relate to First Nations" (AANDC, 2012). According to Place (2012), although sometimes being on reserve equates to being 'rural', and off-reserve equates to being urban, these terms do not always align. For example, a small portion of the Indigenous population lives in reserves that are located within population centers[11] (Place, 2012).

The Indigenous population in Canada is increasingly urban. Of the estimated one million Aboriginal peoples in Canada in the 2006 Census, just over half reside in population centers in Southern Canada. However, many Indigenous people maintain connections to their original communities (Statistics Canada, 2008, UAPS, 2010). There is also considerable mobility between on-reserve/rural communities and off-reserve/population centers as well as within population centers (Norris & Clatworthy, 2003). The *Urban*

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[11] According to Statistics Canada, a 'population center' (which in 2011 replaced the previous term 'urban area') "has a population of at least 1,000 and a population density of 400 persons or more per square kilometer." All areas outside population centres are classified as 'rural areas' (Statistics Canada, 2012b).

Aboriginal Peoples Study (UAPS, 2010) found that urban Indigenous peoples and groups differ significantly in their degree of urbanization. The least urbanized groups include the Inuit and Status First Nations whereas the most urbanized groups include Non-Status First Nations peoples and Métis (who are most likely to have lived in their city 20 years or more).

Adding to the layers, locations of many Canadian cities overlap with the places where Indigenous people had historically settled and gathered, but colonial processes of deterritorialization often functioned to remove Indigenous people from newly developing urban areas and reserves were purposefully located at a distance from urban centers (Peters, 2004). Thus, it is sometimes possible to note a pattern, Canada-wide, where just before entering a city by road, there is often subtle signage for the reserve located just outside. Additionally, many Indigenous people who live in population centers are actually residing in their traditional territories.

A failure to critically address how Indigenous cultures are conceptualized in relation to rural and urban environments can reproduce unhelpful and damaging stereotypes and frameworks. In 1992, the Native Council of Canada noted that: "there is a strong, sometimes racist, perception that being Aboriginal and being urban are mutually exclusive" (p. 10). Despite the fact that land-society dynamics are not static, some academic and community perspectives carry undertones of "true" Indigenous cultures belonging to places far from cities or belonging to a distant past (Peters, 2002). By implication, culture and identity of Indigenous people is sometimes not associated with urban living (Todd, 2000). According to Peters & Anderson:

There is a tendency to frame rural and remote locations as emblematic of authentic or "real" Indigeneity and as central to the survival of Indigenous cultures and societies. While such a perspective may support Indigenous struggles for territory and recognition as distinct peoples, it fails to account for large swaths of contemporary Indigenous realities, not the least of which is the increased presence of Indigenous people and communities in cities (2013, Back Cover Synopsis).

Revisiting the question of 'land' in relation to urban Indigenous youth, I draw on Goeman (2008) who argues that discussions about the meaning of the land for Indigenous people should involve "inclusive ways of thinking about land, and those who are part of it" (p. 30), beyond rigid boundaries, territories and jurisdictions. These inclusive ways of thinking about land runs alongside discussions of Indigenous identity construction and Indigeneity, which are "envisioning new boundaries and homelands over time and space" (Peters & Anderson, 2013, p. 49). Likewise, the conceptualization explored in 'land' meanings (Section 2.2.1), whereby nature, culture and society are seen as a myriad of "entanglements of elements and processes spanning both sides of the supposed divide" (Jones and Demerritt 2009, p.295), creates new ways to think about relations to the urban environment. Jones and Demerritt (2009) point out that cities and their diverse mosaic of spaces can offer rich habitats and ecological niches for human and non-human life alike, as well as places to connect to nature. For example, in honouring the University of British Columbia's (UBC) place on traditional and unceded Musqueam territory, the UBC Farm, which is located within Vancouver, provides a site for land-based approaches to Indigenous health and food security (UBC, 2009), where both humans and non-humans might collectively flourish.

Additionally, in order to limit harmful stereotypes around land, Indigeneity and urbanity, Peters, Maaka, & Laliberte (2008) argue that instead of describing the *sources* of Indigenous identity (e.g. such as the land), discussions should shift their focus towards how Indigenous people *draw on* their "cultural heritage and their experience of colonialism to make sense of their place in contemporary society" (p.3).

2.2.3 From Global to Local: Contemporary Land Considerations

Developments on the international stage, such as the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), provide an important backdrop to contemporary land (and health) considerations for Indigenous peoples, from global to local levels (United Nations, 2007). Amongst many important statements related to rights to self-determination, health services and education is the recognition of land rights:

> Indigenous People have the right to maintain and strengthen their distinctive spiritual and material relationship with the lands, territories, waters and coastal seas and other resources, which they have traditionally owned or otherwise occupied or used, and to uphold their responsibilities to future generations in this regard (United Nations, 2007).

Although UNDRIP was eventually endorsed by the Canadian government, the Canadian government and Indigenous people are still navigating tumultuous relationships in relation to the land in the context of changing political, economic, environmental, and social landscapes. Indigenous people in Canada continue to fight for contemporary recognition of treaty rights and the honouring of sovereignty, as exemplified in the recent Idle No More Movement (Idle No More, 2013) and ongoing legal action, e.g. the Williams Case (Cadman, 2008).

When these dynamics are considered at the provincial level, it is important to acknowledge BC's particular socio-political characteristics, including the lack of First

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Nations treaties, when compared to other Canadian provinces (Roth, 2002). With a series of instrumental court rulings (e.g. the 1997 Delgamuukw case, the 1973 Calder case and the 1990 Sparrow case), the grounds for modern land claims and treaties have been established. The intention of modern treaties is to formalize Indigenous rights and title, while encouraging reconciliation between First Nations, federal and provincial governments (Miller, 2009). A process, consisting of six stages[12] was initiated in 1992 called the British Columbia Treaty Commission (BCTC), an independent body that acts to facilitate treaty negotiations among provincial and federal governments and First Nations. Modern treaties are multifaceted, shifting, lengthy, expensive, complex processes (Miller, 2009). Many First Nations entered into treaty negotiations, however not all persisted. While successful treaty implementation may enable some level of self-determination and community autonomy, Indigenous landscapes are still defined by external governmental authorities and colonial structures (Roth, 2002).

These land considerations need to be acknowledged in the context of, social, economic and environmental changes that are occurring on an unprecedented worldwide scale. McMichael (2013) argues that the rate and scale of change constitutes "a syndrome, not a set of separate changes, that reflects the interrelated pressures, stresses, and tensions arising from an overly large world population, the pervasive and increasingly systemic environmental impact of many economic activities, urbanization, the spread of consumerism, and the widening gap between rich and poor both within and between countries" (p.1335). A

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[12] The six stages of the treaty process coordinated by the BC Treaty Commission are described in more detail here: http://www.bctreaty.net/files/sixstages.php

notable example of these global-local considerations is the unequivocal warming of the global climate system (IPCC, 2007) with impacts that may be damaging, abrupt and irreversible, with severe impacts on human and natural systems (Heyd & Brooks, 2009). Indigenous people in Canada are not immune to such changes, resulting in threats to "ways of life, knowledge systems, traditional governance systems, foods and cultures" (Simpson, 2002, p. 13). Such climate-related concerns are well-documented among Inuit communities of the circumpolar north (Berkes & Jolly, 2001; Berner, 2005; Cunsolo Willox et al., 2012), though less so among other localities such as rural First Nations reserves (Parkes, de Leeuw, & Greenwood, 2011).

Many Indigenous communities are also continuously impacted by environmental degradation and destruction of their lands because of industrial and commercial development instituted by state governments and multinational corporations (Simpson, 2004). In line with the arguments presented in the section on 'Colonization and the Land', Willems-Braun argues that positioning Indigenous territories as empty, wild, public lands is still a commonly used representation today. For example, corporations often exploit lands under the guise of contributing to the "public good", which risks diminishing Indigenous struggles for sovereignty. The Alberta Tar Sands (Aljazeera, 2012) and the Enbridge Northern Gateway Pipeline project (Hong, 2012) are high-profile examples of ongoing environmental battles for Indigenous (and non-Indigenous) people and communities in Canada.

2.3 Conclusion

While many Indigenous youth are living happy and healthy lives, many still suffer from a greater burden of poor health and mortality compared to non-Indigenous youth (UNICEF, 2009). New solutions are needed for closing the health gap, and these require us to think in new ways. In addition to the rapid development in our understanding of the SDOH, the emerging ideas around ecosystem approaches to health linked with the "healthy by nature" literature are finding new ways to re-integrate ecosystem and the land, human health and well-being. But these ideas need to be considered within the complex historical, environmental, political, social considerations of land and Indigenous peoples in Canada. In this literature review, the need to understand the complexities and cross-cutting nature of the connections between land, health and well-being has been identified as a promising avenue to inform holistic approaches that seek to address the pressing health challenges for Indigenous youth in Canada.

CHAPTER 3: STUDY CONTEXT

The following chapter includes an introduction to the Dakelh people and their

territory as well as the Saik'uz First Nation itself. One starting point for considering the

relevance of the interrelated themes of this thesis is the Saik'uz First Nation: Community

Strategic Plan (2011) which includes the following vision statement:

> Saik'uz First Nation is a sustainable and harmonious community. We embrace the
> traditions of our Elders to create a community that uses resources wisely for the well-
> being of our membership and the future of our youth.

This chapter aims to build on themes discussed in the literature review with a focus

on how they manifest for Saik'uz First Nation, with an eye to various key historical events

and contemporary drivers of change that have ongoing effects in the region.

3.1 Dakelh Land and Culture

For generations, the Dakelh (also commonly known as Carrier) have lived on the

northern edge of the Interior Plateau of northern British Columbia (see Figure 3.1), which is

bordered in the east by the Rocky Mountains, to the north by the Omineca mountains and in

the west by the Coast mountain ranges (Brown, 2002; CSTC, 2007; Ritch-Krc, 1996). This

region is the homeland of 20 distinct Dakelh First Nations communities or bands, each

consisting of one or more reserves (Furniss, 2004). In the Dakelh language, the names of the

bands are composed of a place name within their respective territory with the suffix –*whuten*,

meaning "people of" (Furniss, 2004).
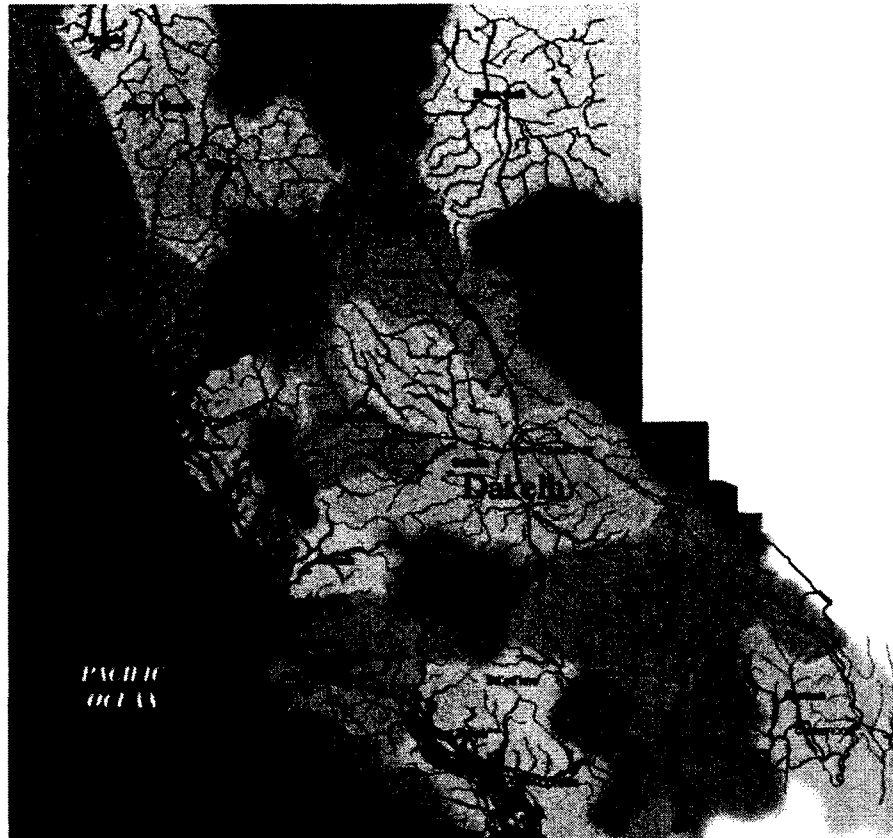
Figure 1. Map of First Nations Traditional Territories of British Columbia.[13]
Map retrieved from: BC Ministry of Education http://www.bced.gov.bc.ca/abed/map.htm.

Up until the late 19th century, Dakelh cultures were predominantly forest-based with

hunting, trapping, gathering and fishing economies (Ritch-Krc, 1996). The various bands

within the expansive territory that made up Dakelh society were a "diffuse network" as

opposed to a "homogenous unit", characterized by bonds of kinship, shared culture and

language as well as complex social and economic relationships (Furniss, 2004, p.203).

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[13] This map was designed by the BC Ministry of Education to illustrate the rich diversity of the First Nations Peoples of British Columbia (BC Ministry of Education, 2012). It was the BC Ministry of Education's "best attempt" at reflecting a current situation, but it is important to recognize that boundaries are currently being negotiated by the First Nations as part of the B.C. Treaty Process. There are complex territorial relationships involved, reflected in the blended/blurred boundaries on the map.

Hereditary chiefs (heads of extended families) have title over *Keyohs*, which are specific land bases that include lakes and waterways (CSTC, 2011). The *Keyoh* holders are responsible for taking care of those lands and have rights to hunt and trap within them. According to Heikkila (2007): "…Keyohs are places where it becomes possible for individuals to attach in a personal way to the land. Other than being places to hunt, fish, gather and trap, keyohs offer respite and retreat" (p.141). *Bah'lats* (potlatch) and clan systems were used to regulate and affirm the rights to resources[14] within the *keyoh* (Morris, 1999). Dakelh society is made up of four primary clans: *Likh ji bu* (Bear), *Gilhanten* (Caribou), *Jihl tse yu* (Frog), and *Likh sta Mis yu* (Beaver) (CSFS, 2011). The animal crests signify the strong sense of kinship Dakelh people have with all living beings and the land (CSTC, 2007).

The language of Dakelh people is also called Dakelh. Today, approximately 30% of the Dakelh population has knowledge of the language (Statistics Canada, 2007). Dakelh people strongly value the land, water and air. For example, the Carrier Sekani Tribal Council (CSTC) describes their land vision as rooted in the philosophy of "our living and our lives come out of the land. The land is part of our family and we a part of the land" (2007, p 11). The Dakelh way of life is described as having spiritual, cultural and economic connections

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[14] In order to remain consistent with the literature, the term 'resources' is left intact throughout the thesis when linked to an original source. However, it is important to note that many Indigenous peoples reject the utilitarian term "resources" because the use of the term is a way to commodify and marketize Indigenous territories or homelands as well as Indigenous relationships, responsibilities, and resurgence efforts (Corntassel, 2012).

between the people and the land, where "people rely on the health and ecological integrity of the land for their survival" (Brown, 2002; CSTC, 2006, p.11).

The landscapes on which the Dakelh have traditionally lived are drained by the Nechako and Fraser rivers in the south and the Finlay, Parsnip and Peace Rivers in the north and touche on the drainage basins of the Bulkley, Babine and Skeena Rivers in the West (Brown, 2002; Ritch-Krc et al., 1996). Some streams, lakes and rivers are abundant in fish including freshwater species (e.g. trout, char, sturgeon, whitefish), as well as Pacific salmon that spawn in the headwaters of the Skeena and Fraser watersheds. The climate can be described as "continental", which means that winters are relatively long and cold and summers are short. Levels of precipitation are considered to be 'low' in this region (Brown, 2002).

The social and ecological systems within which Dakelh people have lived have experienced dramatic changes, especially in the last 150 years. Hartman (1996) highlights the rate and scale of changes that have occurred in the basin of the Nechako River in the last century, especially as a result of hydroelectric development (see description of the Kemano project in Section 3.3), forestry, agriculture (grain, hay, cattle, poultry) and the growth in the human population, each contributing to widespread and cumulative effects. These drivers of change will be described in more detail below, as they relate specifically to SFN and the region (Section 3.2.1).

Despite the extent of changes across Dakelh territories, the landscape is still dominated by forests. These forests are dynamic living systems, constituted of wildflowers, berry bushes, stock-piles of dead trees and dried-up stumps in clear cuts, mushrooms, ferns,

lichens, and mosses in amongst a variety of tree types including white and Englemann

spruce, sub-alpine fir, black spruce, aspen and lodge pole pine (Brown, 2002). The forested

parts of the landscape provide habitat for ungulates (e.g. moose- however they did not move

into the Nechako valley until 1934) and fur bearing animals (e.g. bears, beavers), rodents

(e.g. rabbit, squirrels) and birds of prey (e.g. eagles), songbirds, grouse, and waterfowl

(Brown, 2002).

In addition to these contextual features, many qualities of these landscapes and the

social-ecological context are experiential. I have seen the eyes of many people in the Valley

light up at the mention or sighting of a moose. I have stood side by side in a circle of SFN

community members at night, a male black bear splayed out in the back of a pick-up truck

after a hunt, entrails glistening, and the young people in awe. Scattered amongst the beauty

and the remoteness of these landscapes are the ominous reminders of social injustice and

violence that permeate these areas. The section of Highway 16 between Prince George and

Prince Rupert has become known as the "Highway of Tears," where at least 18 women, most

of them Indigenous, have gone missing or were murdered (CBC, 2012). It is difficult to go

anywhere in this region without seeing the telltale signs of a missing woman or road signage

warning against the dangers of hitchhiking; it is also difficult to go anywhere without

thinking about these women and their families whose lives continue, embedded within the

stories and landscapes of this region.

3.2 The Saik'uz First Nation, British Columbia

Very little has been written down about the history of Saik'uz. While many efforts have been made to collect the stories of Elders (see Moran, 1988), there is limited human resource capacity in the community to transcribe, organize and amalgamate archival material (Personal communication, Jasmine Thomas, May 7, 2013). Rather than attempting to detail the SFN story, this section introduces the community and highlights drivers of change and opportunity that were influencing the SFN context during the period of this study.

The SFN (see Figure 3.2) is located a 15-minute drive away from Vanderhoof, British Columbia (population 4,480) and approximately 95 km west of Prince George (population 84,232), the nearest city (Statistics Canada, 2012a). The community is nestled in amongst lightly rolling grassy hills and beside a lazy creek. SFN services ten reserves covering 3,236 hectares. The main community is located within the reserve called "Stony Creek Reserve 1" and the neighbouring "Laketown Reserve 3". The on-reserve members of SFN frequently travel by paved road to Vanderhoof, other neighbouring towns and Prince George for amenities and services. Although many members have personal modes of transportation, there is a SFN bus that transports people back and forth from Vanderhoof. It is also very common to see people hitchhiking between SFN and Vanderhoof.

The name 'Saik'uz' comes from a Dakelh word meaning 'on the sand'. SFN has 905 registered members[15]; 427 live on-reserve, 474 live off-reserve (4 living on other reserves)

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[15] Band 'membership' entitles band members to live on reserve, vote in band elections and referendums, and share in band assets (Crey, 2009)

(AANDC, 2011). In 2006, 36.4% of the population of Saik'uz First Nation was under the age of 19 (compared to 23.2% in BC overall) (Sunderman, 2009). The community owns and operates a health center, firehall, potlatch house/campground, daycare, multiplex community center (currently closed), dance/bingo hall (currently closed) and band office. There is one convenience store located in the community. The clans of the SFN are Nulki (Frog) and Tachek (Grouse), which is a sub-clan of the Caribou clan. There are also several members of the Bear Clan that live in the community. The traditional language of Saik'uz is Southern Dakelh and today there are approximately 50 fluent speakers, 30 who speak or understand somewhat and 80 who are learning the language (FPHLCC, 2012).

Despite many challenges, Saik'uz is a vibrant community with strengths in political, social and environmental activism exemplified by prominent leaders such as Mary John Sr. and traditional healer, Sophie Thomas. The late Mary John Sr. (1913-2004) was a political activist, one of the founders of the Yinka Dene Language Institute and was awarded the Order of Canada in 1997. The story of her life is told in the book *Stoney Creek Woman* (Moran, 1988). Sophie Thomas (1913-2010) was a healer, and political and environmental activist who received honourary doctorate degrees in law and medicine from UNBC, conducted dozens of workshops and presented at many conferences, universities and schools throughout North America. A small part of Sophie's vast knowledge about medicinal plants and medicines is summarized in the book *Plants and Medicines of Sophie Thomas* (Young & Hawley, 2002) and the short film *Warmth of Love: The Four Seasons of Sophie Thomas* (2000) directed by Terry Jacks.

A variety of local stewardship and restoration efforts have also taken place in the SFN territory. For example, the Carrier-Sekani Tribal Council and the Saik'uz First Nation initiated the Nulki-Tachick Watershed Restoration Project (1995-2000) in response to the declining local Rainbow Trout population. The watershed scale restoration approach aimed to assist the natural recovery of key riparian and in-stream ecosystem components while involving community members (including youth and Elders) throughout the course of the project (Irvine & McIntosh, 2001).

Figure 2. Location of Saik'uz First Nation, British Columbia. (Created using iPhoto)

3.2.1 Drivers of Change and Opportunity

This section is informed by the view that health and well-being arises in reciprocal inter-relationship with the social and ecological context, and is influenced at a variety of spatial, temporal and political scales (Northern Health, 2012; Parkes et al., 2010). Although

not comprehensive, a variety of key drivers of change at various scales will be explored in relation to the community of Saik'uz, people and the land in order to provide a broad understanding of these dynamics within this context.

Drivers of change on the land

Saik'uz First Nation, like all of the Dakelh communities and most First Nations in BC, maintains unceded sovereignty over their homeland (see section 2.2.3 for background). The member First Nations of the Carrier Sekani Tribal Council (CSTC) have designated the CSTC to coordinate modern treaty negotiations with the provincial and federal government. The negotiations have been in process since 1993. CSTC is currently in stage four "Negotiation Of An Agreement In Principle" of the six-stage process (BCTC, 2013). According to the CSTC (2007), there have been consistent efforts to negotiate interim protection measures to protect territories pending a final agreement.

Throughout the years of negotiations, there has been no slowing or stopping of 'development' on Dakelh lands. Industrial activity near and within the Saik'uz First Nation traditional territory started in the early 1800's, especially forest exploitation, agricultural land use and hydroelectric development, which are all closely linked in terms of their impact on river systems (Hartman, 1996). The forestry industry has been the dominant resource sector in the region and continues to support the area's economy today (Patriquin, Heckbert, Nickerson, Spence, & White, 2005). Because of a convergence of favourable habitat conditions, British Columbia is experiencing the largest epidemic of the Mountain Pine Beetle (MPB), *Dendroctonus ponderosae* (Coleoptera: Scolytidae) in recorded history.

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However, at a provincial scale, the volume of the attack has declined rapidly since 2005 (Walton, 2013). In 2012, the infestation, had affected over 722 million m^3 of Lodgepole pine (*Pinus contorta*) and mortality rates of merchantable pine volume were at 53% province-wide (Walton, 2013). In the Vanderhoof Forest District, the mortality of pines peaked in 2005, and as of 2010 the infestation was essentially over. In response, there has been a surge in timber salvaging and recovery, which increases the frequency and size of clear cuts and can result in changes of forest ecology (CSTC, 2007). In June 2010, a large wildfire called "the Greer Creek fire" swept through parts of SFN traditional territory fuelled by "strong winds, dry conditions and beetle-ravaged trees" (Stockton, 2010, para. 1) and ultimately burned 6,102 hectares of land.

The Kemano project of the Aluminum Company of Canada Ltd. (ALCAN), which began in 1950, is the largest industrial presence in the Nechako River Basin. A key feature of the project is the Kenney Dam, constructed to serve the enormous power needs of the ALCAN aluminum smelter at Kitimat, BC (Windsor & McVey, 2005). When the massive dam reservoir system was filled in 1952, it flooded hundreds of kilometers of wildlife habitat, agricultural and ranching land and disastrously the village, cemeteries, lands and waters of the Cheslatta T'En Indian Band (Windsor & McVey, 2006). One version of the Cheslatta story was told in a 2010 documentary entitled "Finding our Way" directed by Attili and Sandercock. Chapter three of the film weaves through a devastating account of how the Cheslatta people were only given ten days to evacuate their traditional lands for higher ground. Despite being told that their cemetery, graves and spirit houses would be "taken care of", these sites were torched and an aluminum and concrete memorial erected in their place.

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The displaced people had to buy property using $50 compensation cheques and ended up in scattered and disjointed settlements throughout the region. During a second flooding in 1956, another cemetery was flooded and the people spent years looking for remains on the shoreline, and retrieving floating caskets from the waters (Attili & Sandercock, 2010). The grievances of the Cheslatta remain unresolved and continue to be a source of ongoing tension in the region.

The Kenney dam is located 100 km from the SFN and to this day remains a contentious issue for SFN and other First Nations in the area. The altered flows of the Nechako River have resulted in environmental impacts including water temperature changes, erosion, sedimentation problems and resultant declines in salmon, trout and sturgeon stocks as well as declines in beaver, muskrat and other wildlife (Hume, 2012). The deep-water reservoir itself is dangerous for recreational activity due to snags and debris leftover from the flooding of the surrounding lands (Christensen, 1995).

The Northern Gateway Pipeline is a controversial proposal by the Canadian corporation Enbridge to construct a twin pipeline between the Alberta Tar Sands and a marine terminal in Kitimat, B.C. The 1,170 km pipeline would cross more than 800 streams and rivers as well as numerous First Nations traditional territories, including the SFN. Additionally, tanker vessels would transport the products from BC's north coast. The main concerns center around risks of an oil spill along the pipeline, tanker accidents and increased traffic as well as the high-carbon nature of the oil sands project in the face of climate change (Skuce, 2010). Opposition amongst First Nations is extensive; over 130 First Nations groups have signed the "Save the Fraser Declaration" opposing the transport of tar sands oil across

their lands and waters (Pipe Up Against Enbridge, 2013). Opposition is also growing

amongst some local governments, non-governmental organizations (Elias & Blundell, 2013)

and members of the public throughout BC (Skuce, 2011).

Socio-Cultural Drivers of Change

As with other First Nations in Canada, Saik'uz has a history of colonization,

systematic discrimination, racism, residential schools and forced relocation (Kirmayer et al.,

2003; Richmond & Ross, 2009). Many people from SFN attended Lejac Residential School,

located 10 km west of Fraser Lake, which was funded by the federal government from 1922

to 1976. Representatives of the Roman Catholic Church administered the school, the men

were 'Oblates of Mary Immaculate', and the women were 'Sisters of the Child Jesus'. The

school was named after Father Jean-Marie Lejac, an Oblate missionary who co-founded the

Fort Saint James mission in 1873. Although there is nothing left architecturally of the school

(except for a graveyard and a memorial), like many other residential schools throughout

Canada, memories and stories live on along alongside accounts of abuse, neglect, and other

hardships. Like most residential schools, LeJac was concerned with assimilation, detaching

First Nations people from land, and annihilating cultural ways that fostered relationships to

land and community (Goeman, 2008). Subsequently, many people who attended residential

school suffered a loss of family cohesion and structure, culture, identity, language and

traditional ways of life (Kelm, 1998). The youth in this study had parents or grandparents

who attended this school.

Every year during July 5-7, hundreds of people from all over Canada gather for the "Rose Prince Pilgrimage" near Fraser Lake to visit the grave of a young Dakelh girl who spent her life at the LeJac Residential School and was known for her devout Catholic faith and kindness (Peebles, 2013). Years after her burial, her coffin was re-opened and her body was found to be 'incorrupt' (or non-decomposed) and the gravesite is now thought to have healing capabilities. According to the Prince George Citizen newspaper, "Prince is a religious icon but also a major figure of peace and reconciliation for the many aboriginal people touched by Lejac, a residential school with a tragic and horrific history. Prince is one of the few positive chapters in the Lejac story" (Peebles, 2013).

Today, there is a daycare but no school in the Saik'uz community. Children and youth from SFN attend Elementary and High School in Vanderhoof (represented by School District #91-SD91). According to the SD91 website, there are many Aboriginal Education Staff whose goal is to "promote and help to ensure the success of Aboriginal students" (2013). In the Vanderhoof schools there are Aboriginal Program/Services[16] as well as a Dakelh language program. School district 91 represents 20 schools, located within 13 First Nations territories and is currently made up of approximately 39% First Nations students (SD91, 2013). The Saik'uz First Nation created a Youth Council in 2011 and they are in the midst of hiring a youth coordinator. Despite numerous efforts, many community members feel that there is a lack of programs and resources for youth and problems related to violence and

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[16] According to the School District 91 website, the Aboriginal programs and services include: cultural programs, Carrier language, academic support, home-school coordination, curriculum integration, trips, conferences, guests, Aboriginal day and student performances.

substance use continue to affect the community (Peebles, 2011; SFN Community Strategic Plan, 2011).

There is a complex, sometimes tense and fraught relationship between the people of Saik'uz First Nation and the residents of the neighbouring town of Vanderhoof that has received regional and national attention (Moran, 1998). Certain high-profile events have revealed some undercurrents of racism and discrimination. In 1976 twenty-one year old Coreen Thomas, a young First Nations woman in her ninth month of pregnancy, was struck and killed by a car while walking back to the reserve in the middle of the night. A young white man from Vanderhoof was driving the car. The people of Stoney Creek joined together to force the justice system to hold an inquest into Coreen's death. This event drew nation-wide attention, bringing to light latent tensions in Indigenous/settler relations characterized by injustices within the courtroom (Moran, 1998).

These types of tensions continue to permeate day-to-day life in the Nechako Valley. However it is possible to see many ways forward and many positive developments occurring in terms of Indigenous and non-Indigenous relationships in the region. For example, the 'Good Neighbours Committee,' with partners from a variety of agencies and groups including the Saik'uz First Nation and the District of Vanderhoof, was formed in 1999 in order to address local racism. The committee undertakes a variety of activities such as a blog, community theatre and other events in order to work toward their mission of having a society "where racist behaviour is unacceptable and mutual respect between individuals is honoured" (Good Neighbours Commitee, 2009, p.1).

Another notable transition of consequence for SFN is the transformative and exciting

change underway within the governance and vision of First Nations health in British

Columbia. The signing of the *BC Tripartite Framework Agreement on First Nation Health

Governance and the 7 directives*[17] in October 2011 by BC First Nations Chiefs and leaders

put in place the legal basis to transfer the operations of Health Canada's First Nations Inuit

Health Branch-BC Region to the First Nations Health Authority (FNHC & FNHA, 2013).

Since then, First Nations – including through the work of the First Nations Health Council,

BC FNHA, and First Nations Health Directors Association – have been undertaking a

process of change, directed towards the establishment of a BC FNHA that designs, manages,

and delivers health programs and services for First Nations people. The transfer of functions

from federal, provincial and regional levels to the BC FNHA will occur using a phased

approach, guided by sub-agreements that describe logistics and legalities. There is no

existing model of this type of health governance system in Canada (Kelly, 2011). According

to the First Nations Health Council, Government of Canada, and Government of British

Columbia, (2010, p.8), "the transfer of programs and policy responsibilities to BC First

Nations would facilitate the development of holistic and better integrated programs that could

improve necessary linkages in education, child and family, housing, etc. This would have the

dual benefit of improving health services and facilitating action on the social determinants of

health". According to the latest Transition Update Newsletter "headquarters functions,

management and administrative functions and policy and program leadership roles" (FNHC

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[17] The 7 directives include: 1) Community-Driven, Nation-Based, 2) Increase First Nations Decision-Making
and Control, 3) Improve Services, 4) Foster Meaningful Collaboration and Partnership, 5) Develop Human and
Economic Capacity, 6) Be Without Prejudice to First Nations Interests, 7) Function at a High Operational
Standard. The full list and descriptions can be found at: http://www.fnhc.ca/index.php/iFNHA/mission_vision

& FNHA, 2013, p.4) will be completed on July 2, 2013, and the remainder, such as primary care, environmental health etc., will be finalized in October 2013.

3.3 Conclusion

The Saik'uz First Nation is a Dakelh community with a rich and long history in the Northern Interior of BC. A variety of socio-cultural and land changes continue to influence the current day realities of SFN members. This study aimed to build on the strengths of this community and to explore the pressing and intersecting topics of land, youth and health within a complex socioecological context alongside a community that has identified these issues as fundamental for their future well-being.

CHAPTER 4: METHODOLOGY AND METHODS

As discussed in the literature review and study context chapters, the issue of improving Indigenous youth health in Canada should be a priority. However, despite the fact that the land is integral to Indigenous health, it is often ignored in the way health is thought of, framed and acted upon. In order to explore the connections between land and health for Saik'uz First Nations youth within this complex terrain, I aimed to find methodologies and methods that encouraged an action-oriented approach[18] and that could help to address and acknowledge the complexity of health in socioecological systems, while also trying to avoid repeating past mistakes of research with Indigenous peoples. This led to considering and selecting both decolonizing methodologies and ecosystem approaches to health (ecohealth) to *guide* and *inform* the research design of this study. One approach is not prioritized over the other, instead they have been drawn on in strategic and interactive ways throughout the course of the research. This methodological orientation also informed the choice of Photovoice, the primary method used in this study, which is located within the epistemological origins and methodologies of Participatory Action Research (PAR) and community-based research.

This chapter will review and describe decolonizing methodologies and ecohealth as approaches well-suited to addressing the objectives and questions of this research, followed by an explanation of modified Photovoice as it was conceived as the central method for this study. Next, the various stages of this research project will be outlined, followed by an overview of the data collection and analysis procedures. Ethical considerations and

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[18] By 'action-oriented approach' I mean that the process of research aims to achieve a social goal (Parkes & Panelli, 2001).

approaches to validity and research quality will then be explored, ending with a discussion about research dynamics.

4.1 Research Approach

As I began my thesis work and set out to explore the connections between land and health for First Nations youth, I was drawn to approaches that were action-oriented, acknowledged complexity, and recognized that health is contingent on biophysical, social, economic and political environments (Webb et al., 2010). The methodological orientation of ecohealth offered many points of reference for research that actively connects ecological and social determinants of health through the bridging of disciplines, taking into account a variety of perspectives and accounting for inequities (Webb et al., 2010). In particular, a growing number of researchers have found ecohealth helpful for framing their Indigenous research projects (Flint et al., 2011; Harper, Edge, & Cunsolo Willox, 2012; Johnston, Jacups, Vickery, & Bowman, 2007; Kingsley, Townsend, Henderson-Wilson, & Bolam, 2013; Parkes, 2011; Stephens, Parkes, & Chang, 2007; Wesche & Chan, 2010).

However, as I deepened my relationship with the Saik'uz First Nation and confronted the legacy of past failures and exploitative dimensions of research with Indigenous peoples (Castleden, Morgan, & Lamb, 2012; de Leeuw, Cameron & Greenwood, 2012, Smith, 1999), I was also prompted to explore methodologies that could more explicitly engage with the Indigenous struggles deeply embedded in themes of land and health. I found that decolonizing methodologies were a good fit, in that a decolonized agenda has the potential to address the legacy and continuation of colonialism in research and reminds us to look beyond

the settler vantage point, "towards honouring Indigenous 'laws of the land'" and "our particular responsibility to this land and its stewards" (Sium, Desai, & Ritskes, 2012, p.3).

For the purposes of this study, characteristics from decolonizing methodologies and ecohealth approaches were combined and were often mutually supportive in informing research design. Their convergence provided good points of reference for genuine and critical conversations with the literature, study participants, the community research advisor and myself.

4.1.1 Decolonizing the Research Process

Combining my interest in innovative participatory and community-based research, while acknowledging the history of research with Indigenous peoples in Canada, and my position as a non-Indigenous, outside researcher, decolonizing methodologies became particularly important when designing research with youth and Elders in a First Nations community. This study arose at a time when research approaches conducted *on* Indigenous peoples and communities in exploitative and insensitive ways, (Castellano, 2004) are increasingly being called into question. Along these lines, Denzin and Lincoln (2005) describe research as "one of colonialism's most sordid legacies" (p.1).

The scientific tradition in research, firmly established in positivism, has long been the dominant means of inquiry in Canada and elsewhere. This form of research has been associated with the belittlement and rejection of Indigenous ways of knowing, and with the appropriation of fragments of Indigenous knowledge, claiming them as discoveries within positivism (Martin, 2009). Denzin, Lincoln, & Smith (2008) highlight the processes of exclusion throughout the research process leading to subsequent objectification,

generalization and representation and the generation of 'truths' about Indigenous cultures, which were often used as a tool to justify the oppression of Indigenous peoples. Visual images and pictures have also been co-opted or taken by outsiders, which worked to reproduce status quo and stereotypical interpretations (Brooks, 2009). Linda Tuhiwai Smith, one of the most prominent Indigenous scholars to have written about the challenges of research in relation to Indigenous people, argues that, "research is not just a highly moral and civilized search for knowledge; it is a set of very human activities that reproduce particular social relations of power" (p.88). Smith (2005) also states: "the term 'research' is inextricably linked to European imperialism and colonialism. The word itself, 'research' is probably one of the dirtiest words in the Indigenous world's vocabulary" (p.1).

As mentioned, this research project was developed during a period when the landscape of research practices involving Indigenous peoples was, and still is, undergoing significant changes (de Leeuw et al., 2012). Several research philosophies and methodologies have been put forward as having the potential to address the legacy and continuation of colonialism in research, one such methodology being decolonizing methodologies. In the words of Sium, Desai and Ritskes (2012), "decolonization is a messy, dynamic, and a contradictory process" (p.2). Decolonizing methodologies challenge the researcher to ask critical questions and to design the *entire research process* in ways that help redefine research "as a moral and political project that seeks to enhance, rather than simply describe or define, the lives of Indigenous peoples" (Martin, 2009, p. 50).

Smith's (1999) conceptualization of decolonization recognizes the role of non-Indigenous peoples becoming 'allies' in the decolonization process. An ally is a complex

term with many meanings, but in the context of Indigenous-non-Indigenous relations, according to Bishop (2002), an ally is "a member of an oppressor group that works to end that form of oppression which gives him or her privilege" (p. 12). Davis (2010) argues that being an ally is about re-envisioning political and personal relationships based on recognition, respect, sharing, and responsibility, without replicating the continuing colonial relations. A common goal that runs through Davis' (2010) examples of alliances and Indigenous/non-Indigenous relations is the "desire to see longstanding injustices resolved and a mutual, respectful future realized, whatever the complexities of getting there" (p.10). The complexity of the ally concept is also echoed by Margaret (2010) who suggests that being an ally is not an 'identity,' instead it is a contextual process and a practice developed through experience and learning.

Given the violent history of research 'on' Indigenous peoples worldwide, and a new push to engage in research that is community-controlled, ethical and beneficial, Indigenous research protocols are attempting to clear the way for more respectful and responsible scholarship. This is elaborated and institutionalized in the Tri-Council Policy Statement on the Ethical Conduct for Research Involving Humans[19] (see Chapter 9). Aboriginal research protocols such as Kirkness and Barnhardt's (1991) 4 R's framework have also set a precedent for more respectful and responsible scholarship moving toward ethical, mutually beneficial and culturally competent research. The 4 R's: *Respect, Relevance, Reciprocity and Responsibility* have many overlaps with other principles informing participatory research

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[19] Note: The "CIHR Guidelines for Health Research Involving Aboriginal People" (2007) are no longer CIHR funding policy. Health research involving First Nations, Inuit and Metis people in Canada is henceforth governed by the provisions outlined in Chapter 9 of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS).

(described in this section).

Given the increasing popularity and application of decolonizing methodologies, it is

extremely important to maintain a critical and reflexive stance. Tuck & Yang (2012) write

about the dangers of adopting "decolonization as a metaphor (and nothing else)", as it risks

recentering whiteness and extending innocence to the settler through appropriating,

absorbing, adopting, and transposing, instead of supporting true Indigenous struggles for

recognition of sovereignty and repatriation of land (p.3). Moreover, Tuck & Yang (2012)

and Sium et al. (2012), argue that much decolonizing work fails to ground itself in the land,

water, and air, and that without this foundation, decolonization can be a sham.

In the same way that decolonizing methodologies demand that the researcher ask

questions of the entire research process, reflexivity is also concerned with process but

involves being attentive and aware of how one 'thinks about thinking' (Maranhao & Steier,

1991). Reflexivity draws "attention to the complex relationship between processes of

knowledge production and the various contexts of such processes, as well as the involvement

of the knowledge producer" (Alvesson & Sköldberg, 2009, p. 8). Sandelowsi and Barroso

(2002) expand on the definition of reflexivity:

> Reflexivity is a hallmark of excellent qualitative research and it entails the ability and
> willingness of researchers to acknowledge and take account of the many ways they
> themselves influence research findings and thus what comes to be accepted as
> knowledge. Reflexivity implies the ability to reflect inward toward oneself as an
> inquirer; outward to the cultural, historical, linguistic, political, and other forces that
> shape everything about inquiry; and, in between researcher and participant to the
> social interaction they share (p. 216).

In practice, being reflexive means a continuous consideration and reflection by the

researcher on her or his values, positions, worldviews, beliefs and preconceptions, as well as

behaviour, and presence, and how this can impact interactions with the research participants (Jootun, McGhee, & Marland, 2009). Sultana (2007) describes reflexivity as a vital element of a decolonized methodology because it requires a critical reflection on politics in the research, power relations, self, process, representation, as well as researcher accountability in data collection and interpretation. 'Good' ethical guidelines found within institutional paperwork do not necessarily capture these critical reflections, instead they are negotiated and grappled with at the various stages of the research process and sometimes on the spot (Sultana, 2007). In this way, being reflexive can allow for a shift away from strict codes of institutional paperwork, towards reciprocal, respectful and ethical relations (Sultana, 2007).

Informed by the prioritization of a reflexive stance, my views about research and knowledge production or ways of knowing should be recognized for their influence on my world-view, attitudes and beliefs that ultimately shape this research. I take the perspective that research is never neutral and that knowledge is partial, situated and socially produced, created within the context of inter-subjectivities and the places we occupy (i.e. physically, spatially, socially, politically, and institutionally) (Staeheli & Lawson, 1994; Sultana, 2007; Wilson, 2003). Guba and Lincoln (1994) describe the inquirer as more of an orchestrator or facilitator of the research as opposed to a more authoritative role. In keeping with such perspectives, this thesis does not intend to uncover universal truths, make grand claims, or present an authoritative account of Saik'uz First Nation (SFN) youth perspectives about land and health. Partial perspectives and findings in this study will arise from the linked interactions between the value-laden researcher and the four youth and two Elder participants, where values are seen as inevitably contributing to the outcomes of the research.

Without minimizing the tremendous complexity inherent in the process of decolonization, my hope is that this thesis will represent a small contribution, reflected through research *and* actions described herein, towards a decolonizing approach to research.

4.1.2 Ecosystem Approaches to Health (Ecohealth)

As introduced in Chapter 2, ecohealth is a developing, yet very diverse, field of research, education, and practice (Charron, 2012a). From the perspective of a graduate researcher, the emerging field is challenging to describe, not least since it has characteristics that span both conceptual and methodological considerations. Rather than a definitive guiding framework, it can be helpful instead to see ecohealth as a suite of mutually reinforcing ideas, that are informed by a "rich tapestry of approaches" (Parkes, 2011, p.1) drawn from well-established areas of scholarship. According to Waltner-Toews (2011) "there is not one way to "do" an ecosystem approach, nor is any study an "ideal" ecohealth study" (p.2). Even so, ecosystem approaches to health are characterized by some consistent principles that encourage ecohealth researchers to engage with challenging methodological considerations including transdisciplinarity, participation and knowledge to action (Charron, 2012a).

Rapport (2013) points out that links between ecosystems and health have been a focus of transdisciplinary research and practice since the mid-1970's, borne out of practical efforts to link human activity, ecological outcomes and human health. In 1997, Canada's International Development Research Center (IDRC) built on these earlier efforts and launched an Ecosystem Approaches to Human Health research program. Among the diverse lineages of scholarship that have contributed to the emerging field of ecohealth (Parkes,

2011), the specific literature on ecosystem approaches to health has paid particular attention to the development of guiding concepts and methodological orientations. The IDRC program on Ecosystem Approaches to Human Health arose in the development context and made a notable contribution by delineating three 'pillars' to guide and inform ecohealth work: transdisciplinarity, stakeholder participation and attention to social and gender equity (Forget & Lebel, 2001). Over ten years later, Charron (2012a) expanded these three 'pillars' into six 'principles': transdisciplinarity, systems thinking, multi-stakeholder participation, sustainability, equity, and knowledge to action.

As ecohealth thinking has expanded globally, it has also progressed in scope of application, reaching into the realms of education (ecosystem health programs in professional and graduate studies), research programs and investigations, international forums and mandates, various associations (*International Society for Ecosystem Health,* and the subsequent *International Association of Ecology & Health*), and academic journals (*Ecosystem Health and* subsequent journal *Ecohealth*) (Rapport, 2013). As an emerging field, ecohealth continues to navigate persistent challenges, dealing especially with issues around redundancy and territory across conceptual and methodological terrains (Parkes, 2011) as well as issues of differential power and knowledge between various actors involved in ecohealth projects (Anticona, Coe, Bergdahl, & San Sebastian, 2013; Cole, Crissman, & Orozco, 2006). Additionally, ecohealth has been criticized for "demanding too much", for example having overly idealistic and lofty goals and intense resource requirements (Leung, Middleton, & Morrison, 2012, p.14). Informed by these strengths and challenges, the methodological consideration involved with ecohealth approaches warrants explicit

consideration for research design.

Knowledge-to-Action through Transdisciplinarity and Participation

When attempting to grapple with complex and real world issues such as disparities in First Nations youth health in the context of socioecological systems, researchers and practitioners are confronted with people who have a major stake in the issue and societal interest in improving the situation, but also disagreements around the relevance of the problem, its causes, and potential solutions (Pohl & Hirsch Hadorn, 2008). The concepts of knowledge-to-action, participation and transdisciplinarity are key principles of ecohealth research that can be applied to research design as well as providing tools for thinking and action for tackling complex problems in these kinds of contexts. While none of these ideas are unique to ecohealth research, their application within ecosystem approaches to health highlights a range of methodological insights that are informative and relevant to the research context described in this thesis.

The *Knowledge to Action* principle is aligned with decolonizing approaches and the importance of action-oriented endeavors "where knowledge gains are applied in some way to improve health and well-being, and to promote equity and sustainability" (Charron, 2012b, p. 260). In the ecohealth context, 'knowledge-to-action' (KTA) is preferred to the commonly-used term knowledge translation, because "the point is not to achieve some near-prefect level of knowledge before making a change (the translation)" (Charron, 2012a, p.17). There are other similar terms to describe this concept, including 'knowledge transfer', 'research utilization', 'knowledge exchange', and 'knowledge mobilization' (see Graham et al. (2006) for a description of terminology). Indigenous communities also have their own form of KTA

methods (although not categorized under this term), for example oral traditions, experiential knowledge, and cross-cultural knowledge sharing (CAHR, 2013). According to Graham et al. (2006), the Knowledge-to-Action (KTA) process and related concepts and terms, are "about an exchange of knowledge between relevant stakeholders that results in action" (p.22).

Based on a systems view of KTA frameworks as described in Best & Holmes (2010), various forms of knowledge (as distinct from data and information) are valued and seen as mutually dependent and reinforcing. Within this framework, there is also the recognition that researchers cannot create systems-level change on their own, instead, collaboration and co-production is required throughout the process across multiple levels of change (e.g. individual, organization, community) (Best & Holmes, 2010). Similarly, according to the Canadian Institutes of Health Research (2012), when KTA is undertaken in an integrated way (e.g. with participation from those who will be using the knowledge), the outcomes from the research are more relevant, appropriate and there is a greater likelihood for uptake and use of the findings. Research collaboration and action oriented approaches in an Indigenous context complement decolonizing approaches and are often seen as a necessity with ethical underpinnings. Because of the need for collaboration among various actors, the KTA cycle is not just about production and uptake of knowledge, but it also involves "identifying interdependencies and trade-offs, and negotiating interests" of those involved (Best & Holmes, 2010, p.154).

Working towards 'knowledge to action' raises important questions about the 'types' of knowledge involved in research projects and therefore links with transdisciplinarity as

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another "principle" of ecohealth approaches (Charron, 2012a). Many would argue that the 'wicked problems[20]' that are defining the new century cannot be adequately addressed from individual disciplines, or without inputs from various actors facing different realities. However, most universities are structured with a tendency to favour uni-disciplinary formations. Therefore, according to Pohl (2011), knowledge production in the academic sector evolves in a different structure than that which would help real world issues. This type of thinking tends to form the basis and need for transdisciplinarity (TD). Pohl & Hirsch Hadorn (2008) define TD as the art and science of integrating multiple perspectives and knowledge cultures, including those outside the academy, in order to create "descriptive, normative and practice-oriented knowledge" (p. 112) used to address real world issues.

The meaning of TD is still highly contested, and the term is often used loosely, but a recent review by Pohl (2011) revealed recurrent patterns in the literature, related to the key features that characterize TD. TD approaches tend to lend themselves to participatory research, a focus on socially relevant issues, transcending and integrating disciplinary paradigms, and a search for unity of knowledge *beyond* disciplines (Pohl, 2011). Every approach places different emphasis on each feature. The most suitable approach to TD depends on the issues or problem and goals of the project (Pohl, 2011). Pohl (2011) also suggests that transdisciplinary research can help frame, analyze and process the research questions in a way that allows them to "grasp the complexity of the issue," "take the diverse

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[20] The term 'wicked problems' represents "situations where investigators are faced with poorly bounded, contradictory, incomplete, or changing requirements, and where the solutions to some aspects the problem may create or reveal other problems...Furthermore, because such problems can be defined from a variety of apparently incompatible perspectives, there is neither a definitive problem formulation nor an optimal solution" (Waltner-Toews, 2011, p.6).

perspectives on the issue into account," "link abstract and case-specific knowledge" and "develop descriptive, normative, and practical knowledge that promotes what is perceived to be the common good" (p.620). However, while characterizations of TD such as the one above help to define the concept for the purposes of this thesis, there is also merit in recognizing that transdisciplinarity is still an "unfinished project around which there is still much to be discovered and investigated" (Max-Neef, 2005, p.12). As such, TD should be seen as a 'tool' and an ongoing 'project' (Max-Neef, 2005).

Given that our world is a messy, entangled, complex set of processes in motion, "our forms of knowledge (need to) become entangled and creative in response" (Jones & Demerritt, 2009, p.297). Informed by an emphasis in the ecohealth literature, the principle and process of transdisciplinarity offers one approach to grapple with some of this mess, and indeed it influenced components of the design of this study. Learning about transdisciplinarity initially gave me the confidence and partial guidance to go beyond a disciplinary mind-set, as well as to attempt to undertake research that explicitly engages with and has relevance to community interests. By engaging beyond disciplinary knowledge, transdisciplinary thinking drew me towards a partnered and action-oriented approach at the community level, allowed me to recognize the benefits of valuing and being informed by community knowledges (including youth and Elders), and also encouraged me to integrate knowledge and ideas from different academic disciplines (e.g. health, geography, physical sciences, creative arts, First Nations and Indigenous studies) into my approach.

Participation in the context of ecohealth research has been informed by a variety of frameworks, including community-based participatory research (CBPR), participatory

research (PR) and participatory action research (PAR). Although the actual approaches themselves vary in many ways, according to Dakubo (2011) they share core values, assumptions and qualities and three unifying features: participatory research, education and social action. In line with integrated KT (described above, see also CIHR 2012) usually the community involved is part of the decision-making process with shared ownership of the process. Additionally, participatory research allows for co-learning and the acquisition of new knowledge and skills for *both* the participants and the researchers throughout the entire process. According to Castleden et al. (2012), CBPR can allow new knowledge to be co-created and disseminated in a way that is mutually advantageous with the goal of working towards tangible change that members of the community view as beneficial. Another characteristic of the CBPR process are cycles of reflection, dialogue and action (Castleden, Garvin, & Huu-ay-aht First Nation, 2008).

Participatory approaches influenced the conceptualization and implementation of this study in several ways. First and foremost, the decision to work closely with a community-research advisor (as described in Chapter 1) was guided by calls for the importance of drawing on the knowledge and experience of community partners, shared decision-making responsibilities and ownership, and building community capacity (Reason & Bradbury, 2001). From there, the project also aimed to have participants themselves play a more active role in the research (e.g. defining project priorities, goals and methods; and participating directly in data collection) (Parkes et al., 2012) in order to help address the study objectives and answer the research questions, while building capacity, enhancing learning and working towards a process of change.

However, it is important to recognize that participatory approaches have many

challenges and critiques ethically, politically, intellectually, and institutionally (Cargo &

Mercer, 2008; de Leeuw et al., 2012; Kapoor, 2001). Although the goals of participatory and

community-based research methods have values that would seem to accord with decolonizing

methodologies, some scholars question whether such research might, in some cases, sit

uncomfortably alongside decolonizing agendas (de Leeuw et al., 2012). Not only might

participatory projects sometimes fail to live up to the ideals they are based on, but there is

also potential for "such projects to actually reinscribe and retrench unjust relations in the very

pursuit of opposite aims" (de Leeuw et al., 2012, p.185). Critiques of participatory,

community-based models of research also call into question their appropriateness in many

situations due to their burden on Indigenous communities (e.g., human resource challenges).

Some scholars suggest the approach is also, "biased, unreliable, and simplifies the complex

nature of participation and empowerment" (Ballard, 2010, p. 612).

Informed and guided by decolonizing approaches, ecohealth and reflexivity, my

chosen approach to research design was selected to address complex questions around First

Nations youth, health, well-being and the land in meaningful and respectful ways.

Decolonizing approaches helped me to engage with Indigenous struggles deeply embedded in

themes of land and health, and enabled me in some ways to look beyond my settler vantage

point. They also gestured towards the extreme importance of being critically reflective and

reflexive, and staying attuned to the, "potential hazards of good intentions" (de Leeuw, et al.,

2012) as well as being aware of power differentials that are often intrinsic to researcher,

participant and community relationships (Parkes et al., 2012). Ecohealth, KTA, critical self-

reflexivity, transdisciplinarity and participation helped me grapple with the complexities and multiple forms of knowledge related to the connections between land, health and well-being and to design an action oriented, explicitly partnered approach to working with youth in this community setting.

4.2 Methods

The combination of decolonizing methodologies and ecohealth approaches described above informed the selection of the qualitative method of modified "Photovoice" and 'modified sharing circles' for this study. These methods are respectful of protocols, values, and beliefs of the community while fully engaging of the participant in a process of experiential learning (Restoule, 2004). Additionally, in line with the themes and objectives in Chapter 1 and 2, it was important to find participatory tools that encourage youth to engage with and think about how health, well-being and the land were connected in their context.

4.2.1 Photovoice

Photovoice is rooted in Participatory Action Research (Wang, Cash, & Powers, 2000), feminist theory (Kramarae & Spender, 1992) and education for critical consciousness (Freire, 1970). Photovoice builds on Freire's methods of using the visual image to "reflect the community back upon itself" and enable people to think critically about their lives, as well as stimulate dialogue and identify shared concerns (Wang & Burris, 1994, p.172). Photovoice draws on feminist theory in many ways, notably through questioning common understandings of power, representation and voice and using methods that allow participants to construct their own knowledge in ways that empower them (Wang & Burris, 1994). Wang

and colleagues first developed the concept of Photovoice as a PAR method in 1995 while

working with rural women of Yunnan province in China (Wu et al., 1995). Since then,

Photovoice has been applied in many contexts, including for participatory needs assessment,

participatory evaluation, participatory health promotion, water resource management

research, biophysical ecosystem service assessments and many others (Wang & Burris, 1997;

Maclean & Woodward, 2012; Bérbes-Blázquez, 2012).

The basic goal of Photovoice is to involve the members of a community in taking

pictures, telling stories about those pictures and sharing the information with policy makers,

thus Photovoice acts as a vehicle to enable people to identify their strengths and concerns,

promote dialogue and affect policy (Wang & Burris, 1997). Overall, Photovoice is meant to

"reach, inform and organize members for social change" (Royce, Parra-Medina, & Messias,

2006, p.81)

In this project, the photographs and the story-telling that complements them carry the

potential to foster different ways of knowing that can enrich the youths' own understandings

of the situation. They may also allow for the engagement of youth in research and help

facilitate a "collective consciousness" (Royce et al., 2006, p. 81). The following sections

detail the stages and specifics of how Photovoice was used in this study.

4.2.2 Research Stages

This community-based research project was organized into four stages, informed by

the "Stages of Photovoice[21]" (Wang and Burris, 1997) and the Community-Oriented

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[21] Wang and Burris's (1997) themes include: 1) Define the research issue, 2) train the participants, 3) devise initial themes for taking photos, 4) take pictures, 5) facilitate group discussion, 6) document the stories and 7) reach the audience.

Participatory Action Research stages outlined in Parkes & Panelli (2001). The process of

conducting these four stages generated several forms of qualitative data (see section on Data

Collection).

Stage One - Relationship Building, Research Design and Recruitment

Because I am an out of province student, and did not have any previous connections in

British Columbia, the first entire year of my Master's program (September 2010-August

2011) was spent making connections and learning about the region. For example, as I

completed my coursework, I was networking through my school and employment related

activities while also traveling to a variety of communities through work with Carrier Sekani

Family Services. In August 2011, I received a suggestion from a friend to contact Jasmine

Thomas, a SFN community member and former UNBC student who was actively involved in

youth engagement activities and environmental activism. When I contacted Jasmine through

e-mail, she was immediately enthusiastic about working together on a project that would

provide more opportunities for SFN youth to connect to the land, and contribute to training

and capacity building in environmental issues both locally and internationally (J. Thomas,

personal communication, August 16, 2011).

During the initial meetings about a potential study, I felt an immediate connection

with Jasmine. Not only were we close in age and very committed to youth-oriented, socially

and environmentally engaged work, but I also sensed that we had a similar energy level and

enthusiasm for this type of work. Jasmine suggested that she would like to work with me and

advise on aspects of the project, inform me about community protocols and assist with

logistics and planning. My supervisor and I deliberated over what the name of her role

should be and landed on "community research advisor" (hereafter referred to as CRA). The early fruitful phase of this foundational research relationship marked the point at which many aspects of my research process began, including keeping regular field notes, familiarizing myself with UNBC Research Ethics processes and considering the application of research design principles to the context of Saik'uz First Nation.

In August 2011, Jasmine facilitated initial contact with SFN Chief and Council and we were invited to present the project proposal at an upcoming meeting. The early morning meeting was my first encounter with the community as a researcher representing UNBC. It was a beautiful late summer morning and I met Jasmine in the parking lot of the Band Office. Nervous and ready, I made my way for the front doors. "Just wait," she said, and for the first time, in a moment I will never forget, used her thumb to smear charcoal on my forehead, chin and then sides of my face; and then prayed for my protection on the territory. She then placed tobacco from her torn open cigarette into my hand and asked me to release it in the four directions. East. West. North. South. As I turned in a circle on the pavement, I took in Sinkut Mountain (the largest peak in the area), a forgotten community garden, the skeleton of a new housing project, and a daycare playground. The quiet, grounding, intimate space formed through this gesture was quite distinct as compared to initial experiences in other research collaborations I had experienced in the past. I felt a sense of calm, gratitude, and humility that often followed us throughout our work together.

The meeting with Chief and Council that followed was an exciting and positive experience. The council members made several suggestions to improve the study design, and supported Jasmine's role as CRA. Chief and Council approved the research, and drafted a

letter of support (see Appendix I). In the summer of 2011 my thesis committee was formed, and I defended my proposal in November 2011. Afterwards, I applied for REB approval, and after a round of edits, received approval on January 17, 2012 (see Appendix II).

Many aspects of the project were co-designed, co-developed and implemented with the CRA. Through one or two in-person meetings at the beginning of each stage, we co-designed aspects of the research (see Table 1). The CRA also lead participant recruitment, co-facilitated the training workshop, and was the main contact and support person for the participants throughout Stage Three (participant photography). As the project developed I also became more aware that this partnered research process was being designed in collaboration with a CRA who was also a member of an influential family in the SFN community. Because of community and family dynamics, and the CRA's role in previous youth work, it became clear that many of the youth who took part in the study, and ultimately continued with the study, were also part of this family (implications to be discussed in Reflections on the Overall Research Process, section 5.4).

Throughout this stage of relationship building and research design, field notes and observations were recorded in a journal regularly, particularly after meetings and conversations with the CRA or other study participants, my committee, and peers; and also during relevant conferences and workshops. I also took field notes after having visited the community, or sites throughout the SFN traditional territory. In my field notes I wrote down observations and insights, raised questions, explored conflicts, laid out moments of confusion and concern, described data collection activities, and wrote down stories told to me by the participants. These written records would eventually support the writing of all sections of

this thesis but especially the qualitative analysis stage (see Section 4.2.4) and would serve as a basis for many of the personal anecdotes embedded throughout this thesis, including this Methods section.

This first phase of research laid the foundation for an iterative research project with a small number of research participants who engaged in several stages of data collection. An overview of the research process in terms of stages, dates and data is provided in Table 1.

Participant sampling in this study was purposeful. The CRA and I discussed the recruitment approach that would be used, but ultimately I respected her choices as someone with intimate knowledge of the community and familiarity with possible participants. We agreed it was important to include any youth that demonstrated an interest in the project, from all backgrounds, clans and families. Recruitment criteria for youth were: (1) between 13-29 years of age, (2) they and/or their parents able to provide informed consent, (3) reside in SFN, (4) identify as Indigenous.

Table 1 Description, Dates & Types of Data Produced in the Project

Stages	Description	Dates	Procedures/ Actions	Types of Data Gathered & Related Appendices
Stage One	**Relationship Building/Scoping and Recruitment** – This stage involved building on relationships with community contacts (most notably the Community Research Advisor) and recruiting youth and Elder participants.	August 2011 - April 2012	-Proposal defense -UNBC REB Approval -Took part in anti-Enbridge rally in Fort St. James alongside SFN community members	-Field notes and observations
Stage Two	**Meeting the Participants, Photography Training and Theme Exploration** – this stage involved training the youth in the Photovoice process and exploring the themes of Land and well-being with the participants.	April 28, 2012		-Workshop transcripts -Field Notes and observations (Workshop Protocol: *Appx V*)
Stage Three	**Participant Photography and Research Refinement** – this stage involved the collection or taking of photographs of what the youth saw as connections between land and well-being and the revision of plans, participants and timeline for Stage 4.	April 28 - August 21, 2012	-Participated in Saik'uz First Nation culture camp	-Field Notes and observations -Photos and Captions (Photovoice Guide: *Appx IV*)
Stage Four	**Feedback/Reflection & Sharing** – this stage involved modified Sharing Circles (SC) & Photo-Elicitation Interviews (reflection on the photographs in groups and individually). This stage also involved collating the photos and stories, and coming up with youth-driven ways to share the stories.	**Sharing Circle (#1):** August 30, 2012 **Interviews:** October 7 - November 17, 2012 **Sharing Circle (#2):** February 2013		-SC Transcripts - Field notes and observations (SC Protocol: *Appx VI*) - Interview Transcripts (Interview Guide: *Appx VII*)
Post Project	**Follow-up activities** – After the official completion of the project, several follow-up activities took place (which are ongoing).	March 2013 - ongoing		-No data collected (List of activities and examples: *Appx VIII*) - Field notes and observations

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The CRA visited the high school in Vanderhoof and discussed the study informally with several students from SFN. If a youth was interested in being a part of the study, the CRA described the research process and information in the consent forms and obtained written consent from the youth participant. If the youth participant was under 18 years old, the CRA also described the study to their parents/guardians and obtained consent. The CRA also had an idea of two Elders who would be a good fit for the project. She approached them both, explained the project and their expected roles and obtained their written consent to participate.

While the CRA was involved throughout the project, it was decided after the training was completed that Jasmine (the CRA) would also contribute as one of the youth participants (see Stage Three). This means that there were a total of four self-identifying First Nations youth aged 14-27 years who participated in this project from start to finish: three males (Gabriel, Adam and Elijah) from the Grouse Clan and one female (Jasmine) from the Frog Clan (who was also the CRA). Two Elders also participated: one male (SQ) and one female (Marlene), both from the Grouse Clan. Adam and Jasmine had already completed three years of post-secondary education at the time of the study, and Gabriel and Elijah were in high school (Grades nine and 11, respectively). Two high-school aged young women attended the first workshop but dropped out of the study prior to handing in any photos. Another 21-year old young woman signed a consent form, and received all of the photovoice training materials after missing the first workshop, but did not attend any of the subsequent gatherings (workshop, or sharing circles) and did not take any photographs.

Stage Two – Meeting the Participants, Photography Training and Theme Exploration

In keeping with the research approach approved by Chief and Council in Stage 1, recruitment for the study was the primary responsibility of the CRA. Therefore, my first encounter of the youth and Elders did not occur until an early morning training workshop in April 2012. When I entered the meeting room in the Band Office I greeted the two Elders, Marlene and SQ, who were in their late 60s, and were soft-spoken as well as very warm, gentle and friendly. The youth participants arrived a few minutes later and included Elijah, Gabriel and two young women (who did not continue with the project after the first workshop as described above). All of the youth seemed somewhat withdrawn and uncertain of the process, but they listened attentively and with interest. Before beginning the workshop, we all shared a light breakfast of bagels, fruit, juice, and tea.

To begin the workshop, Jasmine and I introduced ourselves, and briefly gave an overview of the project. Guided by other Photovoice approaches (Palidroba, Krieg, Murdock, & Havelock, 2009; Wang & Pies, 2004), we then held a one-hour basic photography training session which was lead by a local photographer who had several years of experience working with the Saik'uz First Nation on various photography assignments. Next, the CRA and I co-presented about the project, the Photovoice process and the general themes (land and health). We prompted the youth to consider the following open-ended guiding questions: *1) From your perspective, what used to be the connections between the land and well-being for the people of Saik'uz?, 2) Today, what is your connection to the land, how does that relate to your wellbeing (or that of your community)?*, and *3) What could the*

connection between the land and wellbeing look like in the future? Also think of what could

revitalize/revive/enhance the connection to the land for you in your community?

Next, we led a discussion about cameras, power, and ethics (see Appendix V for

protocol). The issue of safety and how to minimize risks while taking photographs was

discussed, such as following safety considerations while in public or on the land, acting

responsibly towards the public, and respecting the rights and privacy of others (Royce et al.,

2006). In addition to supporting the youth by providing my contact information in case any

problems or questions arose, the CRA was also available to them for guidance and support

throughout the process, in keeping with the approach proposed by Royce et al., (2006). Each

youth participant received a digital camera to use throughout the process (value ~$100). The

Elders attended the workshop in a mentorship role and took part in discussions, but they were

not participating in the photography process (and therefore did not receive a camera).

Each youth participant received a Photovoice Booklet, which contained the key

questions to think about while taking their photos, a FAQs page, Photo Consent Forms (for

taking photos of people over 18) and Photo Logs (for writing descriptions of their photos)

(see Appendix IV). They were asked to select and write descriptions for twenty of their

favourite photos. The cut off of twenty photos was chosen to match studies using similar

methods where participants were given disposable cameras that had a maximum of 27

exposures (Castleden et al., 2008). Additionally, 20 photos seemed to be a reasonable and

practical number of images for the youth to photograph and describe in the given time period.

The training workshop was audio-recorded with a digital recorder with the permission of all

participants.

Throughout the morning I learned that Gabriel and Elijah were 14 and 16 and in Grades nine and 11, respectively. They both attended high school in Vanderhoof. Elijah shared with me that he was hoping to take a photography course at school and was excited to learn more about the subject. He mentioned that he was hoping to get a high quality camera in the future in order to pursue his interest and he showed me some photos he had already taken using Instagram. Gabriel was less forthcoming, but I did find out that he had a love for sports.

Stage Three - Participant Photography and Research Refinement

Although the original objective was to include a wide-range of youth, it became clear throughout the course of the project that the youth that remained were from the same extended family. It also became apparent that this particular family group tends to be more politically active within SFN including holding many leadership roles in the community (implications to be discussed in the Limitations Section). The three youth who did not continue their participation were from less-advantaged families and were also facing many life challenges at the time of the study.

On receiving their cameras, the remaining youth participants were asked to take photos over a period of one month anywhere within the SFN traditional territory (in the end stage three took approximately three and a half months). The initial choice to locate the project in the SFN traditional territory was informed by the work of educational scholars and non-Indigenous scholars alike who feel it is important to help students "develop a sense of place, a feeling of being connected to or at home in their geographical surroundings" (Lowan, 2009, p.55) . Additionally, due to the interdependent development of First Nations

cultures within specific geographical settings (Cajete, 1994; Lowan, 2009), by grounding this project in the participants' traditional territory, discussions about land and well-being can come alive in these settings. As Lowan describes, the youth "can see the physical features, hear the sounds or feel the winds present in the stories of Elders and other knowledge holders" (p.55).

Because three participants withdrew from the project during this phase, it was decided that we should try to recruit several more youth participants. Although Jasmine communicated with several youth, we were only able to recruit one more participant, Adam, who was also a member of the Grouse Clan. Although he was living in Prince George at the time of this study, completing his second year of post-secondary studies, his family still lived in SFN, he visited frequently and spent the summers working for the band. Adam was very soft spoken, but we shared numerous stories and enjoyed many laughs throughout the project, especially during the long drives back and forth from Prince George to SFN.

It was during this participant photography stage that Jasmine shared her preference that, as a SFN youth who also had much to contribute to the process alongside the other youth, she wanted to be involved in the photography process and the telling of her story. Although I was hesitant at first due to concerns related to representation and power imbalance, I decided after some consideration that Jasmine would have a dual role in this project, both as a participant and as a community research advisor. This decision hinged on the condition that Jasmine and I were to be very attentive to and reflexive about her dual role throughout the rest of the project, many aspects of which were recorded in my field notes.

Jasmine felt that the first annual Grouse Clan culture camp[22] (early August 2012) would be a great time to convene and hold a sharing circle with the youth in the project, as they were all also participating in the camp. I was invited to attend the camp as a guest, and I was afforded the considerable privilege of playing with the children, observing the skinning of a bear, participating in two moose hunts, learning how to set trap lines, and listening to Elder's Creation stories around a campfire. The unique quality of the culture camp allowed me to experience, with all of my senses, the coming together of youth, land, health, and community. For the first time since the beginning of the project, I got to know certain community members on a deeper level, and quite willingly became the target of relentless light-hearted teasing and humour. A particularly memorable experience occurred one hot and muggy afternoon while the camp youth were busy with an art project, and two Elders, Jasmine and myself sought refuge in the shade. For hours, in a state of sleepy relaxation, Jasmine and I listened to these women's stories, observed their gestures, their stares, squints and smiles between drags on their cigarettes. I was touched and amazed by their stories of struggle and resilience in the face of persistent injustice, and their ability to jump seamlessly through stories of the past, present and future. During a smudge later in the day, they thanked me for spending time with them and prayed that the stories and teachings they shared with me would be passed on.

By the end of my second day at the camp, it became clear that holding a sharing circle at the camp was not ideal and Jasmine and I decided to defer the sharing circle and reconvene

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[22] The Grouse Clan Culture Camp has been running for the last two years. It is located on the shores of Tatuk lake, within SFN traditional territory, which is 1.5 hours from Saik'uz via active logging roads. The site of the camp is a former SFN village.

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at the end of August 2012. There were several reasons for this decision. First, I realized

early on that the youth had not quite collected all of their photos or written their captions. In

fact, they had been waiting for the camp experience in order to take their photos. Secondly,

having a sharing circle at the camp not only would have disrupted the natural rhythm and

plans of the day but surely would have led many of the other children, youth and adults to

want to observe or participate, which had obvious implications for confidentiality and study

design.

Although the original plan was to have the youth participants complete the exercise of

taking photos, writing captions, and submitting the entire package within a month, in reality

the photo taking process alone took approximately three and a half months. After this time, it

became clear that the participants needed an additional impetus in order to compile their

images and write their captions. On August 21, 2012, Jasmine and I organized a gathering in

the computer room of the SFN Band Office to assist in the uploading of photos to computers

and to go through the process of selecting photos that best reflected the stories they hoped to

share.

During the gathering, each youth participant sat at individual computers in order to

select their photos, but it is worth noting that there was a lot of discussion and laughter

amongst the youth as they looked at each other's photos. In terms of process, first, the photos

from each of their memory cards were uploaded onto the computer. Next the youth

participants sorted through their own photos, flagging their favourites. Elijah wrote short

titles for each of his nine photos while Gabriel wrote longer captions for his 20 photos.

Adam submitted captions for his 19 photos several days later by e-mail because he needed

more time to reflect. Jasmine chose not to write any captions or titles for her 15 photos. The process of selecting photos and writing captions took approximately one hour. Interestingly, Elijah and Gabriel mentioned that other community and family members had actually photographed some of their chosen images, because they lent out their cameras throughout this time period. Unsurprisingly, all of Elijah and Gabriel's photos and a portion of Adam's photos were taken during the culture camp. Additionally, all of the photos were taken within the SFN traditional territory except for Jasmine's. She also included photos from other places in Canada (e.g. Ottawa, Fort McMurray, Prince Rupert) and internationally (e.g. England, Brussels). Gabriel included seven photos of children and two photos of adults who had not consented to having their photo taken. I was unable to display those particular photos in this thesis because of the ethical requirements set out at the beginning of the project,

Although Jasmine and I had great rapport and kept in frequent contact through text messaging, e-mail and phone throughout the year, as well as several lunch meetings in Vanderhoof and Prince George, it was not until one year later (during Stage Three) that I felt we were developing a friendship and could speak more openly about the project, family, our past experiences and our future. In the summer of 2012, we went berry and medicine picking with other community members and I was given a tour of parts of the community as well as sacred sites. We shared many aspects of our lives during long drives in Jasmine's pick-up truck on dusty logging roads or while drinking coffee on the front porch of her home in Saik'uz watching the comings and goings of the community.

Stage Four: Feedback/Reflection & Sharing

Once the chosen photos were printed, we reconvened with the two Elders and four youth to share the youth-chosen photos and stories using a modified approach to the traditional Sharing Circle (see Appendix VI for detailed sharing circle guidelines and Figure 3). The process of the modified sharing circle used in this work was heavily influenced by Kaaren Dannenmann's work, "Circle Work for Community Building" described on p.150-151 of the COPEH-Canada Ecosystem Approaches to Health Teaching Manual (McCullagh et al., 2012). Sharing circles (and related learning or healing circles) are based upon Indigenous belief systems and are used in ceremony, healing and group support in many Indigenous communities in Canada (Stevenson, 1999). Sharing circles are increasingly being used as an Indigenous method of inquiry for gathering stories and capturing people's experiences. A sharing circle is comparable to focus groups in qualitative research where researchers gather information on a particular topic through group discussion (Lavallée, 2009). However, the principles of a sharing circle differ: "circles are acts of sharing all aspects of the individual—heart, mind, body, and spirit" (Lavallée, 2009, p.29). Sharing circles often begin with a smudge and prayer. Next, one of the participants is given a 'talking stick,' whereby only the person holding the object is supposed to speak. Once the first participant has said what they wanted to say, they pass the talking stick to the person beside them and the process continues around the circle. Usually there are one to three rounds. Throughout, the others are to listen carefully and respectfully. In this study, the sharing circle was modified slightly (e.g. a small amount of speaking out of turn occurred), which allowed for a more organic form of conversation than a strict sharing circle.
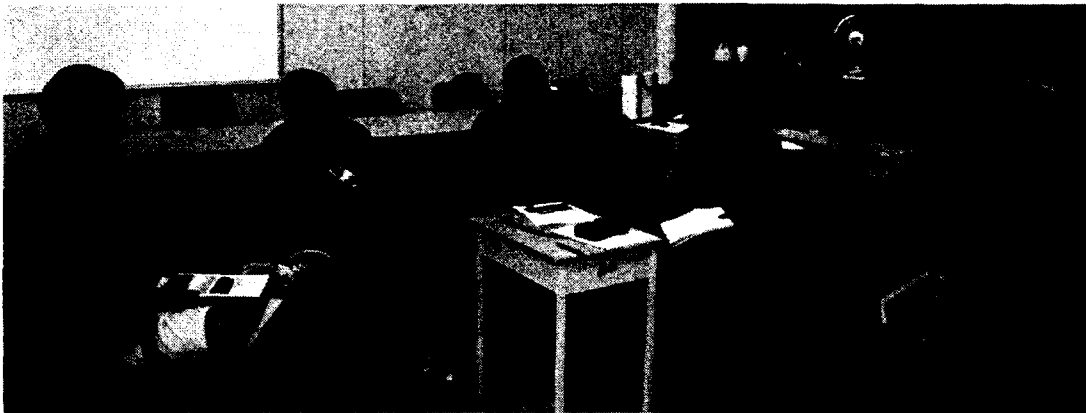
Figure 3. Sharing Circle #1 with youth (only three shown) and Elder participants (Band Office of the Saik'uz First Nation)

The dynamics of the modified sharing circle provide important context for the Findings Chapter. The sharing circle lasted approximately two hours and included three rounds (i.e. each participant spoke approximately three times), and was audio-recorded with the permission of all participants. During their turn to speak, the Elders helped to promote dialogue and told stories to build on the various themes that the youth were describing. During his turns, Gabriel often gave very brief responses and was prompted at times to expand on his contributions. He appeared to be quite shy and uncomfortable, however when talking about particular subjects (e.g. traditional games and sports), he lit up and made the group laugh with his marked enthusiasm. Elijah started off with somewhat concise contributions and seemed slightly uneasy and shy at first, but became less so in the subsequent rounds. During their turns, Jasmine and Adam described their photos through multilayered stories.

A semi-structured interview protocol was used to guide the collection of data in the interviews (see Appendix VII), which explicitly allowed room for the participants to lead the way. In all of the interviews, there was room for the research participant to tell their story of

the photograph on their own terms (Thomas, 2005). The participants generally had quite a lot to say about their photos in relation to the themes of the project and were prompted, when necessary, with follow-up or probing questions to clarify, expand or confirm ideas. The time length of the interviews varied from 30 to 45 minutes, and the location of the interviews was based on the suggestions of the participants. Semi-structured interviews were conducted with three of the youth participants (Jasmine, Adam and Elijah) using a conversational format to elicit and explore perspectives about the participant's photos (see Table 1).

Although Gabriel originally agreed to do an interview, he seemed hesitant, shy and nervous. I made sure to explain to him the informal nature of the interview and let him know that participating was entirely up to him. When I arrived in Saik'uz for the scheduled interview, Gabriel was out hunting. Ultimately, although Gabriel never refused, the interview never happened, as I did not want to push the matter. In retrospect, although there could have been many reasons for not doing the interview, I feel that Gabriel considered a one-on-one interview intimidating. Because of the lack of interview data, smaller contributions during the sharing circle, and the fact that nine of his photos were unable to be used due to lack of photo consent, Gabriel has a less prominent voice throughout this thesis.

In February 2013, the group of four youth met again for the second sharing circle (see Table 1). Although the Elders were invited, they were unable to attend due to personal reasons. The dynamic changed somewhat without Elder participation. The process carried a less formal feel, and the sharing circled maintained less structure. A selection of youth quotes, stories and photos were placed on a large table, organized under preliminary themes as discovered through thematic analysis. I went through the themes, supported by photos and

stories and we had an open discussion about whether the themes resonated with what they were hoping to convey. Next, we discussed how the youth might like to share the photos and stories with the community/region and decision-makers/policy-makers. The CRA and I started the discussion by giving examples of how work has been shared in other Photovoice projects, e.g. a photo exhibition/gallery, photo essays, blogs, etc. This session was audio-recorded with the permission of all participants.

The youth participants were allowed to keep the digital camera at the conclusion of the study as a gesture of appreciation. Many of the cameras ended up as "community-owned", and were brought out during community events such as the culture camp the following year. Additionally, a hard-cover compilation album of photos and stories (Appendix VIII-B) was produced for the Elders who participated in the project. An album was also given to the Band Office and to the High School in thanks for supporting the study.

Post-Project

The last phase of the study consisted of having the youth present the findings, stories and photographs to people that they believed could be interested in creating change and/or who might be interested in the results. Additionally, a series of prints and related quotations were displayed at a Saik'uz Career Fair in March 2013 (see Appendix VIII-C for an example). During the career fair, the hard-cover album was presented to the SFN Chief after a short speech by all of the youth participants (Appendix VIII-B). On May 7, 2013, Jasmine and I co-presented the findings at the Regional Stewardship Forum in Vanderhoof. On June 29, 2013, enlargements of the same quotes and photos as well as a project poster were put on

display at the grand opening of "Sophie's[23] Healing Garden" at the BC Cancer Agency

Centre for the North in Prince George (see Appendix VIII-C and D). An Instagram[24] account

was also created that displayed a selection of quotes and stories that the youth were able to

share through their social networks (Appendix VIIII-E). On August 21, 2013, Jasmine and I

co-presented the findings at a SFN Council meeting. Additionally, the band was given a

summary report, a copy of the photo book, a project poster, as well as enlarged prints to be

displayed on the walls of the band office. The meeting members were very pleased with the

work, and mentioned that this type of work is important for helping to define "who we are"

as people. They were very interested in the follow-up activities and how to get more youth,

and other community members in general, involved in these types of projects in the future.

Other features of these follow-up interactions are discussed in Chapter 5.

4.2.3 Data Collection

In total, four types of data from four sources from the iterative research design were

combined for qualitative analysis (see Table 2 for a breakdown). These sources included 1)

digital-audio recorded sharing circles, 2) digital-audio recorded interview discussions, 3)

photo captions from the youth participants as well as 4) my field notes. Both the sharing

circle discussions and interviews in this project were audio recorded and I transcribed them

verbatim. I also typed up my field notes, which made them searchable. As was described in

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[23] Sophie Thomas is a respected Dakelh elder and traditional healer in northern BC who passed away in 2010. The Healing Garden, adjacent to the cancer clinic, was opened in her name. It is made up of the same indigenous shrubs, flowers and trees Sophie used to make her medicines.

[24] Instagram is a service that allows online photo sharing and social networking by enabling its users to upload photos, apply digital filters and frames to them, attach captions and share the final product on a variety of social networking services such as Facebook and Twitter.

section 4.2.2, participants contributed to each of the data types to varying degrees. The

overview in Table 2 shows who contributed to each data type.

Table 2. Data Sources and Participant Breakdown from the Saik'uz First Nation Youth
Photovoice Project

Participant	Youth*				Elders**		***
Source of Data	J	E	A	G	S	M	L
Workshop #1 Transcript							✓
Photo Captions							✓
Sharing Circle #1 Transcript							✓
Interview Transcripts							✓
Sharing Circle #2 Transcript							✓

☐ = Shaded areas indicate that the participant contributed to the type of data
  * Youth Participants: J = Jasmine; E = Elijah; A = Adam; G = Gabriel
  ** Elder Participants: S = SQ; M = Marlene
  ***Researcher: L = Lindsay (Note: this column represents field notes that were taken in relation to all
  sources of data)

4.2.4 Data Analysis

A thematic analysis approach to the collected data allowed me to identify, analyze

and report patterns and themes across the data set,[25] (Braun & Clarke, 2006; Graneheim &

Lundam, 2004; Castleden, 2007; Ritchie & Lewis, 2003). The approach to analysis described

below was primarily informed by very similar strategies proposed in Graneheim & Lundam,

(2004) and Ritchie and Lewis (2003). After transcribing the workshops, sharing circles and

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[25] In this study, the complete data set that was thematically analyzed included interview, workshop and sharing
circle transcripts, as well as photo captions provided by the youth.

interviews, as well as typing up the field notes, I started by examining (reading and rereading) the data set in order to get familiar with the data, taking notes along the way. The text related to specific content areas was extracted and consolidated into separate labeled sections of an Excel document. It was then divided into two types of condensed meaning units: one where the description was close to the text (paraphrased) and another where there was interpretation of the underlying meaning. Sometimes it was difficult to condense some of the data as it was already given to me in a condensed form (e.g. the photo captions). The condensed meaning units were then abstracted and labeled with a code. During this process, notes about insights, connections to literature and relationships between codes, themes, categories were also recorded. The process and decision making was fuelled by the literature that I had read; conversations with my supervisors and committee, the CRA, and study participants; and consistent revisiting of my field notes. The field notes allowed me to see where my thinking was at in that moment and reminded me of key insights and observations.

Following the initial organization of the data, the codes were reviewed, rearranged, sorted and modified. The codes were sorted into categories (again, with much reconsolidation and rearranging) and the underlying meaning of the categories was formulated into themes. According to Braun & Clarke (2006), "a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (p.82). The process was not linear. It required a dynamic and creative process of inductive reasoning, thinking and theorizing (Basit, 2003) fuelled by conversations with my committee, research participants and peers. During the latter phases of analysis, representative quotations were selected to highlight the main themes and

categories that were included in the final write-up. Because this was my first experience of thematic analysis, I felt it was important to fully engage with the thought-process, and "behind-the-scenes" aspects of qualitative analysis. Therefore I chose to use this more "hands-on" and manual method as opposed to utilizing a qualitative analysis software program such as NVivo.

A notable aspect of the process of analysis was that some of data was in the form of stories, especially for the Elders and to a lesser degree the three older youth participants in the sharing circle and interviews. In the works of Bessarab & Ng'andu (2010), Kovach (2010) and Lavallée (2009) it is clear that sharing circles and open-ended conversational style methods of inquiry inspire a more fluid, dynamic storytelling format (as opposed to question and answer formats). Thus, in some cases, the data from this project was in the form of long non-linear stories – Kovach (2010) argues that when disaggregated by thematic analysis, such stories can become fragmented and lose their intended meaning. Therefore, while maintaining thematic analysis as the overarching data analysis approach, I also explored narrative analysis. In narrative analysis, stories are kept intact allowing them to speak for themselves, preserving their integrity, their highly contextual nature, the participants' voices as well as the spiritual, emotional, physical, and mental responses they can evoke (Kovach, 2010; Thomas, 2005). The concepts behind narrative analysis opened me up to different ways of understanding the data; they created room to ask questions like: 'why is this story being told to me'? And 'what does this story tell me about the story-teller'? (Martin, 2009). While analyzing the data and interpreting the findings, I made sure to hold the meanings behind the stories in mind, and continued to do so as I devised codes and categories.

As is common in many Photovoice projects (e.g. Castleden et al., 2008; Hansen-Ketchum, Marck, Reutter, & Halpenny, 2011) the photos themselves did not serve as a form of data to be analyzed. Instead, the individual who took the photo was the one to provide their perspectives and interpretations through caption writing, the interview and the sharing circle (see Table 2 for data type overview). Because the youth participants were asked to take photographs that represented ideas that were important to them, they themselves were substantially involved in the first phase of analysis because they determined, through photography, what was important (Castleden, 2007). Asking participants to identify their preferred photos before the sharing circle served as another contribution to the analysis, allowing the participants to further reflect on and prioritize their perspectives on the connection(s) between land and well-being. As noted in Castleden (2007), participant identification of preferred photos also helps the researchers in data analysis and for communicating back primary participant priorities.

4.2.5 Ethical Considerations

SFN Chief and Council support and approval to conduct the study was obtained in mid-September 2011 (see Appendix I). Ethical approval was obtained from the University of Northern British Columbia Research Ethics Board (REB) in mid-January 2012 (see Appendix II). Amendments were made for specific details (e.g. choice of participants to include their name) and the final string of appendices is included in Appendix III A-K.

The formal ethics review process is in place to help ensure that research, especially with humans, is conducted in a way that minimizes harm to research participants (TCPS, 2010). This is especially the case for participants under the age of 18. In this project several

measures were taken in order to protect youth from harm. This included a discussion of risks and safety when taking photographs (see Chapter 4, Stage Two discussion), as well as provision of a list of resources on hand (such as phone numbers for various community supports), available in case reflection about certain issues caused stress or other negative emotional responses. Additional measures for minimizing harm such as informed consent are described below.

The approach in this research is consistent with Thompson & Van Den Hoonaard (2002) notion of informed consent being a *process* and not a time-limited event. For the two youth under 18, informed written consent was obtained from an authorized third party (e.g. a parent) by the CRA prior to the first workshop. The CRA explained the nature of the project, as well as the risks, benefits, etc. (as outlined in the consent forms), to the youth and their parents in person and provided an opportunity for them to ask questions. Blake (2007) argues that formal ethics processes can sometimes undermine or hinder the more dynamic, fluid, open-ended processes inherent to participatory research relationships. Also, the formalized process of gaining informed consent (ultimately through securing a signature) can be intimidating or feel like a business relationship (Blake, 2007). However, these issues did not seem to be relevant in this project because of the participants' trust in and familiarity with the CRA. Before the workshop, sharing circles and interviews, verbal consent was obtained from the youth and Elder participants to ensure ongoing consent.

As stated in the REB forms (see Appendix III A-F), although confidentiality was impossible to guarantee in the sharing circles, participants were given the chance to choose a pseudonym that would be used to protect their anonymity in the transcripts, photos and in the

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reports. However, only two participants chose to use a pseudonym (Gabriel and SQ), the others requested that their real names be used in the work. Participants (or their parents/guardians) who selected to share their real names signed a privacy waiver (Appendix III-K). The waiver outlined their wish to waive their right to privacy and anonymity for the purposes of the research project and outlined the consequences of this choice, i.e. that their real name would be used in discussions about what was said during the interviews and the sharing circles, and that their names could be included in the final results of the research, and any publications, posters, reports, or events related to the research.

Anonymity and confidentiality in terms of photographs of people was dealt with at various stages throughout the research process. During the training, participants were briefed about the ethics of taking photographs, and that taking photographs of people under 18 was not encouraged as those photographs could not be used in the project. In their packages they were also given a set of Photograph Consent Forms (Appendix IV) in order to get signed informed consent from any individuals that participants wished to photograph. During the photograph selection phase, if a photograph contained a person who did not give consent, the youth participants cropped those people out using photo-editing software.

As outlined in the project consent forms (Appendix III), all electronic data collected during this study was downloaded and stored on a secured password protected hard-drive. Consent forms were stored in a locked filing cabinet in my supervisor's lab at UNBC. All forms of data recorded for this project and stored at UNBC will be destroyed after a period of five years. The only holder of data after five years will be the SFN (the data custodian) where it will be safely archived at the Band Office for access by First Nations. For this project, a

compilation of information was aggregated into a package to be added to the SFN research library. The package included a USB key filled with the audio recordings, photos, project materials, and transcripts. The package also included transcripts, photos, project materials and reports printed and organized into a project binder.

4.2.6 Approaches to Research Validity and Quality

This section presents how the challenges of research validity and quality were addressed in this study. I also discuss the strengths and limitations of the research strategies. Strategies included triangulation, participant feedback and self-reflexivity.

Triangulation is an approach that can be used to increase/ensure the reliability, validity or strength of a study. 'Triangulation', according to Denzin (1970) and Thurmond (2001), is the design of a study where various data sources, investigators, methodological approaches, theoretical lenses and/or methods of analysis are combined in order to yield complementary findings or similar conclusions, in which case the findings become more credible. Many scholars see the value in using multiple researchers, methods, data sources and methodologies because it encourages exploration of questions from various angles, expands the scope, and increases understanding, in the end yielding a more complex (yet still partial) understanding (Tracy, 2010). In line with these notions, the design of this study was informed by literature drawn from a wide range of disciplines, a combination of methodologies and approaches, and the use of several tools of data collection (field note records, workshops, participant photography, interviews and sharing), which produced a rich data set. The project was also characterized by an iterative element, whereby two main cycles of data collection were conducted over a one-year period with a small group of youth.

This study was also designed, planned and implemented with a CRA, as opposed to another investigator, but it still allowed for some discussion and exchange over process while deepening the development of knowledge and providing more nuanced understandings.

Although triangulation is a useful approach, Tracy (2010) prompts us to remember that realities are partial, multiple and constructed, and that there is no single reality or truth. Just because a variety of data from different sources may appear to converge to a similar conclusion, does not mean that this reality is *the* reality. Nor can we assume that if there are different conclusions from a variety of sources that some or all of those conclusions are less reliable. According to Tracy (2010), data collected using a variety of means does and often *should* yield different results.

Another important strategy used to create validity and quality in the research process is participant feedback, which can be guided through sharing transcripts, findings and research reports with the participants in order to create space for questions, reflections, critiques, affirmations and other feedback (Tracy, 2010). In this study, a copy of the transcripts from the first workshop, first sharing circle and individual interviews were given to each youth participant once the data was transcribed. Youth were given the opportunity to make any edits, elaborations and/or note any omissions as they saw fit. Additionally, at a very early stage in the analysis, the initial draft of preliminary themes was shown to the CRA, we discussed the relevance of the themes and whether or not they resonated with her. This discussion confirmed that the themes seemed to resonate and thus the analysis and writing process continued. Once I was able to tell the story of the data, integrated with my own insights and those from the literature, I shared the initial findings/discussion with the

youth participants and gave them a chance to explicitly engage with and provide reflections on the representative quotations/stories, and discuss whether the categories and themes were sensible and meaningful (Tracy, 2010).

Tracy (2010) notes that self-reflexivity is a practice through which quality and sincerity in qualitative research can be realized. Reflexivity, as introduced in this chapter, was a constant companion throughout the stages of research: from building trust, to data collection, to analysis and finally representation. My field notes included a self-reflexive commentary about subjective feelings, biases and values; and I made sure to be aware of and document power relations, how my presence had impacts on the various settings, and what was said or not said (Tracy, 2010). Some of these self-reflexive considerations are woven throughout this thesis in order to share with the reader what I see as important observations, reactions and realizations. They also help to make explicit the researcher's role as 'instrument,' for example, how my own identity and subjectivities have an influence on the research and how this relates to accountability in data collection and interpretation (Sultana, 2007; Tracy, 2010). Despite these approaches, as with any study there are limitations. Study limitations will be discussed in more detail in Chapter 5.

4.3 Conclusion

The decolonizing and ecohealth research principles that underpinned this study provided a framework for exploring the connections between land and health for First Nations youth within the context of socioecological systems, in action-oriented, respectful, responsible and ethical ways. Guided by a modified Photovoice method and a phased approach, the participants spent several months taking photos and discussing alongside their Elders the

connections between land, health and well-being, while reflecting on their lives and community, and sharing their knowledge. I took a lead role in the analysis of the data from the project, but the iterative research design also meant there were opportunities for discussions with the youth participants to comment on the findings and discuss how they would like to share them. The emergent relationship with the CRA was integral to the entire research process. The next chapter highlights the key findings arising from this process, based on youth and Elder participant perspectives on the connections between land and health and the many pathways in between.

CHAPTER 5: FINDINGS AND DISCUSSION

The Saik'uz Youth Photovoice Project produced a rich data set, which was analyzed using the thematic analysis process described in Chapter 4. This chapter presents the findings that emerged from the analysis and discusses these findings in relation to the literature in Chapter 2 and in some cases, beyond this to possible new areas of literature warranting exploration. The chapter is divided into four sections. As a way to set the scene, the first section begins with the contributions of the two Elder mentors in this project. The next section highlights the voices of the Saik'uz First Nation youth who participated, from start to finish, in the project. The quotes from the participants are identified using the participant name (for which I was given explicit permission to use) or their chosen pseudonym and the text within the brackets indicates whether it was taken from the workshop, sharing circle or interview. The images (figures) embedded in the text are those the participants referred to in relation to the given excerpt(s). The captions written by the youth are included in the Figure title where applicable. The third section of this chapter presents reflections on the modified Photovoice project and the fourth section reflects on the overall research process.

5.1 Elders Voices and Experiences: "New things we learn from the old"

Driven by the request from SFN Chief and Council and supported by the literature, Elder participation formed an important feature of this project's design and process. The Elders' role in the project was very different from that of the youth. The Elders were not involved in the participatory photography process, but they were present at the first workshop and first sharing circle. In this role, the Elders set the scene in terms of protocol, rhythm and

dynamic. This section presents key findings gleaned from the presence of those Elders' voices.

Two Saik'uz First Nation Elders participated in this study: one woman, Marlene and one man, SQ, both from the Grouse Clan. Throughout their participation in the workshop and the sharing circle, much of their contributions to the conversation were in the form of stories. As SQ proclaimed: "little short stories, I love what they do these.... new things we learn from the old" (SQ, Sharing Circle). The tone of the Elder's participation in the workshop and sharing circles was one of great respect and appreciation for the youth involved in the project and what they had to say. Their chief interest concerned the passing on of teachings and stories in relation to their perspectives on the themes of land, youth and culture (and tacitly health and well-being). Analysis of the Elders contributions identified four general themes: 1) the connection that First Nations people have with the land, 2) stories and specific procedures related to traditional knowledge and practices, 3) anxieties about current and past environmental and social-cultural change and 4) advice to the youth for the future. Each theme is discussed below.

A key topic of discussion by both of the Elders during the sharing circle was the *longstanding connection that First Nations people have with the land*. The Elders' stories revolved around the essential nature of land and cultural practices for sustenance and survival. For instance, Marlene wanted to ensure that the youth understood that a connection to the land has always been a part of First Nations culture and has not been lost, despite the various challenges facing First Nations people:

> Just thinking about connections to the land. I think our new generation really has to know that we have always been connected to it. It never left us although a lot of

times we have probably wandered off from it you know, through the drugs and alcohol and all this bad stuff coming around. Doesn't seem like it gives us a choice. We have a choice to stay clean or join the crowd but for me, I think about our First Nations people; the land was always our survival" (Marlene, Sharing Circle).

Marlene also described what her lifestyle was like when she was growing up, "right through the four seasons we had something to do" (Workshop). She depicted the essential nature of land and cultural practices for sustenance and survival:

> That's how I raised up anyways: trust the land. We got our provision in the bush, did our fishing, got everything out of the land. A lot of work, we put stuff away for the winter. We never had a deep freeze, no fridge, no nothing, so just about have to smoke, dry or can everything" (Marlene, Workshop).

SQ echoed similar ideas about the importance of land in the lifestyles of his people a "long time ago":

> For me when I think of land, the mountains the lakes, my people long time ago eh, they go out there with team, go to any lake, they do their fishing, berry picking. Most times some ladies, old ladies, they come, they'll pick their medicines while they're out there way up. (SQ, Workshop)

These foundational ideas about connections to the land for First Nations in the region were a prominent thread in Elders contributions throughout the workshop and sharing circle.

Naturally emerging from the broad discussions about connections to the land were closely related *stories and even specific procedures relating to traditional knowledge and practices*. These contributions were specifically focused on passing on teachings to the youth, with the hopes that knowledge would continue on. SQ encouraged the youth to:

> Show your children. Your kids when you get married, kids will have questions. They want to go hunting with you. They want to see a moose. You teach them this. Teach them how to skin an animal. How to handle knife carefully, or axe anything (SQ, Sharing Circles).

SQ shared traditional knowledge passed on from his grandfather, describing very detailed

accounts of how to set snares for a variety of animals and how to survive if lost in the bush in

the winter. Likewise, Marlene demonstrated a powerful way to connect and communicate

with the land through a "candlelight prayer" (learned from her father) that she uses to dispel

bad storms "...and then the next time I look up and its just like a big highway, a bright blue

sky just like a big highway and that storm disappeared and it was gone" (Marlene, Sharing

Circle). Marlene also shared a story about the teachings she received when she was young,

about respecting the land and reciprocity:

> One time I remember us going out looking for soap berries and it's really hard to pick
> those so I broke a branch off of it and I was hitting it and I got punished for that, they
> told me I couldn't do it like that, breaking the branches, you kill the branch and then
> there will be no more berries. That's how they taught us respect for the land. When
> you do berry picking you have to be very careful how you treat that branch so next
> year it produces more (Marlene, Workshop).

The Elders also shared their *apprehensions about rapid environmental and social-*

cultural change, with discussions about the connection to land. Apprehensions were often

intertwined with the transformation of valued tradition or livelihoods:

> Now the place I used to hunt beaver, I go down there, there'll be a big pond, you'll
> come over a hill you'll see it, beaver house. Two summers that I've been up that way,
> that place where the pond was, its just dried up, no beaver house. And stand around
> and listen, no squirrels, no birds. Dead. (SQ, Workshop)

Although the Elder participants did not offer extensive explanations for the underlying causes

of social-cultural-environmental fragmentation, they both alluded to the effects of

colonization. For example, SQ revealed great resilience and adaptability in the face of

marginalization in his stories about negotiating wage labour in relation to rapidly changing

technologies within the forestry industry. In this excerpt SQ demonstrates the frustrations he

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felt when motorized equipment was introduced for forestry work in the Nechako Valley, and

the subsequent impact on employment possibilities:

> First Nations. First time in their life they ever saw a CAT that strong. They were surprised; never saw machines in their life! All they knew was horses, the strongest animal. That's when everything started, land clearing, all done by machines. And where were our jobs? (SQ, Sharing Circle)

The subject of residential schools was raised several times by both Marlene and SQ. As

Marlene described: "Cause I couldn't learn, I'm not a very good learner at the school. My

education, I never finished it because it seems like I was so traumatized from that LeJac

residential school; every school was like it for me" (Marlene, Sharing Circle).

SQ and Marlene were also explicit in their support for the project and *provided advice*

and ideas to the youth for the future:

> And that's what I wanted to share with you kids. I am really happy you're doing something positive with your lives. Maybe, you know you could make a good example for all of those that I know, even my grandkids troubles that they are having now. Just being an example for them that could turn their life right around. Make them turn back again. So we need to help younger generation, so many of them struggling with this drugs already and I always pray for those who want to make a better life for yourself. Muss'i (Marlene, Sharing Circle).

SQ closed the first sharing circle with a positive outlook and encouraged the coming together

of the generations, premised on a strong sense of reciprocity and community building:

> I think each one of us here, we should start working like a team. One bunch. Say he was working and one doing nothing. See him, talk to him, start helping him. When you work like a team you are strong. My Elders, the young people. (SQ, Sharing Circles).

The Elders stories and contributions documented in this section provide some

indication of the many insights they provided during the research in relation to land, culture

and youth. The theme of health and well-being seemed to be co-expressed in all of these

stories: when talking about land, or future generations, the Elders were also talking about health and well-being. Clearly the contributions from the Elders provided a rich point of reference for the evolution of the research, and the intergenerational dynamics were an important feature of the modified Photovoice process. Themes around intergenerational dynamics will be discussed in Section 5.3.3. The Elders' insights provide a solid ground from which to explore current youth perspectives on the connections between land and health in the same community.

5.2 Youth Voices

The cumulative and iterative development of the themes that emerged from the youth participant data is detailed in the methods chapter (see Thematic Analysis, Section 4.3.5). Although these themes are presented in a seemingly linear fashion, they are interconnected and multi-directional – all of the themes interact with eachother. The findings and discussion are organized around themes that connect back to Objective II and specifically the two guiding research questions:

- How do Saik'uz First Nation (SFN) youth view their relationship with the land and its influence on individual and community well-being?
- What pathways and opportunities exist for SFN youth to heal, foster and improve connections to the land?

There were six themes that emerged from analyzing the body of data (workshop, sharing circles, interviews, field notes, photo captions - see Table 1) related to the youth participants. The first category of themes "Relationships Between Land, Health and Well-being" encompasses four themes that reflect how land, health and well-being are connected

for the youth in this project. The final two themes represent Drivers of Change to the

Relationships among Land, Health and Well-being.

Table 3. Summary of themes.

HEADING	THEMES
5.2.1 Relationships among Land, Health and Well-being	Land-based activities Land-based Indigenous knowledge and stories Land-based sustenance and healing Land-based culture and identity
5.2.2 Drivers of Change to the Relationships among Land, Health and Well-being	Local landscape losses and changes Socio-cultural losses and changes

5.2.1 Relationships Among Land, Health and Well-being

Thematic analysis identified four major themes relating to how the youth saw

relationships between land, health and well-being including: Land-based activities; Land-

based Indigenous knowledge and stories; Land-based sustenance and healing; and Land-

based culture and identity. A depiction of these interrelated relationships is presented at the

end of the section in Figure 25, and can be used as a point of reference.

Land-based activities

The youth participants in this study described a number of ways that the land

provided places for health producing activities such as hunting and harvesting, stewardship,

as well as other cultural and recreational activities. Analysis of their contributions identified

a bi-directional, reciprocal relationship between health and land: participating in healthy

activities enabled reconnection with the land and activities that reconnected youth with the

land also enhanced health and well-being. Partaking in land-based cultural activities or as

Elijah called them, "traditional or older types of things" such as arts and crafts, dance,

hunting and trapping, was a prominent suggestion for maintaining connection to culture and

to the land among the participants in this study: "maybe just keep going out there like, do

more stuff, like traditional things, like staying out there for days and cleaning yourself"

(Elijah, Interview). Referring to one of his photos entitled 'A Sunny Day' Elijah noted: "it is

a really nice place for hunting and my dad is trying to teach my brothers and I how to hunt"

(Figure 4, Elijah, Sharing Circle).

Figure 4. A Sunny Day (Elijah)
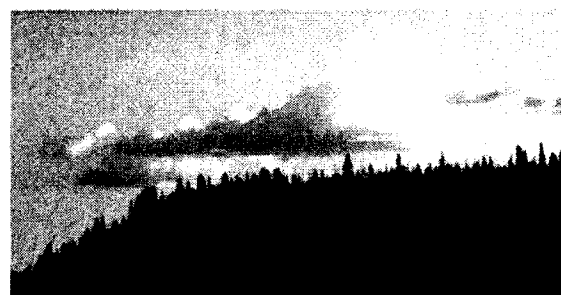
For Jasmine, traditional dance (and the arts) was a strong way to maintain a reciprocal

connection to the land. These dynamics were described in detail in her interview when she

was discussing the photograph in Figure 5.

Figure 5. (Jasmine)

"It's a picture of one of the traditional dance groups that we have in the area, and as I mentioned before through the arts, dancing is a way to reconnect with that energy of the land. It's about reciprocity. The land gives you so much and you have to give back to the land as well and dancing is a way to do that to maintain that connection. And the drum is considered the heart beat of the people and through those songs and those dances it shows how important art is. But its only one medium, one way to be that voice for the land, one way to reconnect to the land."

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In relation to Figure 6, Adam also alluded to the healing benefits of being on the land and

participating in land-based activities such as the cultural camps.

Figure 6. This is what we lived in back in the day. This is the only pithouse rebuilt in Tatuk, I hope there will be others. (Adam)

"This picture was taken at the Cultural Camp last year. It was the first time I've been there in a long time. The last time I was there I was eight. So it was a really good time to heal and reconnect back to the territory. Because I've been away at school for 4 years now. And, I think this was around the same time that I started my healing journey, went through a lot of stuff and it was time to heal and reconnect."

Stewardship activities (e.g. environmental school clubs, advocacy, activism,

environmental cleanup) were described as land-based activities with a multitude of benefits

for the youth. The act of "protecting," "cleansing" or "caring for" the land was seen as health

promoting in and of itself, offering a chance to protect the land on which these healthy

relationships depend. According to the youth, stewardship also provided opportunities to

stay connected to the land. One youth felt that "if you protect the land, the land will protect

you; like I got your back you got my back" (Gabriel, Workshop #2). Jasmine recognized the

responsibility as Yinka Dene to care for the land: "those ties, that connection that we have,

it's also about responsibility to, to take care of those places that you are tied to spiritually,

physically, emotionally" (Jasmine, Workshop #1). Jasmine also made frequent reference to

specific forms of non-violent direct action and advocacy that she has participated in, which

both served to maintain a connection to the land while also protecting it. This was described

in her interview in relation to Figure 7.

Figure 7. (Jasmine)

"This photograph was taken at a mass action in Prince Rupert, so the different coastal communities along with our communities here in the interior oppose the pipeline's have great concerns and adamantly oppose pipeline and tanker projects that could threaten all the waters that are connected to each other from the ocean to the rivers and everything. I really like this shot because it showed that people are taking direct action to preserve that connection to the waters and to the land. And they were doing that on the land but also on the waters as well. So you could see people out in their canoes and also on the land. With their signs, and their banners, with their traditional regalia. Pretty much saying that these kind of projects are not acceptable, our health, our identity, our culture is not for sale and is not worth the risk for a few dollars. So I really like that they took action on land, on water, and in all different kinds of ways."

In relation to Figure 8, Adam also referred to the importance of protecting the land and how

he saw the Photovoice project as one form of raising awareness. During the sharing circle,

Adam spoke about how the photographs he submitted to this project were purposefully taken

on the SFN traditional territory in order to remind himself and others of the need for

advocacy and protection of this unique land.

Figure 8. In-flight view of the Saik'uz
Community (Adam)

"This is a sky shot view of the Saik'uz
community. All my photos are from the
territory and I want to show what is unique to
our territory so that we can show the world
what we have here and what we're doing. I
think it is very important to remind myself
this is what I'm protecting and this is what I
advocate for, is my environment, and I use
my grandma as an example to better myself."
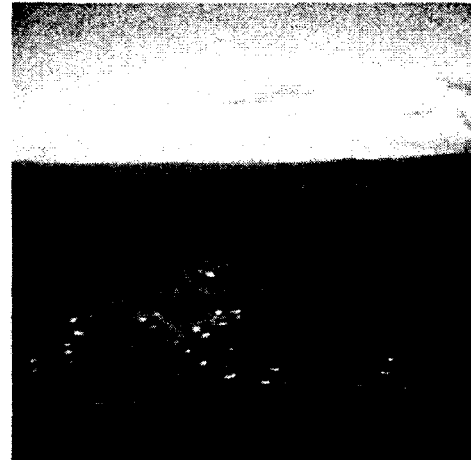
Expanding on these ideas, Jasmine described forms of advocacy and awareness-raising, such

as walks (see Figure 9), as ways to heal the land and the people, while connecting back to the

land.

Figure 9. (Jasmine)

"So the next picture that I'm going to share,
it's from the healing walk that happened in
Fort McMurray, Alberta. And a lot of the
work that we've been doing fighting that
pipeline and other tar sands projects it's not
always protesting or civil disobedience,
sometimes its just doing things that bring us
back to the land and to remember that we are
all healing. So this wasn't a protest or
anything, it was a walk in the heart of the tar
sands there to do healing for the people,
healing for the land, healing for the water.
It was a 14km walk we did."
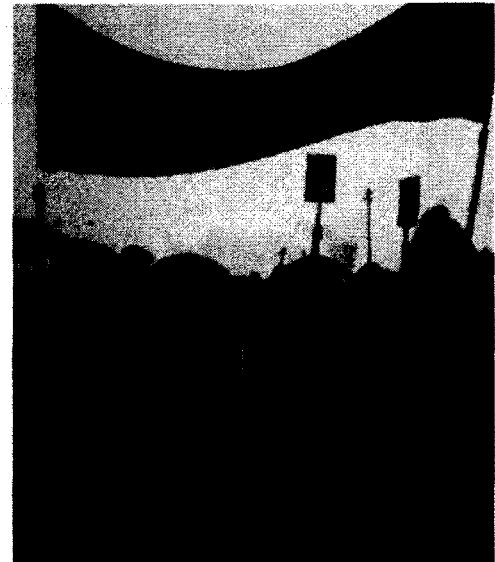
Elijah talked about practical ways to preserve the land and to stay connected to it through

local stewardship initiatives, such as joining school clubs: "I like thinking of ways to

preserve it. Cause in school there's a bunch of like enviro stuff going on. Clubs and

whatever. And I'm trying to get into that" (Elijah, Interview). Elijah also recognized the

benefits of local stewardship, the possibility of spiritual connection to the land and being a

role model for other community members: "It will give more confidence in people to believe

in cleansing the land; if you're doing it then maybe it will start a butterfly effect... And then

get connected spiritually" (Elijah, Sharing Circle #2). Gabriel suggested a practical example

of caring for the land, and getting the community on board:

> Hmm, I think of all the things that we could do with it. To help it, like, get better....
> Like you know how there's a bunch of garbage in the creek and stuff like that we
> could get people to help us take some stuff out (Gabriel, Sharing Circle).

Linking to the following section about Indigenous knowledge and stories, Jasmine

recognized the importance of stewardship, especially in relation to the places that hold

connection to identity such as histories, stories and connections to the past present and future:

> Just making sure I do my part to protect those areas so that in the future when I bring
> that next generation out there that we could still go out there and see those places
> where, you know, "me and grandma used to go and pick medicines there" or "this one
> time we were picking berries over there", you know make sure I can share those
> stories but make sure I can be stewards of those places still (Jasmine, Sharing Circle).

Jasmine felt that reconnecting to the land for well-being was about building capacity in terms

of protecting the land "finding different ways to build capacity in the community to protect

those areas. Be it through the arts, be it through other different skills, learning how to go do

field work, learning how to use a compass, a GPS, all these different things. There's all

different kinds of tools out there available now" (Jasmine, Interview).

There seemed to be an underlying sentiment among Adam, Jasmine and Elijah that

finding ways to stay connected to the land was something that needed to be integrated into

daily life and, although extremely beneficial, short-term programs were seen as insufficient.

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As Elijah explained:

> "...not just going to a week or two weeks of culture camp. That, they can't learn about all the things that they do with the medicines, I mean it takes a whole lot of time to do" (Elijah, Interview).

Adam, in his photo caption (see Figure 6) and interview expressed a similar desire and felt that the building of long-term cultural infrastructure, especially on reserve, would help support the connection: "I hope they make more pit houses. I don't know if it's a plan, I wish it was" (Adam, Interview).

Discussion

The examples offered by the youth participants in this research demonstrate several conceptualizations of how partaking in land-based activities (including singing, dancing, hunting, fishing, berry picking, engaging in stewardship) provides links to the land, and these activities in turn are linked to health and healing for the youth in this study. These themes align with some other literature, that demonstrate that activities on the land can be linked to health and well-being. Although the youth did not provide deeply nuanced explanations of how exactly land and health were linked, their comments and descriptions echo the themes proposed by a range of scholars who have argued that activities on the land have reciprocal relationships with maintaining cultural life and increased social integration, which in turn supports networks of family and community relationships, with subsequent health and well-being benefits (Abadian, 2006; Turton & Reynolds, 1997). It has also been suggested that a loss of these activities may result in alienation, increased substance use (Cheah & Nelson, 2004) and violence (Duran & Duran, 1995; Waldram, Herring, & Young, 1995). Many scholars have also discussed that activities on the land, with links to social integration, are

also associated with the building or maintenance of personal and cultural identity (Ford, Berrang-Ford, King, & Furgal, 2010; Kirmayer, Simpson, & Cargo, 2003; Richmond & Ross, 2009; Wilson, 2003; Wolsko et al., 2006). Wilson (2003) emphasizes there can be important emotional healing benefits related to the physical and spiritual aspects of hunting, trapping, fishing and harvesting food and medicines.

The youth identified several land-based activities that aimed to 'protect,' 'cleanse', or 'care for' the land. Activities ranged from non-violent direct action (e.g. protests), to joining environmental protection clubs, to local stewardship activities (such as picking up garbage). Youth participants described ways that these activities could lead to a 'healthier land' on which to flourish, also noting that the acts themselves provided opportunities for the passing on of stories and teachings, social activities, and healing. A more targeted research design with explicit attention to these themes could help to provide more detailed understanding of the associations between stewardship activities and health in this context. However, the findings in this study do echo themes identified by Burgess, Johnston, Bowman, & Whitehead (2005) that for many Indigenous peoples, continued association with, and caring for, ancestral lands is a key determinant of health. A range of authors have identified social, mental and physical health and well-being benefits related to 'caring for the land' (or as known in Australia, 'Caring for Country'), including social cohesion, sense of identity and community, physical activity, as well as positive effects related to the broader determinants of health including employment and sustainable economic development[26] (Hunt, Altman, &

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[26] The word 'economic development' is used here to remain consistent with the author's original usage. However, it is important to note that the term is contested. For example, according to Corntassel (2012), 'economic development' misses "the larger connections embedded within Indigenous economies linking homelands, cultures and communities" (p.88).

May, 2009; Kingsley, Townsend, Phillips, & Aldous, 2009). Additionally, Kirmayer &

Valaskakis (2009) argue that political and social action in defence of the land and the

political rights of First Nations "can be a path toward healing" (p.458) through which people

can regain knowledge of their history and culture, confidence to demand and affect change

(Alfred, 2009), gain a sense of direction and purpose and build social ties (Kirmayer &

Valaskakis, 2009). The findings from youth in SFN suggest the relevance of these themes for

future study in Northern BC.

Land-based knowledge and stories

The data revealed that land-based knowledge and stories are an important component

in land-health connections. Jasmine spoke about how the land houses Indigenous

knowledge, stories and cultural or family memories. In the sharing circle and her interview,

she touched on the idea that stories and memories are attached to specific places: visiting

places on the land catalyzes storytelling and connection to family/ancestors and thus culture

and identity.

> I always hear different stories about "oh this one time at this place, or the one time at
> this place" and I probably wouldn't have been able to hear those stories if we didn't go
> out to the land and to those places and where those memories were triggered again to
> remember (Jasmine, Sharing Circle).

Additionally, the data revealed that many of the youth felt that the *transmission* of land-based

knowledge works to connect them back to the land. The process of both teaching and

learning also helps to strengthen their culture and identity while making important social

connections that are important for health and well-being. Jasmine spoke in relation to Figure

10 about how the act of going out on the land to pick medicines is important for the

continuation of Indigenous Knowledge, storytelling and connection to particular areas of the

land.

Figure 10. (Jasmine)

"Just, one of the pictures I saved too was of the medicines that we go and harvest and it's more than just harvesting medicines and healing. But it's also about the transfer of knowledge and sharing those stories because the different places we go to pick these medicines"

During the sharing circle, Gabriel told a brief story in relation to his photo[27] (Figure

11), about the lengthy and difficult process of preparing a deer hide. When prompted about

how the photo related to the land and well-being, Gabriel responded: "It made me feel stinky

(*laughs*)!... but I learned something new there".

Figure 11. This is a hard working child learning how to tan deer hide (Gabriel)

In relation to a question about making the connection to the land stronger in the future,

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[27] Note: This photo was cropped to protect the identity of the child in the photo.

participants focused on the importance of learning, preserving and passing on various forms

of Indigenous knowledge.

> Well, for the future, I don't know what's going to happen in the future but my dad is teaching us how to do all of the older types of things that he did, fishing, berry picking, hunting and he's teaching, my parents are teaching me about the potlatch and all the clan systems and stuff and yesterday I had to work on the grave. Helping my dad, and I guess he wanted to teach me how to do that sort of thing. Working for the other clans, yeah. We try to preserve all of that knowledge for the future I guess (Elijah, Sharing Circle).

Elijah suggested that it was important to expand the teaching of traditional medicines to other

youth: "A lot of people don't know how to do that sort of thing. It should be more taught to

the other youth" (Elijah, Interview). Jasmine, in the sharing circle, focused

intergenerationally, reflecting on the importance of passing on teachings to her children: "At

a point in my life where I want to have children or where I want to have my own children,

what are the things that I'm going to be passing on to them?... That was a moment for me

thinking about the future, thinking about the unborn and making sure I pass on the teachings

that have been shared with me" (Jasmine, Sharing Circle).

Although Gabriel did not get a chance to expand on his photos in the interview (and

many are not included here because they contain children), it is important to note that he

alluded to intergenerational transmission of knowledge in his photo captions (see Figure 12)

several times. For example, many of his photos and captions centered around ideas of "the

next generation" going to hunt, learning how to play lahal (a traditional game), etc...

Figure 12. These are our teachers...
Listen and learn (Gabriel)
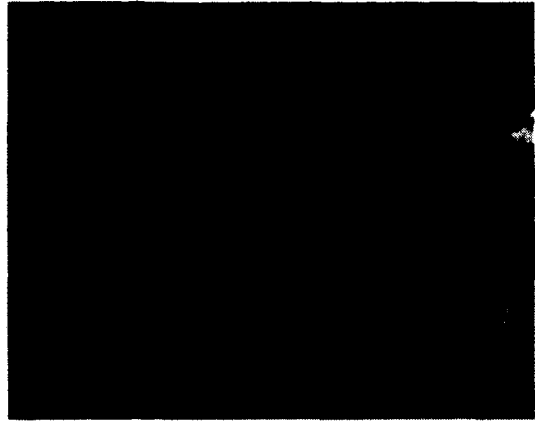
In addition to the mention of school clubs, the topic of formal education only came up

one other time in the recorded discussions. As a way to help maintain connection to the land

and enhance well-being, Jasmine suggested that education for First Nations should be equally

founded in Dakelh ways of learning, which are anchored in teachings from and of the land:

> I think how we can strengthen our connection to the land and to our well-being like in
> our community, the future, making sure our education, our learning process, our
> learning journey is happening on the land too and its on the same level as the schools
> in town or Prince George or whatever and our ways of learning are just as equal, just
> like what Dick "Gunner" Patrick[28] was fighting for that we are equal human beings
> too, and you know, those differences need to be respected especially as being the First
> People of this land (Jasmine, Sharing Circle).

Discussion

Analysis of the youth participant contributions highlighted the importance of the role

of *Indigenous Knowledge (IK) and stories* as related to the connections between land, health

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[28] Although it was possible to find the story behind Dick Patrick's military medal online (see
http://en.ww2awards.com/person/44378), I was unable to find the following story in historical records.
According to Adam and Jasmine, Dick "Gunner" Patrick fought for the Canadian Military in WWII and was a
celebrated war hero. When he returned home he went to one of the restaurants in Vanderhoof to have a meal (at
that time they still had "No Indians Allowed" signs on restaurants and stores). He was immediately asked to
leave, and because he refused, the owners called the police and he was sent to prison in the south. As soon as he
was released he went straight back to that restaurant and the same process went on for 11 months.

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and well-being. This finding reinforces literature that explores how the sharing of IK and stories can contribute to a positive self-image, healthy identity and strengthening of culture which each have also been linked to health and well-being (King et al., 2009, Ganesharajah, 2009). This idea is supported by Goeman (2008), who states: "...rooted connections are a result of a relationship between land and people—they are not sacred because they are there, but rather they are imagined into being and spoken from generation to generation. They are carefully attended to through words and reconnected to through story" (p.27).

The youth participants' emphasis on the importance of IK and stories in maintaining a connection to the land is not surprising given that IK systems are grown out of extensive experience and extremely long relationships with the land; land forms the basis of IK: "Indigenous Knowledge cannot be separated from the people who hold and practice it, nor can it be separated from the land/environment/Creation" (McGregor, 2004, p. 390). McGregor (2004) further describes IK as knowledge that ensures the "continuation of Creation" over generations (what Western science and policy might call sustainability). Principles and values, such as "co-existence", "balance", and "reciprocity" are all embedded within IK (p.389). She also notes "many stories and teachings are gained from animals, plants, the moon, the stars, water, wind, and the spirit world" (p.388).

Participants referred explicitly to the importance of maintaining and visiting particular locations in order to hear stories and maintain that connection to the land, a point which is supported by Prosper's (2007) statement that IK and the narrative tradition "relies on the visual, mnemonic role of topographic features (such as mountains and rivers) to assist in the telling and learning of oral history" (p.120). Likewise, according to Simpson (2004),

spiritual places provide and maintain opportunities for "alliances with the essential forces of nature" which are responsible for the transmission of IK (p.379). In these ways, landscapes and places, 'house' stories, values, social relations, a culture's knowledge and understanding of its history and future, and the process of remembering and telling stories about these places contribute to the reproduction, survival, and evolution of Aboriginal cultures and identities (Houde, 2007; Buggey, 2004; Osborne, 2001). In the words of Goeman (2008), "it is place told through story that continues to hold fragile, complex, and important relationships of place together for Indigenous people, not merely borders, jurisdiction and the law" (p.28).

Intricately linked to IK and stories, and the strengthening of culture and identity, one participant mentioned that the education received at school should be anchored in Dakelh ways of teaching and learning, including teachings from the land. This idea is reinforced by Greenwood & de Leeuw (2007) who state: "there is a holistic relationship between Indigenous peoples, their lands, their health and well-being and the education of Indigenous children" (p.49) and "in education exists the possibility of building healthy Indigenous children and associatively healthier Indigenous communities" (p.53).

The use of photographs in this project provided an elegant way to prompt and draw out stories based on specific features and locations on the land, even when the photographs were taken previous to the project (see Chapter 4). Specific land features photographed and mentioned by the youth included topographic features (lakes, streams, mountains), and spiritual places. Descriptions of the land tended to explore broad notions of the land, but the

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study design was limited as a strategy to explicitly explore details of youth perspectives on specific ecosystemic dynamics, biological processes and associated ecological knowledge.

Even so, some of the youth who participated in this project provided full, rich narratives and stories about what they saw as important in terms of land and health. These narratives offered a variety of insights into a complex reality, in a process that connected and addressed both the ecological and the social in relation to health and well-being. As Davis states (2004), "stories cement together generations of collective memory, embodying the historical, spiritual, social, and spatial" (p. 3). It was clear even through this small project that stories have the power to holistically engage (Kovach, 2010), steer us away from reductionism, and unite disparate situations (Allen, 2008).

Land-based sustenance and healing

For the youth participants in this project, food, water, and medicines from the land were seen as directly or indirectly essential for well-being, with the themes of healing and sustenance coming to the fore. Food, water, and medicines were seen as having many direct holistic healing benefits. Additionally, engaging in the process of harvesting and preparing food and medicines were seen as having many indirect positive cultural and social affects on health. Either way, discussions about engaging with food and medicines provided insights into how youth felt they could build or maintain a connection to the land. Some participants made specific reference to aspects of the land (e.g. trees, berries, water) as essential components of traditional medicines for health and healing. Elijah discussed the medicinal benefits of a certain type of tree bark (see Figure 13). Likewise, Jasmine discussed water from a sacred site in their territory and its health and well-being benefits (see Figure 14).

Figure 13. Collecting Medicines (Elijah)

"I'm going to talk about this photo. I chose it because my dad was telling me that if you have a sore throat you can make medicine out of the inside bark and you can just chew on it for a while."

Figure 14. (Jasmine)

"This picture here is from one of our areas where there's an aquifer. So the water used to come out straight from the ground through a tree. And then the tree started to rot away, so we put a pipe in there. And the water is so pure. It's the only water that we used to make our traditional medicines because its the water that gives everything life. It's the water that gives medicines its power. And we used it to heal not only physically but mentally as well. We use that to help treat people who may have mental illnesses. We use it for spiritual purposes among other things. But here I have my grandmother, she's taking a drink and every time we go there we kind of smudge ourselves with it, cleanse away all the bad energies that could be sticking to us when we go around different places."

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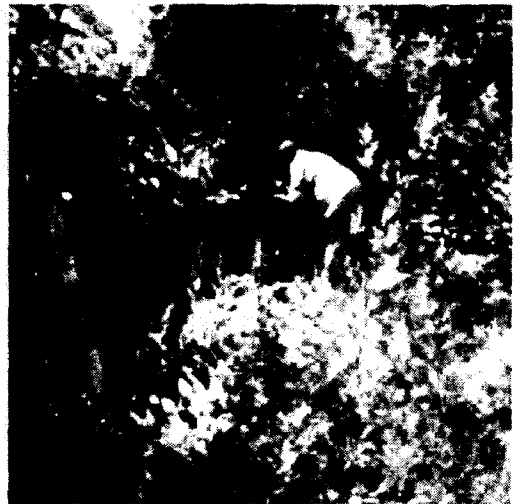
All of the participants took photos of food sources and/or medicines derived from the land, which were considered to contribute to health and well-being. The juxtaposition of the three photos in Figure 15 (soapberries for making Indian ice cream and medicines, moose and fish) highlights some of the different youth perspectives. The link between traditional foods and health was described most prominently in terms of how food and food preparation enhances or enables a connection to culture. For example, Adam mentioned during his interview: "some of the Elders and the others that organized this cultural camp they taught some of the youth how to prepare moose and then prepare it for the winter". When asked how that story relates to health and well-being, Adam responded: "our cultural diets".

Figure 15. Soap Berry Patch (Adam), Meat Smoking in the Smokehouse (Gabriel), Catching Fish (Adam)
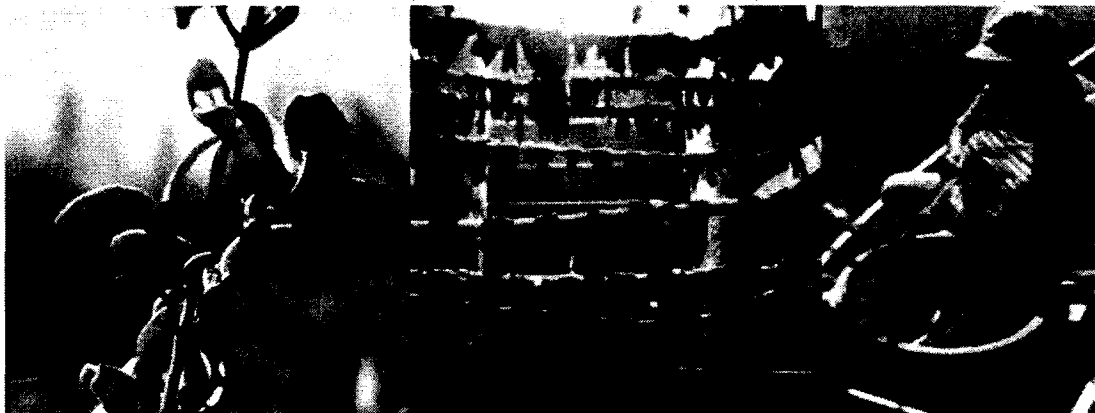
Discussion

One of the most tangible connections between land and health that the youth pointed out through their photos and stories was that the land provides *land-based food and medicines*. It is interesting to note that for the Dakelh (including SFN), species are not

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always differentiated in to what constitutes as 'food' and what constitutes as 'medicine' as it depends on factors such as stage of development, mode of preparation, parts used etc. For example, soapberries are used as a food source (Indian ice cream) as well as a medicine for constipation.

At a broad level, the youth touched on ideas about how hunting, harvesting and procurement of land-based foods and medicines comes with its own set of benefits— including physical activity, connecting to traditions, culture and identity and the building of social ties. Although this study provides only a glimpse into the realities of these four youth, other studies have found similar themes. Flint et al. (2011) found that subsistence foods relate to health and well-being on many levels - physically, mentally, spiritually. Elaborating on this idea, Pilgrim *et al.* (2010) argue that local diets strengthen the connection between a community, its landscape and ancestral roots, and epitomize "the ways in which culture uses, classifies and thinks about its natural resources" (p. 238).

It is also well known that traditional foods (e.g. moose, bear, fish, soapberries) are nutritious- typically nutrient-dense, with high levels of protein and fat, vitamins and minerals, and relatively low levels of carbohydrates. While traditional foods were photographed and discussed frequently by the youth participants, when participants were asked about the health connection, they only associated traditional foods with a cultural health connection (e.g. procuring them gives them a chance to reconnect with their traditions, cultures and identities). Although other related studies with adults also emphasize a cultural health connection to traditional foods, they also tend to emphasize other benefits as well such as superior quality and nutrition, healing properties and better taste (Flint et al., 2011; Wolsko et

al., 2006). Participants in this study did not emphasize other types of traditional food-related benefits. This may reflect limitations of this study, but may also reflect the pervasive transition occurring in Indigenous communities worldwide where local, traditional foods are being replaced by market foods, with subsequent changes in availability and food preferences (Kuhnlein & Receveur, 1996).

Identity and Culture

The workshop, sharing circle and interview discussions demonstrated to me that for two of the youth in this project, the land itself, and the relationships described above, formed an important basis of their cultural identity. At the training workshop, Elijah felt that the land was tied to identity: "I think the land is about who and what we are and how and why it shaped us to be who we are." (Elijah, Workshop). During his interview, Elijah added that for him the land is a holistic concept that also includes culture and their way of life, which is dependent on the land:

> "I think it [the land] would be a bunch of things put into one, like all of the cultural stuff, environmental stuff and I think that's just a way of life, how it all works. Because of the land." (Elijah, Interview).

Jasmine also described the identity-land connection as inherent to who they are as people:

> A lot of people tend to look at the land as an isolated thing, as not a part of us. And Yinka Dene, that's what we have referred to ourselves as, its 'people of the land', so there's no distinction, no separation. Our identity is tied to the land (Jasmine, Workshop).

Although Gabriel did not explicitly express a link to land and health in this example, he alluded to the maintenance of the Dakelh language while discussing his photograph during the sharing circle (Figure 12): "this is a picture of my mom and she's a Carrier teacher at the

High School. I was in her class last year. We learned a lot. And she's trying to keep the language with the youth in the High School" (Gabriel, Sharing Circle).

Discussion

The literature review identified a strong identity and culture as important for the health and well-being of Indigenous people (see Chapter 2). Many of the themes that emerged from this study connect back to strengthening land-based culture or identity. Goeman (2008) reinforces this theme by claiming that land "is at the heart of Indigenous identity, longing, and belonging. Indigenous peoples make place by relating both personal and communal experiences and histories to certain locations and landscapes—maintaining these spatial relationships is one of the most important components of identity" (p. 24). Expanding on the youth perspectives, an emerging body of work is starting to make the connection among land-culture-identity *and* health and well-being for First Nations (Richmond & Ross, 2009; Wilson, 2003) and other Indigenous contexts including in Canada (Anderson, 1995; Cunsolo Willox et al., 2012; Greenwood & de Leeuw, 2007) Australia (Garnett & Sithole, 2007; Johnston, Jacups, Vickery, & Bowman, 2007; McKnight, 1999) and New Zealand (Nikora, Guerin, Rua, & Te Awekotuku, 2004). Additionally, although there was only one mention of language by one of the participants, Indigenous language has been noted to provide a vital link among the land, knowledge, culture, identity and health (NCCAH, 2010; Simpson, 2002) and could be a theme that would emerge with more explicit questioning about this topic in future research.

5.2.2 Drivers of Change to the Relationships among Land, Health and Well-being

For the SFN youth participants, changes in local landscapes (e.g. from industry and development) and less explicitly discussed (but also deeply linked) rapid socio-cultural changes (e.g. colonization) are influencing the context and causing many impacts to the relationships among lands and people.

Local landscape losses and changes

Many photos and subsequent reflections represented drivers of change in the SFN territory or region especially due to mining, forestry and hydro-electricity. During the interview, Adam expressed concerns about loss of traditional plants due to the flooding related to the Kenney Dam project (introduced in Chapter 2) "well it wiped out a lot of traditional plants too so..." (Adam, Interview). Elijah expressed a similar sentiment in relation to pollution and land changes: "Yeah, I mean, we are losing a lot of things too here. That were always here. The creek is all polluted and everything. Some things are overpopulating here" (Elijah, Interview). Elijah also represented his concern for pollution and toxins and their affects on the land in relation to his photo entitled "Flowers at Tatuk". Explaining the photo in his interview: "I guess I put more focus on the flower, because it's more like a new life type thing. But, leaves that come off, that die because of different pollution" (Elijah, Interview).

Figure 16. Flowers at Tatuk (Elijah)

All of the participants expressed concerns about Stoney Creek (see Figure 17); a stream that

once provided the community with fresh water for drinking, fishing and swimming, but that

they now fear is polluted and filled with sediment. As Adam explains:

Figure 17. The Stoney Creek (Adam)

"I took this one last year; it's the creek (Stoney
Creek), a house beside the creek. I don't know.
You used to be able to swim and drink from
the water but now it's all mucky. Oh
obviously its bad for our health. I don't know, I
see it as we need improvements and it's like
that in every other reserve I think."

Gabriel expressed a deep concern for the land in his photo captions (see Figures 18, 19 and

20). He also expressed hope mixed with fear for the future; see photo captions for Figure 21

and 22. The following collage of photographs and captions displays Gabriel's concerns, fears

and hopes for the land:

Figure 18. We have to protect what's left of our lands (Gabriel)

Figure 19. These creeks are our earth's veins, keep them clean (Gabriel)

Figure 20. I took this picture to remind those how beautiful our environment is and to keep it that way (Gabriel)

Figure 21. This represents the glimmer of hope for the environment (Gabriel)

Figure 22. This is a crisp summer night, hopefully more people get to see this (Gabriel)
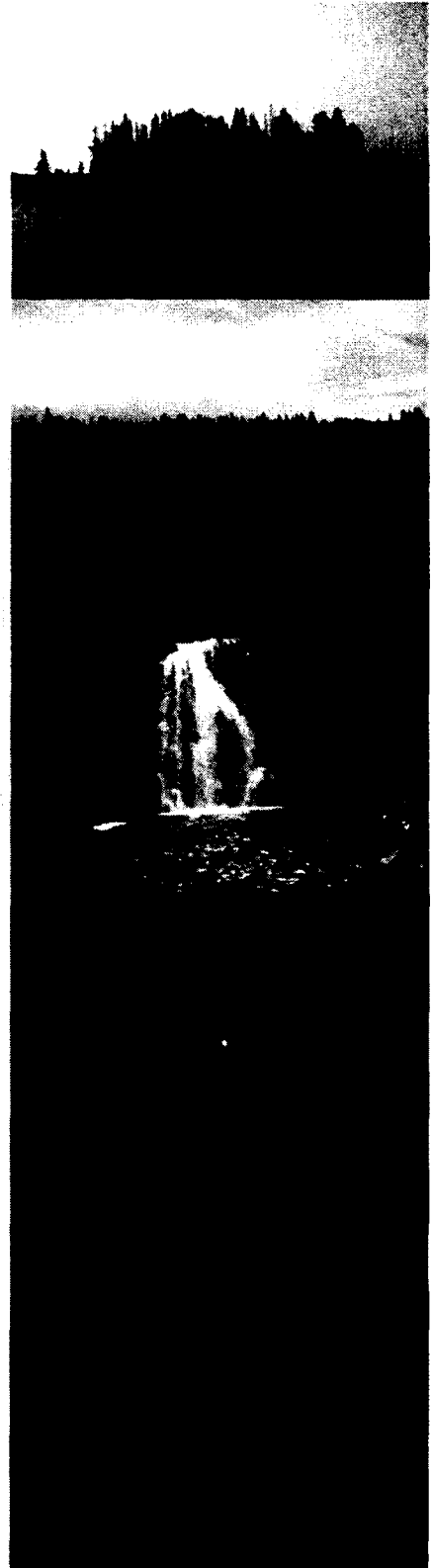
Elijah lamented the many changes that have occurred to the land: "I mean, it's all different than what it was like back then", and "I guess it affects everyone because no one knows how much better it was back then. Like all the different animals and different waterways and stuff". Overall, he felt the many changes were affecting spiritual connection to the land, with negative affects on health and well-being of his community.

When participants expressed fears or concerns about development, they did not necessarily oppose industry itself; instead they were more worried about company ethics and practices. Jasmine talked about the indiscriminate logging of a sacred site, despite industry regulations of riparian zones (see Figure 14):

> So grandma's drinking the water here but there's also a ribbon here in the front, because it's a riparian zone. The logging industry, they are supposed to stay away from areas like that. And when we went to collect water one day, it was all logged around it. They did not consider their boundaries that they are supposed to follow within their policies (Jasmine, Interview).

Jasmine also made reference to the fact that companies are not aware of the importance of the land for First Nations people, especially the deep meaning attached to certain locations; they simply see forests and trees in numerical terms (see Figure 23):

Figure 23. (Jasmine)

"This photo here is a pile of logs that have been
logged basically, in my territory. And then I
seen the spray paint on one of the logs like kind
of like a number or something, I'm not sure
what it is supposed to represent. But it just
made me think of like, that is all it is to them.
Just a number. It's just a spray paint on a log.
And everything else that wasn't up to length or
up to par it was just considered excess. These
logs where it was logged, was located not even
a km away from a very sacred spot that my
family uses to go and pray, to go and harvest,
to reconnect with the land and to see it so close,
in proximity to that logging site it makes me
afraid that one day I will go back to that spot
and it could just be logged out."

Elijah discussed in relation to "Rocky Hill" (Figure 24), the cultural and environmental

implications of irresponsible mining practices that he witnesses in their territory. Later,

Elijah added, "what people get into before they don't know, they are just there for basically

money, they're not there for the... They just destroy it and just leave it there. And it

contaminates all the waterways and trees and air" (Elijah, Interview). In other words, for

Elijah, some mining operations located within the SFN territory do not value the land for its

life-giving properties or its importance to First Nations people. Instead, they see the land as a

commodity available for exploitation.

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Figure 24. Rocky Hill (Elijah)

"This reminds me of a really earthy type of thing with the rocks on a hill and a bunch of little forest pieces and this is something like what miners destroy. You're not supposed to dig up. In our culture you are not supposed to dig up mountains or anything because that's what the Creator put mountains over, the biggest mistakes he made... I guess that's where the biggest mistakes were made. If those are dug up, you could get really hard-core consequences."

Many of the participants felt that environmental degradation and destruction was resulting or could result in reduced access to sacred sites as well as locations for recreation, knowledge sharing, medicine gathering, hunting and fishing. For example, Adam wrote about the environmental and recreational impacts of Kenney Dam (see Chapter 3 for more information): "you can see the trees that have risen from the bottom of the flooded lands. They shoot up like torpedoes, so it is very dangerous to swim or boat" (Adam, Photo Caption). In relation to logging, Elijah remarked "and now a lot of it has been logged and there's not a lot of, not a ton of animals to see all of the time" (Elijah, Sharing Circle). Jasmine fears that IK transmission along with its social and cultural benefits could be compromised if unfettered development continues in their territory:

> I think now's the opportunity to bring different generations together, and bring them back to the land but if there's going to be no land to go back to I fear that transmission of knowledge won't happen (Jasmine, Interview).

For the participants in this study, the land around the community has been rapidly changing, leading them to report feelings such as mental and physical "pain", "fear", "tensions", as well

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as general poorer health related to land destruction in their territory and beyond. For example, Jasmine expressed the manifestation of mental and physical pain in relation to the loss of land: "and not having those places to go to, those stories would be lost with it as well. It almost, it causes pain, mentally and physically, and doing project after project to try to do whatever I can to try to make sure those areas aren't going to be impacted" (Jasmine, Interview). Generally, the participants did not expand deeply on the concepts of health and well-being in relation to land changes beyond these more broad references. For example, they did not mention any specific forms of illness or disease, or describe their tensions, or mental/physical pain in nuanced ways.

Discussion

The study findings suggest that, for SFN youth participants, land losses and changes were a very important mediator in the relationships between land and health. This finding is supported by Cunsolo Willox et al. (2012), who argue that environmental changes can impact "physical, bodily, social, economic, cultural, emotional, and psychological connections with the land and, as a result, negatively affects the physical, mental, and emotional health and well-being of individuals and communities" (p.544).

The study findings also offer new insights into descriptions of direct and indirect pathways between ecosystem change, ecosystem services and human well-being, that were presented in the Millennium Ecosystem Assessment (MEA, 2003). According to the MEA (2003), 'direct' effects to health and well-being occur somewhat immediately and the biological or ecological pathways are locally discernable (e.g. pesticides and contaminated foods). Indirect effects to health and well-being can take decades to have an impact and are

embedded within complex webs of causation, which can involve social, economic, and political routes through dynamic, interacting processes. In the MEA (2005), indirect effects are described in relation to their impact on the "determinants and constituents of well-being" (p.78) including security and good social relations. For those more familiar with the social determinants of health discourse, the language of the MEA highlights how ecosystem change and degradation may impact on what is described as the 'distal' social and cultural factors that determine Indigenous health in Canada (Loppie-Reading & Wien, 2009).

In this project many of the youth described that development, resource extraction and poor industry practices in their territory (and extending BC wide) undermines their relationship with the land. In many instances, they described that changes and losses to the land indirectly threaten the health giving properties of the land (connection to family, identity, culture, Indigenous knowledge). However, because of the complexity and temporal disconnect of indirect pathways, they appeared to be more difficult to identify and explain. The youth participants also identified the more tangible direct threats to their health such as pollution and contamination.

As outlined in Chapter 3, there have been a range of large scale disturbances to the socioecological context in which these youth are situated (e.g. mountain pine beetle, large-scale forestry, mining, the Kenney dam, the 2010 Greer Creek forest fire). Disturbances such as these can cause changes to the hydrology and water cycling of the area, which subsequently affects factors like distribution of plants and animals, erosion, and sedimentation. While ecosystems generally have a tremendous capacity to either recover or to reorganize into a different state in response to disturbances, Adger and Brown (2009) note

that "no ecological state is unambiguously 'better' than another" (p.111). However, states that provide particular ecological services to humans can be perceived as more "valuable" (Adger & Brown, 2009). It has been shown that ecosystems are subject to periodic shifts into states that are often triggered by and often less desirable for, human use (Scheffer, Carpenter, Foley, Folke, & Walker, 2001). For example, shifts will have enormous implications for a variety of species, and subsequently the people who make their livelihoods from those species, or who derive a variety of health benefits from the landscapes (Waltner-Toews, 2011).

In the context of this study, the recent ecological changes that occurred during these youth's lifetimes may have impacted their perspectives on the 'healthiness' of the land (and their ability to derive health-producing benefits from the land), despite the fact that the ecosystems may in fact be undergoing a 'normal' period of reorganization or recovery (which in ecological terms, can be short-lived) (Holling, 2001). These dynamics underscore the need to consider the myriad of ways in which people make sense of and connect to the land around them in order to determine impacts to health and well-being from changes to life-supporting ecosystems (Cunsolo Willox et al., 2012).

Socio-cultural losses and changes

Although it was not a theme addressed by all of the participants, it is still worth noting that two of the youth identified socio-cultural reasons for a disconnection from land, including poor community health, lack of will, jealousy, drugs and alcohol and lack of teachings: "I mean, everyone's not spiritually connected. They are going through all the sickness, the drugs and alcohol, jealousy and all that type of stuff. Not just the physical stuff

but also all the mental stuff that people think about all the topics around here" (Elijah, Interview). Elijah also alluded to changes in land values that have occurred over the last decades: "And you don't see it as much as my dad seen it. How people back then, like his Elders, how they seen the land and stuff. I mean, no one really sees it how they did. And no one cares like they did" (Elijah, Interview).

Adam expressed concerns about how many youth do not reach out to learn about their traditions and cultural ways, despite the fact that the resources may already exist in the community: "Because there are people in the community that know. It's just that nobody goes to them [....] But, when the cultural camp comes around then people get interested. Yeah, so I hope it grows out of this. I hope people start getting involved in the community and with their Elders to learn about cultural teachings" (Adam, Interview).

Adam and Gabriel at certain times also discussed other aspects related to improving the community or well-being, that were not necessarily related to questions around land and health. For example, Gabriel shared his desire to increase opportunities to play sports in the community, "....maybe a basketball team too. Basketball team, and a soccer team. We could have a sports day where you have a little tournament". Similarly, Adam spoke about the strengths of the new health center in the community, and his frustrations with the poorly funded multiplex, which was closed at the time of this study.

Discussion

All of the youth discussed land losses and changes to local landscapes as an important influence on relationships between land, well-being and health, but other social processes were less commonly discussed through the actual Photovoice process. On analysis of all data

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from my field work, it was notable that my field notes contained numerous details about the concepts of self-determination, land rights, treaties and Indigenous sovereignty in relation to land and health from informal conversations with the youth, but these ideas were not overtly discussed through the actual Photovoice process. However, in an informal discussion with one of the participants about the preliminary themes, one participant mentioned that they felt that "Indigenous sovereignty" was missing (although they did not expand at the time nor address this in the sharing circle with the larger group). These gaps may not indicate that these concepts are less important from the youth perspective. Instead, the method itself, including the limitations of photography and the length of time to engage with these complex issues, may have been partly responsible (see also Study Limitations).

Several authors contend that in addition to damage to the land, many of the health problems that continue to exist today in Indigenous communities are deeply related to the interplay of continued land dispossession (Devitt et al., 2001; Richmond & Ross, 2009) and spatial restriction (King et al., 2009). It is argued that countering these processes has huge potential to positively influence the health and well-being of Indigenous communities. For example, Richmond et al., (2005) maintain that having autonomy over environmental resources allows communities the choice and opportunity to create empowering and self-determined economic development opportunities, with subsequent affects on community health and well-being (p.361). Chandler and Lalonde (2009) have demonstrated that youth suicides are significantly lower among bands in British Columbia who have achieved a certain measure of self-determination (i.e., self-government and title to traditional lands). According to Alfred (2009), key steps in facilitating relationships between land and health

align with the RCAP's (1996) recommendation to return traditional lands or 'homelands' on a massive scale or restructure the relationship between First Nations people and the law in a way that allows and facilitates access and use of the land. Although there exists a multitude of systemic, structural and practical barriers, Alfred (2009) argues that the return of lands in turn would support not least the passing on of teachings, the building of self-sufficient economies, the continuance of land-based practices, and a strong identity and culture, which are fundamental for health and well-being of First Nations.

However, while priority in many Indigenous communities is rightly focused on the reclamation and protection of 'material' land, it is also important to repair or re-establish a cultural set of constructions around connections and relationships to the land. As Goeman (2008) states: "the land remains in place so to speak. It is our narrative relationship to the land that has been impacted..." (p.27). This is also an important distinction in terms of connections to the land and health for urban Indigenous youth in Canada, who may be spatially, as well as culturally or socially disconnected from their 'traditional territory' or 'homelands' (as discussed in section 2.2.3).

The findings from this study have profiled a number of ways that the land provides sustenance, healing, places to play, socialize and connect to culture and identity and have also highlighted that the connections back to health and well-being are embodied in different ways. Various sources of literature from multiple disciplines support these findings. Within the context of a highly modified and changing landscape, pressures are transforming the amount and quality of time spent on the land, disrupting ways to connect to the land and may have far reaching implications for health and well-being in the future.

5.2.3 The Relationships Among Land, Health and Well-Being and the Drivers of Change

Figure 25 depicts the youth participants' perspectives on the connections between land, health and well-being. The thematic analysis produced four key themes that represented youth perspectives on their relationship with the land and its influence on health and well being including: Land-based activities, Land-based Indigenous Knowledge and Stories, Land-based Sustenance & Healing, Land-Based Culture and Identity. In Figure 25, these themes are depicted as a complex set of relationships deeply embedded in a given context, as partially represented by the land and waterway image in the background. The themes of landscape and socio-cultural changes are depicted as modifying the context as well as the many relationships between land and health. This figure will be explored in more detail in Chapter 6, Discussion and Conclusion.

Potential pathways to heal, foster or improve connections to the land can be understood as navigation routes (which can be multi-directional and non-linear) among Land-based activities, Land-Based Indigenous Knowledge and Stories, Land-Based Sustenance & Healing, and Land-Based Culture and Identity, within a particular context, and influenced by landscape and socio-cultural changes. The pathways are not pre-determined, defined, described or presumed on the figure because they are fully dependent on the context. Possible pathways and opportunities informed by the findings, literature and nested contexts will be described in Chapter 6, Section 6.2.
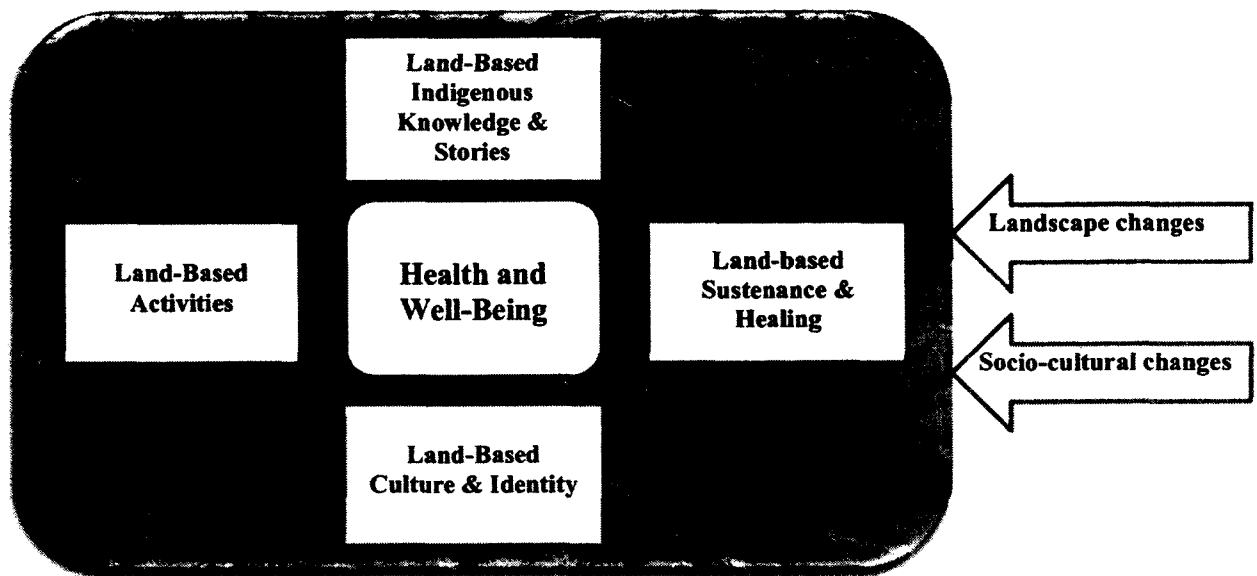
Figure 25. Connections among Land, Health and Well-Being for SFN Youth Participants.
Important features of this diagram include, **four themes** that represent fundamental components in relationships with the land and its influence on health and well being. **Key themes include**: Land-based activities, Land-Based Indigenous Knowledge and Stories, Land-Based Sustenance & Healing, and Land-Based Culture and Identity. The **land and waterway image** in the background depicts a complex set of relationships in which the identified key themes are embedded. **Drivers of change:** Landscape and socio-cultural changes modify the context as well as the many relationships between land and health. *(Background photo adapted and reprinted with permission from Terry Whitaker. Sourced from Whittaker, 2013).*

5.3 Modified Photovoice in the Saik'uz First Nation Context

This section focuses on reflections and the many lessons learned through the modified

Photovoice process with youth and Elders from the Saik'uz First Nation. Areas of focus

include: 1) reflections on the Saik'uz Youth Photovoice Project, 2) the representation and

politics of the creation and circulation of knowledge, 3) intergenerational interactions in

community-based research, 4) considerations for youth engagement, and 5) modifications to

photovoice.

5.3.1 Reflections on the Saik'uz Youth Photovoice Project

Reflections on the Saik'uz Youth Photovoice Project are presented here as context

and point of departure for deeper discussion in Chapter 6. These points were derived from

analysis of all forms of data (workshop, sharing circles, interviews and field notes- see Table 1). During the interviews, youth participants described that this project (and future projects like it) provided valuable opportunities to bring the generations together for a process of decolonizing learning, activism/awareness raising, healing and reconnecting to the land. The Elders expressed gratitude and encouragement for the process in the sharing circle. For example, SQ revealed: "yeah I love these young people, what they do. Taking pictures. Pictures are important. You can show your kids, you know. You can explain to them where that comes from" (SQ, Sharing Circle). Youth participants expressed that they had enjoyed connecting and learning from their Elders and peers throughout the process, and also appreciated having a chance to express themselves.

In several cases the participants described experiences that suggested that they were undergoing a process of learning that would have been enhanced through several iterations of the photography-sharing circle cycle. For example, when colonization came up in the interview, Elijah, referring to the types of photos taken during the project, said: "I didn't think of it in that way. I mean like all that colonization type stuff. I thought of it as nature and how it's being affected. I didn't see it too much at the beginning but now I am aware of it" (Elijah, Interview). Several more rounds of the Photovoice process may have allowed youth participants to go through a deeper process of learning and come to even more nuanced perspectives.

The youth provided various forms of feedback through the sharing circles, interviews and informal conversations including suggestions for improvement, ideas for the future and how the process had affected them. Comments included the need to have more frequent

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meetings or check-ins throughout the course of the project to discuss, inspire and build on ideas in an iterative fashion. In reference to the final workshop, Elijah mentioned: "there should be more meetings like this so that our minds are fresh and we don't forget". However, this feedback came as a surprise to me as throughout the course of the project one of the biggest challenges was getting all of the participants to commit to a meeting time.

Additionally they felt that the project should be run year long (and beyond) in order to incorporate seasonal variations. When asked how the project could have been improved, one participant felt that better cameras were required and another highlighted the importance of incorporating the Dakelh language into the project: "Definitely more language. Bringing in more language" (Adam, Sharing Circle 2).

Feedback at the end of the project revolved around keeping the project going, involving more youth, and gaining more and broader youth perspectives from the community. The youth in this project both had a desire to speak out to other youth and community members as well as "to make it more out there", reaching distant audiences through various technologies. For example one participant, when discussing environmental degradation, expressed an interest to "tell people what is happening out there, because they are not really aware of it" (Elijah, Interview). In the last sharing circle the youth came up with several ways to share their work, including creating a photo book, a calendar, slideshow presentation, display at community events as well as an Instagram account with captions in order to share their work and to get feedback from other youth in the area. Another suggestion was to attach the youth photographs and stories onto a virtual map (e.g. Google Earth) according to the GPS coordinates of where the photographs were taken.

Even though it was difficult to recruit and retain participants in this study, once the project was nearing the end and the outputs were being created, other youth from the community began coming forward and expressed an interest in getting involved. For example, one youth that had been originally signed up to take part in the project but had decided against it was present at a lunch meeting with the CRA and I. After hearing about the preliminary themes and discussions of next steps, she was eager to share her ideas and contribute to future activities (e.g. exhibitions). Likewise, a friend of one of the youth participants who had recently moved back to Saik'uz came along to the final sharing circle and asked if it was too late to take part. He mentioned he had many ideas for photos to share and took part in the discussion with enthusiasm. It seemed that once the project became a reality (or at least more tangible), it was easier for the youth to see the benefits of participation.

Participatory research is usually characterized by iterative cycles of learning and action. Reflecting the time and resource constraints of Master's level research, this research process was only able to produce two main cycles. However, having integrated the project into ongoing work and efforts in the community, the knowledge, photos, materials and momentum produced through this process will be built into future work. Related efforts have already begun (see Table 1 and Appendix VIII). For example, the photo exhibition held in conjunction with the opening of Sophie's Garden at the BC Cancer Agency Centre for the North. Preliminary discussions of other ideas and directions building off of this work revolve around water, Indigenous sovereignty and other youth capacity building initiatives in the community (Personal Communication, Jasmine Thomas, May 7, 2013) as well as a second

iteration of the Youth Photovoice Project with an explicit focus on seasonality driven by one of the youth participants (Personal Communication, Adam Thomas, September 8, 2013). This story will circle back, as new layers are added, new directions revealed.

5.3.2 Representation and the Politics of Creation and Circulation of Knowledge

To begin, this project raised important issues about representation and the politics of creation and circulation of knowledge. The relevance of these issues need to be considered in the Northern BC and Canadian contexts where Indigenous people have consistently been constructed as objects in detrimental image-making practices by non-Indigenous people (see literature review) (Willems-Braun, 1997). During the course of this study, I became increasingly aware of the importance of questions that receive ongoing attention in the literature including: Who has the right to control knowledge?, What power-relations decide whose knowledge is valued? (Latukefu, 2006) and "who has had access to and understanding of media technologies, and who has the rights to know, tell, and circulate certain stories and images?" (Ginsburg, 2008, p.20). This youth Photovoice project in no way resolved these issues. However, several strategies were undertaken to grapple with these questions, including the consistent consultation, interaction and discussion about issues with the CRA (see section 5.4.1). I also engaged in critical thinking and considered certain nuances around creation and circulation of 'new media' and knowledge through discussions with my thesis supervisor, peers and colleagues as well as reflexive field note writing, and attending relevant workshops. Questions around representation and the politics of the creation and circulation of knowledge are important considerations in most studies involving Indigenous peoples, and are becoming especially critical with the increased use of 'new' media tools (e.g.

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participatory photography, digital stories) for research in an Information society.

As raised in the methodology chapter, one danger of community-based research is that it can reinscribe or retrench existing power relations in communities. In this project, as mentioned in section 4.2.2, it became clear that the youth participants were all from a particular family group in the community, a fact that has obvious implications in terms of representation in research and power dynamics. Within a context of complex community relations, there were many reasons that the project played out in this way despite several attempts to limit it. Another approach to addressing inequities is to acknowledge when they arise, as was done at several key points in this thesis. In doing so, it is important to acknowledge ways in which this thesis (and the research it represents) are embedded within larger patterns of power and inequities that are potent problems recognizable at every level of society: whether between and within communities, provinces, and nations; north and south; developed world and developing world. In this regard this research represents a microcosm of much larger issues.

Throughout this thesis, I have attempted to be very clear that these findings represent only a small proportion of the youth in Saik'uz. We were also very clear at community presentations and when sharing the photo book that these study findings represent a limited perspective. In August 2013, during the final presentation of results at a Band Council meeting, this issue was raised and discussed. The councilors were very understanding of our recruitment challenges, and acknowledged that they were familiar with this kind of challenge within SFN. Feedback at this meeting suggested that members of the Band Council saw this project as a step in the right direction, with hopes that more youth, and community members

in general might be able to participate in similar processes in order to contribute to identity

and community-building among members of the Saik'uz First Nation.

5.3.3 Considerations for Intergenerational Interactions

This Photovoice project created a space for a small number of youth to interact with

two Elders in a new way, thus hopefully contributing to a change process in the participants'

community while also raising awareness around issues of concern. Undertaking community-

based research in First Nations communities often includes ambient ideas around the

importance of Elder voices and participation in such projects, as keepers of traditional

knowledge, storytellers, guides, leaders, teachers or mentors with symbolic connections to

the past (Battiste, 1998; Graveline, 1998; Simpson, 2002; Stiegelbauer, 1996). Battiste,

(2005) suggests that, community-based projects involving youth and Elders provide an

opportunity to transfer "knowledge and experience of the social and cultural contexts of their

ecological origins to succeeding generations" (p. 122). This was absolutely the case with this

project, as evidenced by several key dynamics and developments. In particular, at the

presentation of the initial research proposal to Chief and Council, it was reinforced that it was

very important to include Elders - one representative mentioned that in the community many

families no longer have an Elder and therefore the youth no longer have mentors. It was

reiterated that the community needs more opportunities for Elders and youth to reconnect and

come together. For Chief and Council, youth-Elder reconnections were a very important

component for projects that explore aspects of health and land (SFN Chief and Council,

personal communication, September 13, 2011). It is important to acknowledge though that

these were 'non-youth' perspectives. Youth perspectives on the Elder matter were not sought

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out. For one, I wanted to respect the wishes of Chief and Council, who ultimately approved the research. Secondly, I would not have felt comfortable or safe suggesting an alternative.

There exists a fair amount of academic as well as grey-literature about the many benefits accrued through youth-Elder projects in First Nations contexts; however potential pitfalls or challenges are rarely mentioned, acknowledged or explored. This study highlighted the need to maintain a critical consciousness of assumptions, attitudes, and behaviours at the forefront while exploring this terrain. Although Elder participation was extremely positive and beneficial in this context, the inclusion of Elders can also pose some challenges to a youth-driven research project situated in this context. Drawing on literature from the field of Youth-Adult Partnerships, according to Zeldin, Larson, Camino, & O'Connor (2005), "issues of personal and institutional power are embedded in all aspects of youth–adult relationships" (p.8) and these can lead to limitations within community-based projects. When Elders come into a project with the role of mentor, advisor or teacher, there can be an implicit idea that it is the adults who have the relevant experience, whereas the youth do not (Camino, 2005). Sometimes, youth may encounter a smattering of stereotypes held by adults, such as a youth tendency to be moody or conflict-prone or to engage in risky behaviours (Arnett, 1999; Camino, 2000). In a community-based project exploring resilience with First Nations youth and Elders, Andersson & Ledogar (2008) noted that the presence of Elders in sharing circles could limit discussion about sensitive but important topics (e.g. sexual abuse, illicit drug use). Likewise, Elder contributions might influence or shape other participant's responses, because of the deep respect for Elders in many Indigenous contexts (Wolsko et al., 2006).

On balance, my experience was that the intergenerational aspect of this project was an asset. The Elders presence seemed to create a positive and warm environment during the workshop and sharing circle, which was echoed through some of the youth feedback. They also provided support and encouragement for the project, and seemed to express a sense of pride in the youth for their involvement. The youth participants appeared to appreciate the opportunity to connect with the Elders and learn from their stories. The presence of Elders did not seem to limit the youth contributions; instead in many cases they inspired discussion. Through sharing stories from the past about connections to the land, traditional knowledge and environmental, social and cultural change they provided fuel for youth discussions about their present and their future.

5.3.4 Considerations for Youth Engagement

Many of the themes explored in this project are age-old questions regaining prominence in an era when, globally, people are trying to find solutions to complex problems related to health and sustainability. Supporting youth perspectives and engagement is crucial; younger generations carry the potential to create fundamental changes needed for a healthier future. Contemporary youth from the Saik'uz First Nation (like many other communities) are faced with a multitude of cross-cutting and complex health and sustainability challenges alongside a continuum that includes matters of self-determination, cultural rights, and political sovereignty, arising from local, regional, provincial, national and global contexts. As noted in Chapter 1, a motivation for the project was to gain new insights into the potential of implementing community-based projects in ways that value Indigenous youth can help to support their influence in shaping the future.

The modified-Photovoice method allowed the participants to share a highly

contextualized, powerful source of knowledge about what they saw as the connections

between land and well-being, engage in learning, while simultaneously creating the raw

materials (such as quotes and photos) that can be used for knowledge-to-action, as well as

political action to tackle specific goals. Additionally, engaging in and sharing photography

provided an incentive for young people to participate in research and community action.

The Saik'uz youth are indeed located in a global culture; connected through mass

media and Internet exchanges (Kirmayer et al., 2003). One notable factor was that, unlike

Photovoice projects in other Indigenous contexts (e.g. Maclean & Woodward, 2012), the use

of cameras was not a novel experience for all participants in this project. Methods such as

Photovoice are developing at a time when Indigenous communities and a generation

comfortable with media are using the Internet and various platforms and technologies to

create their own representations as a form of social action (Ginsburg, 2008). Photovoice was

seen by the youth as just one option in an array of media tools including Facebook, Twitter,

print media (e.g. newspapers) and film which had been actively used by participants in a

variety of ways. Even so, the Photovoice exercise was an innovative and engaging

participatory means of recording current youth perspectives with the potential to be used as

fuel for future projects while also creating archival documentation and systematized

knowledge for future generations. In this way, the use of Photovoice was more nuanced than

"*giving* a voice" to marginalized groups who have no other options. It was an opportunity

chosen strategically in order to meet specific goals in this particular community.

5.3.5 Modifications to Photovoice

Although originally based on the stages of Photovoice proposed by Wang and informed by other community-based participatory projects, this project took various turns throughout the duration of the study, which were not inconsequential and have some interesting methodological implications for researchers undertaking similar projects in First Nations contexts.

In much of the Photovoice literature, data is collected in several weeks. This study was initially planned with a similar timeframe. In reality, however, the process took six months (March to August 2012) and spanned 3 seasons (end of winter, spring and summer). While there was ongoing contact between the CRA, the youth participants and myself throughout this time period, the youth participants required more time to complete their photography than initially thought, and wanted to wait for specific community events (e.g. culture camp) to take their photographs in order to tell a more complete story. In reality, this "delay" proved to be beneficial in that the prolonged and ongoing immersion functioned to build trust and establish rapport including between myself and the CRA as well as with the participants in a manner that is acknowledged by other authors, including Castleden, Garvin and Huu-ay-aht First Nation (2008) as very important.

The youth were intentional about telling a particular story, and sometimes that meant going beyond the constraints of the Photovoice method and the planned process. In addition to the individual exercise of taking photographs for this project, participants also chose photos taken on their cameras by their family and other community members and picked photos from personal archives. Keeping open to such changes complemented family and communal connectedness. It also allowed multiple perspectives to seep into the project, and

in some ways contributed to a distribution of power in terms of what was 'included' and 'excluded' in the creation of collective knowledge.

5.4 Reflections on the Overall Research Process

This section highlights reflections in relation to the research process overall, with specific focus on the collaboration with the Community Research Advisor as well as the study limitations.

5.4.1 Collaboration with the Community Research Advisor (CRA)

As described in Chapter 4, Jasmine had a dual role in this project, as youth participant and as community research advisor. There were several challenges related to this approach. First, there was the ongoing potential of power imbalances and privileging the voice of the CRA over the other participants in terms of "airtime" as well as at decision-making levels. Relatedly, because of her position in the community and the project, there was the potential of her voice to unintentionally influence or direct the focus of participant's contributions. The CRA and I were both very aware of these challenges, and made efforts to ensure privileging did not occur. Because of our trusting and friendly relationship, we were able to talk comfortably about how workshops and sharing circles would be implemented, in ways that ensured all of the other youth had an equal chance to speak and felt comfortable doing so. Additionally, the sharing circle in particular required very little in terms of facilitation, and it was structured in a way that allowed all participants equal voice (the participants speak in turn, without much interruption, as the talking stick is passed around the circle). The CRA was also not present at the other two youth interviews, which provided space for more openness if her presence happened to be an issue for them (her role in the project was not

addressed or touched on by the participants in any of the interviews). Despite these efforts, Jasmine's dual role is an important feature of the research design and remains a possible limitation or bias in this study.

A second challenge is related to the fact that throughout the project Jasmine had to simultaneously juggle her role as a project co-designer, as participant, facilitator and coordinator. Although this could have lead to confusion and frustration, she navigated this role crossing with grace and ease and it did not seem to limit the process or the participants' engagement in the process.

When I wrote about the 'ally' concept in the literature review, it did not quite resonate with me, but I felt that it was important to acknowledge, given its relative importance as a concept in literature on Indigenous and non-Indigenous relations. However, I learned through my collaboration with Jasmine that labels such as 'allies' do not matter as much as the relationships and intimate connections themselves, built on trust, accountability, honesty and humility. Reflecting on our experience together, my feelings about it harmonize with Spectra's (2013) assertion:

> I'd rather experience people- and their politics- through unlikely, awkward, strained, challenging, beautiful relationships built over time. That way, when we do clash or differ, we love each other enough to express the full range of our raw emotions- cry, yell, storm out- and return to build the deeper, more intimate connections we need to take on the world together, truly united" (para. 6).

I have learned through my interactions with the CRA and other members of the community that alliances and solidarity are not a given; tentative connections between communities, Indigenous people, non-Indigenous people take hard work, time and commitment to exist and thrive (Smith, 2008). These types of collaboration can be difficult,

because of limited mandates and funding. Sometimes they may require new or rekindled thinking as well as courage and imagination to envision and construct a new future.

5.4.2 Study Limitations

There are limitations within any research study, and the Saik'uz Youth Photovoice Project, embedded in a larger qualitative research design, is no exception. Four limitations will be discussed, along with how they were addressed in this study. These limitations include: transferability/generalizability, limitations in the use of photographs, my positionality and time constraints. Important issues about the strengths and constraints of the CRA involvement have been discussed above (in section 5.4.1).

Any transfer of findings, interpretations and conclusions from this study to other contexts should be made with caution. This qualitative study contributed to a deeper understanding of phenomena in a specific context (Khagram & Thomas, 2010): the land-health connections for four First Nations youth in one BC community. Therefore, findings are very much context-dependent and specific to the unique experiences of these four youth and Elders who participated in the project. Additionally, the small sample (in this case 4 youth) represents only a small percentage of the overall youth population in SFN. Small samples favour credibility and internal validity (in-depth knowledge of a specific case) over transferability and external validity (generalized knowledge that can be readily applied to other cases) (Guba & Lincoln, 1994; Khagram & Thomas, 2010). Although we started with youth from various backgrounds, three young women dropped out before taking their photographs. The youth who remained in the study came from a more advantaged family group and two of them had at least two years of post-secondary education. In total, these

factors may have introduced 'recruitment bias' into the study, characterized by a preferential

recruitment of a particular part of the population, which results in less variation among the

participants and can limit validity or generalizability of study findings (Nijs, 2011). In

particular, the views presented in this study are more representative of this particular family

group. Therefore, this thesis does not reflect the views of those youth who did not wish to, or

could not engage with the Saik'uz Youth Photovoice project. The youth in this study may

not have been representative of the overall community. Despite the limitations of

transferability, studies such as this one are worthwhile in that they can provide great leverage

for future research, and contribute to a larger body of work that explored the connections

between land and health for Indigenous peoples. In addition, as argued by Flyvbjerg (2006)

the potential for transferability is increased by grounding the study's findings and discussion

in relation to several bodies of literature.

There were also limitations to the photograph-centered approach. In keeping with the

Photovoice method, the photographs themselves often lead what was discussed in the sharing

circles and interviews, which could be seen to create biases or omissions. Since both the

structure of the sharing circles and interviews was based around photos to elicit responses,

many responses were limited to what was photographed and thus *photographable*. Another

limitation of using still images is that they cannot always capture adequate representations of

complex, abstract, dynamic, multi-scalar processes (Bérbes-Blázquez, 2012), for example

language or climate change. In order to partially resolve these issues, participants were often

encouraged to not be limited by their photographs during the sharing circles and interviews.

For example, if they had something else to add to the conversation, they were encouraged to

express it whether or not it was 'attached' to a photograph. Another approach to addressing this limitation was conveyed during the training session, the use of creative ideas was discussed, in order to represent difficult to capture concepts (e.g. placing a word on a scrabble board and photographing it). It was also suggested that the participants could use other forms of materials or strategies to enhance or change the meaning of an image (for example using paints to draw on top of the photograph, collage, image software etc...).

Additionally, due to the ethical requirements of not using photographs of children or people who have not signed a consent form, much of Gabriel's contribution to the project became somewhat invisible, which was compounded by the fact that he chose not to participate in an interview (and therefore it was difficult to determine, beyond speculation, why he chose to take particular photos). Although throughout the thesis I attempted to include his voice in creative ways (e.g. by cropping photos or simply including the captions), it presented challenges in terms of equal representation.

My location and positionality (as introduced in the Introduction and Methodology Chapter) had both strengths and limitations. The stories and perspectives shared with me are likely different than what would have been shared with someone else, another Indigenous person or community member. However, in general, I felt that the participants made efforts to provide me with context to their stories, tell me about their backgrounds and involve me in relevant aspects of their lives. In some cases, it seemed the participants shared more with me, as someone who was co-learning and working with them. For example, as mentioned in Chapter three, I was invited to participate in two days of the Grouse Clan annual culture camp where I camped overnight, played with the children, went hunting, learned how to set

traps and listened to Elders stories around a campfire. The participants provided me with many teachings about the land, their communities and the history of the area. Such experiences were enriching both personally and academically and they undoubtedly provided considerable richness to the overall study.

The final study limitation was related to time. First, community-based research and especially Photovoice can be time-consuming for those involved (Castleden et al., 2008; Kern et al., 2011). It was a challenge for the CRA to find times when everyone was able to make it to the sharing circles and interviews; youth were busy with other school related commitments or events and there were several community tragedies throughout the course of this project. Second, the time constraints of a Master's thesis, which usually follows a two-year timeframe, presented what felt like a truncation of the learning process with youth. However, in order to help facilitate ongoing learning, all of the materials, data, and equipment were left with the community and they can continue building on the momentum of this project it in their own way. Additionally, although time constrained, some aspects of the project have intangible outcomes and are continuing to unfold beyond (and irrespective of) the lifecycle of a Master's thesis (see Appendix VIII).

Because of aspects related to design and methods, context and timing issues discussed above, I do not feel that I was fully able to answer my research questions related to objective II. As pointed out in the findings and discussion chapter, there were certain times where ideas were only explored at a superficial level and therefore it was difficult to expand or make nuanced associations between land and health for the youth involved. In part, the research questions may have been too broad in relation to the limited points of contact with

only four youth (e.g. only 2 sharing circles and one interview each, not including Gabriel). If it could have been possible within the context of the study, at least two more sharing circles or a second interview may have enabled deeper more nuanced perspectives to emerge. That said, rich descriptions did indeed materialize and this project serves as a useful launching point for future community initiatives and research.

5.5 Conclusion

The modified Photovoice process offered a rich opportunity to gain insight into the world of these First Nations youth and Elders from Saik'uz First Nation. The findings from this study generated new insights and links to literature at the nexus of land, health and well-being. Youth perspectives highlighted complex connections and relationships between land, health and well-being with insights to the many possible pathways for maintaining/improving the connection to the land (for improved health and well-being) in the context of rapidly changing lands and peoples. In the following chapter, insights from the overall research process as well as possible pathways for healing and fostering connections to the land will be explored in relation to the literature.

CHAPTER 6: CONCLUSION AND REFLECTIONS

This thesis documents a community-based project called *Saik'uz Youth Photovoice Project,* embedded in a qualitative study, which took place in Saik'uz, BC from August 2011 to May 2013. The project engaged four youth in a participatory photography process, followed by a sharing circle with two Elder mentors as well as individual interviews and a follow-up discussion with youth, in order to explore what they saw as the connections between land and health. The research design and findings therefore reflect an iterative process with a small group of youth and Elders in one First Nations community, generating new insights informed by their experiences and stories. Through analysis of the photograph captions, stories and discussions, four themes emerged that represented how these SFN youth saw the land, health and well-being as connected. Additionally, the youth described two main drivers of change that were impacting these relationships. All of these themes can be seen as interconnected and overlapping, which also means that the conceptualization presented in the findings represents just one way of representing the data. Broadly, the findings support that the understanding of connections between land and health described by the SFN youths participants are similar to many Indigenous people's beliefs that land, health and well-being are indeed deeply embedded in a system of relationships.

In this Chapter, the main findings are revisited and synthesized in relation to their contributions to addressing the three research objectives (restated here for convenience):

I. Explore and identify strengths and gaps in the literature in relation to First Nations youth, health, well-being and the land.

II.   Undertake engaged, empirical work with SFN youth to discover and explore

perspectives on the connections among land, health and well-being at a community-

level, guided by the following research questions:

- How do SFN youth view their relationship with the land and its influence on individual and community well-being?
- What pathways and opportunities exist for SFN youth to heal, foster and improve connections to the land?

III. Synthesize insights garnered from Objective I and II to identify strategies for bridging

land, health and well-being at multiple levels (community, provincial, national and

international).

This is followed by a summary of some potential pathways for (re) connecting, fostering and

improving youth connections to the land for health and well-being, with particular relevance

at the community, provincial/regional and national/ international levels.

6.1 Land and Health as Interconnected

The literature review presented in Chapter 2 directly addressed Objective I of this

study and informed the approach to Objective II and III. Directly addressing the second

objective, the six themes presented in Chapter 5 represented a way to group significant

content that emerged from the data collection activities. The four themes that represent the

relationships among land, health and well-being (5.2.1) can be understood as embedded in a

larger set of relationships (the socioecological system), which are then influenced by the

drivers of change (5.2.2). These interrelationships are depicted in Figure 25, which is

structured to reflect the potential for synergies, complementarities, and reciprocities among

different themes. For example, some forms of stewardship activities simultaneously

contribute to the building of social relationships, culture and identity, healing, in addition to environmental protection. Initiatives and programs can explicitly build on and take advantage of these types of linkages for additional gains and benefits at many levels.

In sum, the themes supported that for the youth in this project, land, health and well-being are deeply interconnected and provided new locally relevant insights into the themes examined in Chapter 2 and the contextual background in Chapter 3. When synthesizing the findings overall, it was notable that the youth participants viewed the land relationally. The 'land' represented interactions among air, water, mountains and living things (plants, animals and people). Importantly, land was not seen as separate from its inherent connection with air or water and other elements of these linked systems that support life. Participant perspectives on the connections between land, health and well-being were multi-dimensional and stretched into social, spiritual, emotional, intellectual and cultural realms. While health and well-being was not explicitly defined by any of the youth, it was embedded in all of the relationships they described. Land, health and well-being were also often co-expressed (i.e. when asked about health, they would talk about the land and vice versa). This relationality is not currently captured well in the Social Determinants of Health (SDOH) or any purely social orientation to health, which still tends to dichotomize the social and the biophysical (including ecological dynamics).

Additionally, the interrelatedness of land, health and well-being was shown to be integral to the lives of the youth in this project and interlinked with the socio-cultural and landscape changes that are deeply affecting the context of these relationships. The experience of this project and the interaction with the participants brought to the fore an

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urgency that had not been clearly identified through the review of the literature or the study

context. The youth echoed the words of the late Sophie Thomas, Saik'uz Elder: "If we look

after our earth, it will look after us. If we destroy it, we'll destroy ourselves" (Sophie Thomas

Foundation, 2012).

The project also provided new insights into how words can be powerful and have

many roles. For example, as alluded to in the literature review, using the word 'land' instead

of 'environment' can bring more attention to the social, spiritual, cultural and emotional

elements of the relationships. However, I have found that there are certain 'territories' that

our language does not handle well. Words can be clumsy, and are poor proxies for ways of

knowing that science has come up with to try to describe complex topics. I found that many

of the ways of knowing presented in this thesis stretch outside of our given vocabulary. If I

had more time, I would have liked to explore possible Dakelh words that better capture

concepts such as 'interconnectedness', 'relationality', 'co-expression', and 'reciprocity'.

The many relationships between land and health identified by the youth speaks to and

reinforces the need to shift from a view of the environment as a 'natural resource' (to be

exploited, or as a possible source of 'hazards') to a view of the ecosystem as life source, and

a not- negotiable foundation for all life (Parkes, 2011). Re-engaging or re-articulating land-

health connections requires the breaking down of persistent artificial divides, dichotomies

and compartmentalizations that are often used to sever land and health relationships,

including our strong tendency to separate "social" and "environmental" factors as they relate

to health. In her appraisal of an ecosocial perspective and discussion of the co-mingled

social and biological world, Krieger asserts, "to focus on only or the other misses the fact we

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embody both" (2001; 2008, p.227).

Ultimately, the findings of this research challenge us to consider interconnections, interrelationships and reciprocities among land, health and well-being; ways of knowing that overlap with Indigenous epistemologies and ontologies and a large body of work in Indigenous and First Nations studies. Attention to these dynamics may open up a suite of opportunities for holistically healing the deeper causes of health disparities for First Nations youth in Canada. Addressing health and well-being in a holistic way demands valuing these relationships in their many forms.

The Saik'uz Youth Photovoice project provided a microcosm that allowed for manageable exploration of those interrelationships and interconnections, bringing them to life in a nuanced and localized way.

6.2 Pathways for (Re) Connecting, Fostering and Improving Youth Connections to the Land for Health and Well-Being

The third objective of this project was to synthesize insights garnered from Objective I and II to identify strategies and pathways for bridging land, health and well-being at multiple levels (community, provincial, national and international). The combination of insights from the literature with the findings and discussion from empirical work provided solid ground for exploring possible strategies and pathways. In this section pathways can be understood as the navigation routes (multi-directional and non-linear) among various interrelationships within a given context. It is recognized that pathways can take a number of directions, but those identified in this section are informed by an assemblage of contexts, literatures and youth and Elder voices and represent possible research opportunities and

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applications at multiple, nested levels. Directions explored below include:

national/international levels (Canada and beyond), provincial/regional (British Columbia and Northern BC) and local (Saik'uz First Nation).

6.2.1 Canada and beyond

The findings have implications for an emerging body of research currently entering public health and health promotion agendas at national and international level: including new perspectives on the relationships between contact with 'nature' and health (as outlined in Chapter 2 in relation to the concepts of "Healthy by Nature", "Healthy Parks, Healthy People"). Unlike much of the literature in this area, this study was not attempting to quantify or measure the direct associations between nature and health for youth participants. However, the study points to aspects that may be important to consider in future studies with First Nations in general and youth in particular, especially in Northern and rural and remote contexts. The majority of literature that explores the linkages between health and nature comes from an urban perspective, and thus 'nature' often encapsulates paths, parks, gardens and other forms of "green space". The participants in this study did not mention any of these forms; instead, they acknowledged that there was land all around them (their traditional territory or *Keyoh*). The importance was in the maintenance of the connection to that land (in a variety of ways) and the protection of the land in order to derive health and well-being benefits.

In relation to healthy by nature and health promotion initiatives, this research revealed possible pathways for youth from rural and remote communities, especially in terms of prioritizing engagement with traditional lands, perhaps in addition to "health in parks" or

other forms of "green space". Additionally, the multiple and interrelated relationships described in the findings and depicted in Figure 25 may also provide clues for "healthy by nature" type initiatives and research with First Nations youth in rural and remote contexts, in terms possible mechanisms of how land might influence health and well-being.

It is also important to note that different groups of people have differing relations with the land or 'nature', which coincidentally reinforces social differences and wider power relations (Panelli, 2010). Relations can differ within and between many scales: on-reserve, off-reserve, urban and rural. For example, even though many on-reserve youth live on or near their traditional territories there are a multitude of potential barriers (socio-cultural, economical etc…) for accessing the territory and/or taking part in activities that connect them to the to the land. Panelli argues (2010) that the uneven experiences and contact with the land available to different groups is an important consideration but, as was demonstrated in this project, also points to a range of opportunities for co-relation with land (song and dance, activities, eating traditional foods) that can provide ways to access a sense of connection.

In light of the eroding environmental protections in Canada and increasing pressures on people and their environments (Nerenberg, 2013), there is an amplified urgency and need to understand land-health connections in Canada. This is especially so for Indigenous communities who closely rely on the land for health (Cunsolo Willox et al., 2012). As an emerging area of research, there are substantial gaps in research, practice, policy, and programming in terms of the connections between land and health for Indigenous peoples, and especially youth. This thesis has highlighted that more research— qualitative, quantitative, and mixed methods studies— are needed to explore and analyze more deeply

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the multitude of pathways between land, health and well-being as well as the implications of socio-cultural and environmental change on those relationships. Because these issues are complex, the most effective research would include multi-scalar and multi-sectoral collaborative partnerships among a variety of organizations. The research design applied here, of modified Photovoice in a rural context in Northern BC with First Nations youth, may be relevant to the design of future research or projects that aim to explore land-health connections in other northern Canadian contexts.

6.2.2 Provincial/Regional (British Columbia and Northern BC)

As discussed in the study context chapter, First Nations in BC have initiated a transformative process of change towards the establishment of a BC First Nations Health Authority (FNHA) that will design, manage, and deliver health programs and services for First Nations people. Such a transformation creates fertile ground for culturally relevant strategies and interventions that incorporate the interconnectedness of land and health as identified by the youth in this project. More research is needed in terms of how a FNHA could develop strategies to honour and build off of the kinds of interrelationships discussed by the youth. Strategies might include exploring how to emphasize and support the creation of everyday opportunities for multiple generations to spend time on the land; participate in hunting, trapping, fishing, and foraging; and local stewardship/ advocacy/ direct action activities. Additionally, there may be opportunities to expand infrastructure (e.g. pithouses, community gardens) and support existing on-the-land and intergenerational programming (e.g. annual culture camps) all in efforts to contribute to healthy lives. Supporting and expanding existing community resources and linking them explicitly to health and well-being

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has the potential to enhance overall health and wellness at the community level. There may also be opportunities for the FNHA and other First Nations health programming to link in with and build on "healthy by nature" initiatives in new ways (discussed in Section 6.3.1).

Strategies such as these may require the FNHA and/or other health researchers and practitioners to be flexible and adaptable to consider integrated approaches and to explore new unlikely allies and partnerships outside the health sector, as well as multiple roles across different types of collaborations. These challenges are not unique to the FNHA and echo existing work that has been developed to focus on 'Environment as a Context for Health' by Northern Health, within the duration of this project (Northern Health, 2012).

The acknowledged limitations of the small sample and focus on one community have the potential to catalyze future research. Engaging in a cross-case comparative analysis using Photovoice with other and more youth from other First Nations communities could contribute and broaden the understanding of the connections between land and health as well as examine and learn about the transferability of the Photovoice method.

6.2.3 Local (Saik'uz First Nation)

Having worked through implications of this study at different scales, this section re-focuses attention on the Saik'uz First Nation context. It was difficult to synthesize the tremendous learning that took place for me alongside the youth and Elder participants and other community members, through their stories and actions, as well as and time spent in the community, in the region and on the land. It was challenging to decide which pathways to focus on. Some pathways in the community are already mapped out, well traveled. Others are just emerging. Ultimately, current and future generations will map their own pathways,

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ideally on their own terms.

The experience of this project taught me that innovative community programming or projects are one type of pathway, but compartmentalization of pathways into 'programs' or 'projects' may not always honour the organic, dynamic nature of people's lives and the relationships between land and health. Instead, many pathways may include "everyday acts" in the community and on the land (Corntassel, 2012, p.29; Simpson, 2008). All of the youth talked about dozens of "on the ground" direct actions (e.g. healing walks, eating traditional foods, learning from their Elders, learning how to use a compass) that they can take to restore or reclaim connections and relationships to the land for health. If we take Figure 25, and use the analogy of a network of land and waterways, we can imagine tracing routes in a number ways. More direct actions taken by more and more people can lead to more established routes. The research with SFN has highlighted the potential of fostering these actions.

In order for "on the ground" actions to take place, some youth may need assistance navigating the relationships and finding their way. Thus mentorship[29] or forms of apprenticeship (one-on-one or in groups) may represent another key pathway (Corntassel, 2012). This project provided a small case-study for how mentorship can lead to learning and transmission of knowledge to help build connections to the land through linking youth, Elders, and a knowledge holder (the CRA).

Closing the health gap between First Nations and non-First Nations youth, in part, means having approaches that are responsive to First Nation youth needs. Informed by this study, being responsive means creating pathways that acknowledge that health and wellbeing

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[29] Mentorship here is conceptualized as a reciprocal (yet possibly asymmetrical) relationship (Sambunjak & Marušić, 2009).

for the youth are expressions of inter-relationships, deeply embedded within the land on which we all depend. For programs, services and initiatives aimed at SFN youth, this may also mean acknowledging that youth health and well-being is rooted in the structures and changes of socioecological systems and may need to be approached holistically rather than by separating a complex system into discrete components or approaches.

6.3 Conclusion

This project was enabled through the meeting of two people with collaborative tendencies and with overlapping questions and interests in land, health and youth. This thesis opened with two of these questions, embedded within three larger objectives, which were addressed through a mixture of methodologies and approaches applied in one place, the Saik'uz First Nation. With the support of the institutions of UNBC and the SFN, a researcher and community research advisor sought to co-design and conduct a study that would respond to our shared curiosity in how youth in Saik'uz perceived land and health as connected. We also wanted to know about some possible pathways and opportunities to (re)connect to the land for health.

This thesis represents one distillation- in a relative static form- of an experience that has been full of ideas, hopes and dreams for our collective future. Beyond the thesis, the relationships, teachings, learnings, and effects of this process have been embodied and continue to be expressed. The youth and Elders' insights have provided fertile ground for progressing ecohealth and Indigenous health throughout the Northern BC landscape in a variety of ways. The collaboration and friendship between Jasmine and I will continue, building off the Photovoice process with plans for the fall of 2013 and beyond. To borrow

the phenomenon mentioned by one of the youth participants, I hope that this small contribution will in some way, start a "butterfly effect".

For the youth in this project, the process of restoring relationships to the land for health comes from within individuals, families and communities, but is also largely influenced by complex driving forces of change and other ongoing colonial processes. In order to address these types of complex, wicked problems where there is no clear way forward, we ultimately require respectful, responsible, accountable relationships and practices with each other and our ecosystems. I learned through my experiences with Jasmine and the community that change happens through relationships, that we are all healing and that we are all in this together.

I took this picture cause its rare that we see lightning when there is a clear sky out and I thought maybe that's the light at the end of the tunnel and its going to get better from then on.

I'm always trying to encourage youth to do positive things like play sports, or just get out into the community and talk to our Elders and just learn. And that could help revitalize our culture. That's what I'm doing, I'm learning from my Elders right now so, we will always learn from our Elders and I'll pass that on and it will help make our community better. - Adam

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Appendix III – Information Sheets and Consent Forms

A. Information Sheet for Youth Participants (for those over 18)

Research Project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz"*.

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en
Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.
Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

Purpose of the research

The purpose of this study is for Saik'uz First Nation youth to work with Elders and describe connections to the land and how these influence individual and community well-being. Several community groups would like input from youth to build into future programs and initiatives. Lead by Jasmine Thomas, the research team will be working with a multimedia type of research to help youth communicate their ideas to the community and others. This method is called "photovoice" with sharing circles.

Why was I selected?

You have been selected as a potential participant because of your willingness to participate in the research and to share your experiences. Another factor may be your interest in getting involved in community activities related to environmental stewardship and land-based activities, or simply your interest in the connections between land and health.

What will happen?

The study has 3 parts; all data for the study will be collected between January 2012 and May 2012:

- In part one, we will meet for a first workshop (*location to be determined*) where we will brainstorm your ideas about health and well-being and the land. Next we will learn about basic photography, as well as brainstorm risks, safety and respect involved in taking photographs in your community and how to participate in a safe way. We will lend you a digital camera so that you can take pictures (this task will require approximately 90 minutes of your time).
- You will then have a month to take a minimum of 10 photographs of the connections between land and health, write descriptions and captions for each photo and choose 4 of your favourites. The photos and information will be handed over to the research team after 1 month (this will require a minimum of approximately 2-3 hours of your time spread out in a one month period).
- In part 2, you will participate in a sharing circle (*location to be determined*) with the other youth participants and Elders, during which you will be asked to talk about your photographs and your perspectives of the connection between land and health and ways to (re) connect with the land (this will last approximately 90 minutes).
- In part 3, you will participate in the second workshop (*location to be determined*) with project participants, during which you will be asked to review the preliminary findings and to clarify, reflect or elaborate on these findings. During this gathering you will also be asked to think about how you would like to share your photographs and/or the findings with the community (this will last approximately 90 minutes).

Permission?

If you choose to be in the study, a member of the research team will meet with you to get your written consent for participation in the study. The researcher will explain that taking part in the study involves participating in 2 workshops and a sharing circle and sharing the collective story widely with others.

Who Will Know?

If you consent, information from all group sessions may be recorded by video, audio, still photographs or written notes by the researcher. Photographs and video or audio recording will occur only if you have given your explicit consent. Please note that only limited confidentiality can be offered for individuals who choose to participate in the workshops and discussions. At the outset of the workshops, we will encourage all participants to avoid sharing the content of the discussions outside of the study; however, we cannot control what other participants do with the information afterward.

You will not be identified in any recorded data or information that goes out to the public. You will be referred to using a pseudonym (made up name) of your choice. Should you wish to be named and waive your right to privacy and anonymity, you will be required to provide written evidence, witnessed by a third party, to this effect. Should you consent to being recorded by video or audio for the purpose of data collection, you will be given the choice whether or not you consent to the sharing of these images, and visual/audio recordings in representations of the research such as presentations and publications. Consent for this sort of sharing will not be assumed and will be obtained on an individual basis prior to such use of the images, your photographs or voice recordings.

All electronic or multimedia data collected during this study will be downloaded and stored on a secured hard-drive (not connected to the Internet). All information and text that you provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC for 5 years as well as with the Saik'uz First Nation. After the 5-year period, all UNBC data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations. The findings of this project will be made available to you at your request upon the completion of the study.

It's your choice:

It is your choice to participate. You may stop being in the study at any time, and any information you provided up to that point will also be withdrawn. You may ask questions at any time. If there are issues that are upsetting for you, we will help find a professional for you to talk to. We want to thank you for participating in this study. A $500 gift of appreciation will be given to the Youth and Elders Council to go toward future initiatives.

Risks and Benefits:

Potential risks may arise from the disclosure of your identity or information at the workshops or sharing circles, given that you will be interacting with project participants. Other risks are related to the photovoice method itself such as personal safety while taking photographs (we will discuss safety in the first workshop). Although a minimal risk, reflection about certain issues may cause stress or other negative emotional responses. Potential benefits of participating in the study include being a part of a positive change process and group building activity and to provide input or be a part of possible programs, strategies and next steps for youth in Saik'uz.

Questions:

If you have questions please call our community research advisor Jasmine Thomas on her cell phone at _____ or email her at _____ . You can also call Lindsay Beck on her cell phone at _____ or email her at beckl@unbc.ca. Her supervisor, Dr. Margot Parkes can be reached at her office by email: parkesm@unbc.ca or by phone: 250-960-6813. If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

Thank you for your interest!

B. Youth Participant Consent Form (for those over 18)

Title of Study: *Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en

Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.

Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

To be completed by the research participant:	Circle Yes or No

1. Do you feel you have received sufficient information to participate in this study? Yes No

2. Have you received and read a copy of the attached Information Sheet? Yes No

3. Do you understand the benefits and risks involved in taking part in this research study? Yes No

4. Have you had an opportunity to ask questions and discuss this study with a member of the research team? Yes No

5. Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason and it will not affect you. Any data or information provided prior to this point will be discarded at this time. Yes No

6. Has the issue of confidentiality been explained to you? Do you understand that your identity may not remain confidential? Yes No

7. We will take pictures and record audio/video during the workshops and sharing circles for future presentations and publications. Do you wish to be photographed and/or video-recorded? Yes No

8. Do you give permission for the information you provide to be shared in future presentations and publications Yes No

9. Do you give permission for the use of full quotations in the dissemination of results? Yes No

Please note that all information and text that you provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC as well as with the Saik'uz First Nation. During this time the community research advisor (Jasmine Thomas),

researcher and her supervisor, Dr. Margot Parkes, would be the only individuals with access to the raw data. Lindsay Beck will be transcribing (typing out the recorded discussions) of all of the workshops and sharing circles. After the 5-year period, all data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations.

If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

I agree to take part in this study.

Signature of Research Participant: _____

Printed Name: _____

Date: _____

I have explained the nature and parameters of this study to the participant and believe they have understood.

Signature of Researcher: _____

Date: _____

THE INFORMATION SHEET IS ATTACHED TO THIS CONSENT FORM AND A COPY IS GIVEN TO THE RESEARCH PARTICIPANT

C. Information Sheet for Parents/Guardians (to be signed if youth is under 18):

Research Project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz".*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en
Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC. **Supervisor:** Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC.

Purpose of the research

The purpose of this study is for Saik'uz First Nation youth to work with Elders and describe connections to the land and how these influence individual and community well-being. Several community groups would like input from youth to build into future programs and initiatives. Lead by Jasmine Thomas, the research team will be working with a multimedia type of research to help youth communicate their ideas to the community and others. This method is called "photovoice" with sharing circles.

Why was my child selected?

Your child has been selected as a potential participant because of their willingness to participate in the research and to share their experiences. Another factor may be their interest in getting involved in community activities related to environmental stewardship and land-based activities, or simply their interest in the connections between land and health.

What will happen?

The study has 3 parts; all data for the study will be collected between January 2012 and May 2012:

- In part one, a first workshop will be held (*location to be determined*) where youth and Elders will brainstorm ideas about health and well-being and the land. Next they will learn about basic photography, and will also brainstorm risks, safety and respect involved in taking photographs in the community and how to participate in a safe way. We will lend each participant a digital camera so that they can take pictures (this task will require approximately 90 minutes of their time).
- Each youth will then have a month to take a minimum of 10 photographs of the connections between land and health, write descriptions and captions for each photo and choose 4 of their favourites. The photos and information will be handed over to the research team after 1 month (this will require a minimum of approximately 2-3 hours of their time spread out in a one month period).
- In part 2, the youth will participate in a sharing circle (*location to be determined*) with the other youth participants and Elders, during which they will be asked to talk about their photographs and their perspectives of the connection between land and health and ways to (re) connect with the land (this will last approximately 90 minutes).
- In part 3, the youth will participate in a second workshop (*location to be determined*) with project participants, during which they will be asked to review the preliminary findings and to clarify, reflect or elaborate on these findings. During this gathering they will also be asked to think about how they would like to share their photographs and/or the findings with the community (this will last approximately 90 minutes).

Permission?

If you would like your child to participate, and your child chooses to be in the study, a member of the research team will meet with you and your child to get written consent for participation in the study. The researcher will explain that taking part in the study involves participating in 2 workshops and a sharing circle and sharing the collective story widely with others.

Who Will Know?

If you and your child consent, information from all group sessions may be recorded by video, audio, still photographs or written notes by the researcher. Photographs and video or audio recording will occur only if you and your child have given explicit consent. Please note that only limited confidentiality can be offered for individuals who choose to participate in the workshops and discussions. At the outset of the workshops, we will encourage all participants to avoid sharing the content of the discussions outside of the study; however, we cannot control what other participants do with the information afterward.

Your child will not be identified in any recorded data or information that goes out to the public. Your child will be referred to using a pseudonym (made up name) of their choice. Should they wish to be named and waive their right to privacy and anonymity, they will be required to provide written evidence, witnessed by a third party, to this effect. Should they consent to being recorded by video or audio for the purpose of data collection, they will be given the choice whether or not to consent to the sharing of these images, and visual/audio recordings in representations of the research such as presentations and publications. Consent for this sort of sharing will not be assumed and will be obtained on an individual basis prior to such use of the images, the photographs or voice recordings.

All electronic or multimedia data collected during this study will be downloaded and stored on a secured hard-drive (not connected to the Internet). All information and text that they provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC for 5 years as well as with the Saik'uz First Nation. After the 5-year period, all UNBC data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations. The findings of this project will be made available to your child at their request upon the completion of the study.

It's your choice:

It is your choice and the choice of your child to participate. Your child may stop being in the study at any time, and any information they provided up to that point will also be withdrawn. You and your child may ask questions at any time. If there are issues that are upsetting for your child, we will help find a professional for them to talk to. We want to thank your child for participating in this study. A $500 gift of appreciation will be given to the Youth and Elders Council to go toward future initiatives.

Risks and Benefits:

Potential risks may arise from the disclosure of identity or information at the workshops or sharing circles, given that your child will be interacting with project participants. Other risks are related to the photovoice method itself such as personal safety while taking photographs (we will discuss safety in the first workshop). Although a minimal risk, reflection about certain issues may cause stress or other negative emotional responses. Potential benefits of participating in the study include being a part of a positive change process and group building activity and to provide input or be a part of possible programs, strategies and next steps for youth in Saik'uz.

Questions:

If you have questions please call our community research advisor Jasmine Thomas on her cell phone at _____ or email her at _____ . You can also call Lindsay Beck on her cell phone at _____ or email her at beckl@unbc.ca. Her supervisor, Dr. Margot Parkes can be reached at her office by email: parkesm@unbc.ca or by phone: 250-960-6813. If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

D. Parent/Guardian Consent Form (to be signed if youth is under 18):

Title of Study: *Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en

Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.

Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

To be completed by the research participant: **Circle Yes or No**

1. Do you feel you have received sufficient information to allow your child to
participate in this study?   Yes   No

2. Have you received and read a copy of the attached Information Sheet?   Yes   No

3. Do you understand the benefits and risks of taking part in this   Yes   No
research study?

4. Have you had an opportunity to ask questions and discuss this study with a   Yes   No
member of the research team?

5. Do you understand that you are free to refuse the participation of your or child
or to withdraw him or her from the study at any time? You do not have to give a   Yes   No
reason and it will not affect you or your child. Any data or information provided
prior to this point will be discarded at this time.

6. Has the issue of confidentiality been explained to you? Do you understand that
the identity of your child may not remain confidential?   Yes   No

7. We will take pictures and record audio/video during the workshops and sharing Yes   No
circles for future presentations and publications. Do you allow your child to be
photographed and/or video-recorded?

8. Do you give permission for the information your child provides to be shared in Yes   No
future presentations and publications?

9. Do you give permission for the use of full quotations from your child in the   Yes   No
sharing of results?

Please note that all information and text that you provide will remain confidential and securely
stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC as well as with
the Saik'uz First Nation. During this time the community research advisor (Jasmine Thomas),
researcher and her supervisor, Dr. Margot Parkes, would be the only individuals with access to the
raw data. Lindsay Beck will be transcribing (typing out the recorded discussions) of all of the
workshops and sharing circles. After the 5-year period, all data (electronic, notes, or tape) will be
destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will
be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First
Nations.

If you have any concerns/complaints about this project, you may also call the Research Ethics Board
at 250-960-6735. The Research Ethics Board is not linked to this project.

I agree for my child to take part in this study.

Signature of Parent/Guardian (if under 18): _____

Printed Name: _____

Date: _____

**I have explained the nature and parameters of this study to the participant and believe
they have understood.**

Signature of Researcher: _____

Date: _____

**THE INFORMATION SHEET IS ATTACHED TO THIS CONSENT FORM AND A
COPY IS GIVEN TO THE RESEARCH PARTICIPANT**

E. Information Sheet for Community Elder Participants

Research Project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz".*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en
Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC. **Supervisor:** Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

Purpose of the research

The purpose of this study is for Saik'uz First Nation youth to work with Elders and describe connections to the land and how these influence individual and community well-being. Several community groups would like input from youth to build into future programs and initiatives. Lead by Jasmine Thomas, the research team will be working with a multimedia type of research to help youth communicate their ideas to the community and others. This method is called "photovoice" with sharing circles.

Why was I selected?

You have been selected as a potential participant because of your willingness to work with youth, participate in the research and to share your experiences. Another factor may be your interest in getting involved in youth projects or activities related to health and the land.

What will happen?

The study has 3 parts; all data for the study will be collected between January 2012 and May 2012:

- In part one, we will meet for a first workshop (*location to be determined*) where we will brainstorm with youth ideas about health and well-being and the land. Next we will learn about basic photography, as well as brainstorm risks, safety and respect involved in taking photographs in your community and how to participate in a safe way (this task will require approximately 90 minutes of your time).

- In part 2, you will participate in a sharing circle (*location to be determined*) with youth participants where you will listen and interact with youth as they explore their photographs and perspectives of the connection between land and health and ways to (re) connect with the land (this will last approximately 90 minutes).

Permission?

If you choose to be in the study, a member of the research team will meet with you to get your written consent for participation in the study. The researcher will explain that taking part in the study involves participating in a workshop and a sharing circle and sharing the collective story widely with others.

Who Will Know?

If you consent, information from all group sessions may be recorded by video, audio, still photographs or written notes by the researcher. Photographs and video or audio recording will occur only if you have given your explicit consent. Please note that only limited confidentiality can be offered for individuals who choose to participate in the workshops and discussions. At the outset of the workshops, we will encourage all participants to avoid sharing the content of the discussions outside of the study; however, we cannot control what other

participants do with the information afterward.

You will not be identified in any recorded data or information that goes out to the public. You will be referred to using a pseudonym (made up name) of your choice. Should you wish to be named and waive your right to privacy and anonymity, you will be required to provide written evidence, witnessed by a third party, to this effect. Should you consent to being recorded by video or audio for the purpose of data collection, you will be given the choice whether or not you consent to the sharing of these images, and visual/audio recordings in representations of the research such as presentations and publications. Consent for this sort of sharing will not be assumed and will be obtained on an individual basis prior to such use of the images, your photographs or voice recordings.

All electronic or multimedia data collected during this study will be downloaded and stored on a secured hard-drive (not connected to the Internet). All information and text that you provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC for 5 years as well as with the Saik'uz First Nation. After the 5-year period, all UNBC data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations. The findings of this project will be made available to you at your request upon the completion of the study.

It's your choice:

It is your choice to participate. You may stop being in the study at any time, and any information you provided up to that point will also be withdrawn. You may ask questions at any time. If there are issues that are upsetting for you, we will help find a professional for you to talk to. We want to thank you for participating in this study. A $500 gift of appreciation will be given to the Youth and Elders Council to go toward future initiatives.

Risks and Benefits:

Potential risks may arise from the disclosure of your identity or information at the workshops or sharing circles, given that you will be interacting with project participants. Although a minimal risk, reflection about certain issues may cause stress or other negative emotional responses. Potential benefits of participating in the study include being a part of a positive change process and group building activity and to provide input or be a part of possible programs, strategies and next steps for youth in Saik'uz.

Questions:

If you have questions please call our community research advisor Jasmine Thomas on her cell phone at _____ or email her at _____. You can also call Lindsay Beck on her cell phone at _____ or email her at beckl@unbc.ca. Her supervisor, Dr. Margot Parkes can be reached at her office by email: parkesm@unbc.ca or by phone: 250-960-6813. If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

Thank you for your interest!

F. Elder Participant Consent Form

Title of Study: *Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en

Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.

Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

To be completed by the research participant: **Circle Yes or No**

1. Do you feel you have received sufficient information to participate in this study?   Yes   No

2. Have you received and read a copy of the attached Information Sheet?   Yes   No

3. Do you understand the benefits and risks involved in taking part in this research study?   Yes   No

4. Have you had an opportunity to ask questions and discuss this study with a member of the research team?   Yes   No

5. Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason and it will not affect you. Any data or information provided prior to this point will be discarded at this time.   Yes   No

6. Has the issue of confidentiality been explained to you? Do you understand that your identity may not remain confidential?   Yes   No

7. We will take pictures and record audio/video during the workshops and sharing circles for future presentations and publications. Do you wish to be photographed and/or video-recorded?   Yes   No

8. Do you give permission for the information you provide to be shared in future presentations and publications?   Yes   No

9. Do you give permission for the use of full quotations in the dissemination of results?   Yes   No

Please note that all information and text that you provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC as well as with

the Saik'uz First Nation. During this time the community research advisor (Jasmine Thomas), researcher and her supervisor, Dr. Margot Parkes, would be the only individuals with access to the raw data. Lindsay Beck will be transcribing (typing out the recorded discussions) of all of the workshops and sharing circles. After the 5-year period, all data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations.

If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

I agree to take part in this study.

Signature of Research Participant: _____

Printed Name: _____

Date: _____

I have explained the nature and parameters of this study to the participant and believe they have understood.

Signature of Researcher: _____

Date: _____

THE INFORMATION SHEET IS ATTACHED TO THIS CONSENT FORM AND A COPY IS GIVEN TO THE RESEARCH PARTICIPANT

G. Saik'uz Youth Photovoice Project: Interviews
Information Sheet for Youth Participants (for those over 18)

Research Project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz".*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en
Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.
Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

Purpose of the research

The purpose of this overall study is for Saik'uz First Nation youth to describe connections to the land and how these influence individual and community well-being. Several community groups would like input from youth to build into future programs and initiatives. Lead by Jasmine Thomas, the research team will be working with a multimedia type of research to help youth communicate their ideas to the community and others. This method is called "photovoice". In this next phase of research, we would like to conduct in-depth interviews with you about the same themes.

Why was I selected?

You have been selected as a potential participant because you have already been involved in the ongoing activities of the Saik'uz Youth Photovoice project.

What will happen?

Interview: After the Photovoice sharing circles (which you are taking part), we would like to talk to you separately about your perspectives on the connections between the land and health in your community. We will also be talking about the photos that you took for the Photovoice project. Each interview will take no more than 45 minutes. The Community Research Advisor, Jasmine Thomas and researcher, Lindsay Beck, will ask you these questions and record your answers on paper and/or with a digital recorder. These interviews will take place in September 2012.

Permission?

If you choose to be in this interview, the community research advisor will meet with you to get your written consent for participation in the study.

Who Will Know?

If you consent, information from the interview will be recorded by audio and written notes by the researcher. You will not be identified in any recorded data or information that goes out to the public. You will be referred to using a pseudonym (made up name) of your choice. Should you wish to be named and waive your right to privacy and anonymity, you will be required to provide written evidence, witnessed by a third party, to this effect. Should you consent to being recorded by audio for the purpose of data collection, you will be given the choice whether or not you consent to the sharing of these recordings in representations of the research such as presentations and publications. Consent for this sort of sharing will not be assumed and will be obtained on an individual basis prior to such use of your voice recordings. After the interviews you can review your answers, which will be written on paper, if you want to. If you decide that you do not want what you said in the interview to be used in the final results the research team will not use the information.

All electronic or multimedia data collected during this study will be downloaded and stored on a secured hard-drive (not connected to the Internet). All information and text that you provide will remain confidential and

securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC for 5 years as well as with the Saik'uz First Nation. After the 5-year period, all UNBC data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations. The findings of this project will be made available to you at your request upon the completion of the study.

It's your choice:

It is your choice to participate. You may stop being in the study at any time, and any information you provided up to that point will also be withdrawn. You may ask questions at any time. If there are issues that are upsetting for you, we will help find a professional for you to talk to. We want to thank you for participating in this study. A $500 gift of appreciation will be given to the Youth and Elders Council to go toward future initiatives.

Risks and Benefits:

All data collection will take place only after you are made fully aware of the study, and after informed consent is obtained. Although a minimal risk, reflection about certain issues may cause stress or other negative emotional responses. Potential benefits of participating in the study include being a part of a positive change process and group building activity and to provide input or be a part of possible programs, strategies and next steps for youth in Saik'uz.

Questions:

If you have questions please call our community research advisor Jasmine Thomas on her cell phone at _____ or email her at _____. You can also call Lindsay Beck on her cell phone at _____ or email her at beckl@unbc.ca. Her supervisor, Dr. Margot Parkes can be reached at her office by email: parkesm@unbc.ca or by phone: 250-960-6813. If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

Thank you for your interest!

H. Saik'uz Youth Photovoice Project: Interviews
Youth Participant Consent Form (for those over 18)

Title of Study: *Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en

Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.

Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

To be completed by the research participant: **Circle Yes or No**

1. Do you feel you have received sufficient information to participate in this study?   Yes   No

2. Have you received and read a copy of the attached Information Sheet?   Yes   No

3. Do you understand the benefits and risks involved in taking part in this research study?   Yes   No

4. Have you had an opportunity to ask questions and discuss this study with a member of the research team?   Yes   No

5. Do you understand that you are free to refuse to participate or withdraw from the study at any time? You do not have to give a reason and it will not affect you. Any data or information provided prior to this point will be discarded at this time.   Yes   No

6. Has the issue of confidentiality been explained to you? Do you understand who will be able to see the information you provide?   Yes   No

7. We will record audio during the interview so that we can hear the interview again. Do you wish to be audio–recorded?   Yes   No

8. Do you give permission for the information you provide to be shared in future presentations and publications   Yes   No

9. Do you give permission for the use of full quotations in the dissemination of results?   Yes No

Please note that all information and text that you provide will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC as well as with the Saik'uz First Nation. During this time the community research advisor (Jasmine Thomas), researcher and her supervisor, Dr. Margot Parkes, would be the only individuals with access to the

raw data. Lindsay Beck will be transcribing (typing out the recorded discussions) of all of the workshops and sharing circles. After the 5-year period, all data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations.

If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

I agree to take part in this study.

Signature of Research Participant: _____

Printed Name: _____

Date: _____

I have explained the nature and parameters of this study to the participant and believe they have understood.

Signature of Researcher: _____

Date: _____

THE INFORMATION SHEET IS ATTACHED TO THIS CONSENT FORM AND A COPY IS GIVEN TO THE RESEARCH PARTICIPANT

I. Saik'uz Youth Photovoice Project: Interviews
Information Sheet for Parents/Guardians (if youth is under 18):

Research Project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz".*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en
Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.
Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC.

Purpose of the research

The purpose of this overall study is for Saik'uz First Nation youth to describe connections to the land and how these influence individual and community well-being. Several community groups would like input from youth to build into future programs and initiatives. Lead by Jasmine Thomas, the research team will be working with a multimedia type of research to help youth communicate their ideas to the community and others. This method is called "photovoice". In this next phase of research, we would like to conduct in-depth interviews with your child about the same themes.

Why was my child selected?

Your child has been selected as a potential participant because they have already been involved in the first phase and ongoing activities of the Saik'uz Youth Photovoice project.

What will happen?

Interview: After the Photovoice sharing circles which your child is taking part, we would like to talk to your child separately about their perspectives on the connections between the land and health in their community. We will also be talking about the photos that they took for the Photovoice project. Each interview will take no more than 45 minutes. The Community Research Advisor, Jasmine Thomas and researcher, Lindsay Beck, will ask you these questions and record their answers on paper and/or with a digital recorder. These interviews will take place in September 2012.

Permission?

If you would like your child to participate, and your child chooses to be in the study, the community research advisor will meet with you and your child to get written consent for participation in the study.

Who Will Know?

If you and your child consent, information from the interview will be recorded by audio and written notes by the researcher. Your child will not be identified in any recorded data or information that goes out to the public. Your child will be referred to using a pseudonym (made up name) of their choice. Should your child wish to be named and waive their right to privacy and anonymity, they will be required to provide written evidence, witnessed by a third party, to this effect. Should your child consent to being recorded by audio for the purpose of data collection, they will be given the choice whether or not you consent to the sharing of these recordings in representations of the research such as presentations and publications. Consent for this sort of sharing will not be assumed and will be obtained on an individual basis prior to such use of their voice recordings. After the interviews your child can review their answers, which will be written on paper, if they want to. If your child decides that they do not want what they said in the interview to be used in the final results the research team will not use the information.

All electronic or multimedia data collected during this study will be downloaded and stored on a secured hard-

drive (not connected to the Internet). All information and text that your child provides will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC for 5 years as well as with the Saik'uz First Nation. After the 5-year period, all UNBC data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations. The findings of this project will be made available to your child at their request upon the completion of the study.

It's your choice:

It is your and your child's choice to participate. Your child may stop being in the study at any time, and any information they provided up to that point will also be withdrawn. You and your child may ask questions at any time. If there are issues that are upsetting for your child, we will help find a professional for them to talk to. We want to thank your child for participating in this study. A $500 gift of appreciation will be given to the Youth and Elders Council to go toward future initiatives.

Risks and Benefits:

All data collection will take place only after you and your child are made fully aware of the study, and after informed consent is obtained. Although a minimal risk, reflection about certain issues may cause stress or other negative emotional responses. Potential benefits of participating in the study include being a part of a positive change process and group building activity and to provide input or be a part of possible programs, strategies and next steps for youth in Saik'uz.

Questions:

If you or your child have questions please call our community research advisor Jasmine Thomas on her cell phone at _____ or email her at _____ . You can also call Lindsay Beck on her cell phone at _____ or email her at beckl@unbc.ca. Her supervisor, Dr. Margot Parkes can be reached at her office by email: parkesm@unbc.ca or by phone: 250-960-6813. If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

J. Saik'uz Youth Photovoice Project: Interviews
Parent/Guardian Consent Form (to be signed if youth is under 18):

Title of Study: *Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz*

Community Research Advisor: Jasmine Thomas, Saik'uz Whut'en

Researcher: Lindsay Beck, Master of Science Student in the School of Health Sciences Program, University of Northern BC.

Supervisor: Dr. Margot Parkes, Assistant Professor, Health Sciences Programs, University of Northern BC

To be completed by the research participant: **Circle Yes or No**

1. Do you feel you have received sufficient information to allow your child to participate in this study?   Yes   No

2. Have you received and read a copy of the attached Information Sheet?   Yes   No

3. Do you understand the benefits and risks of taking part in this research study?   Yes   No

4. Have you had an opportunity to ask questions and discuss this study with a member of the research team?   Yes   No

5. Do you understand that you are free to refuse the participation of your or child or to withdraw him or her from the study at any time? You do not have to give a reason and it will not affect you or your child. Any data or information provided prior to this point will be discarded at this time.   Yes   No

6. Has the issue of confidentiality been explained to you? Do you understand   Yes   No
who will be able to see the information you provide?   Yes   No

7. We will audio record during the interviews. Do you allow your child to be audio-recorded?   Yes   No

8. Do you give permission for the information your child provides to be shared in future presentations and publications   Yes   No

9. Do you give permission for the use of full quotations from your child in the sharing of results?   Yes   No

Please note that all information and text that your child provides will remain confidential and securely stored in a locked filing cabinet in Dr. Parkes' lab at the University of Northern BC as well as with the Saik'uz First Nation. During this time the community research advisor (Jasmine Thomas), researcher and her supervisor, Dr. Margot Parkes, would be the only individuals with access to the raw data. Lindsay Beck will be transcribing (typing out the recorded discussions) of all of the workshops and sharing circles. After the 5-year period, all data (electronic, notes, or tape) will be destroyed through deletion of data and shredding of files. The only holder of Data after 5 years will be the Saik'uz First Nation (the Data custodian) where it will be safely archived for access by First Nations.

If you have any concerns/complaints about this project, you may also call the Research Ethics Board at 250-960-6735. The Research Ethics Board is not linked to this project.

I agree for my child to take part in this study.

Signature of Parent/Guardian (if under 18): _____

Printed Name: _____

Date: _____

I have explained the nature and parameters of this study to the participant and believe they have understood.

Signature of Researcher: _____

Date: _____

THE INFORMATION SHEET IS ATTACHED TO THIS CONSENT FORM AND A COPY IS GIVEN TO THE RESEARCH PARTICIPANT

K. Saik'uz Youth Photovoice Project: Privacy Waiver

Saik'uz Youth Photovoice Project (participants over 18)

I _____ (full name), wish to be named and waive my right to privacy and anonymity for the purposes of the research project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz"*. I understand that this means that my real name will be used in discussions about what was said during the interviews and the sharing circle and in the final results of the research, any publications, posters reports, or events related to the research.

Signed: _____   Date: _____

Witness: _____   Date: _____

Saik'uz Youth Photovoice Project (participants under 18)

I _____ (full name), allow my child _____ to be named and waive their right to privacy and anonymity for the purposes of the research project: *"Connections between Land and Wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz"*. This means that my child's real name will be used while discussing what they said in the interviews and the sharing circle and in the final results of the research, any publications, posters reports, or events related to the research.
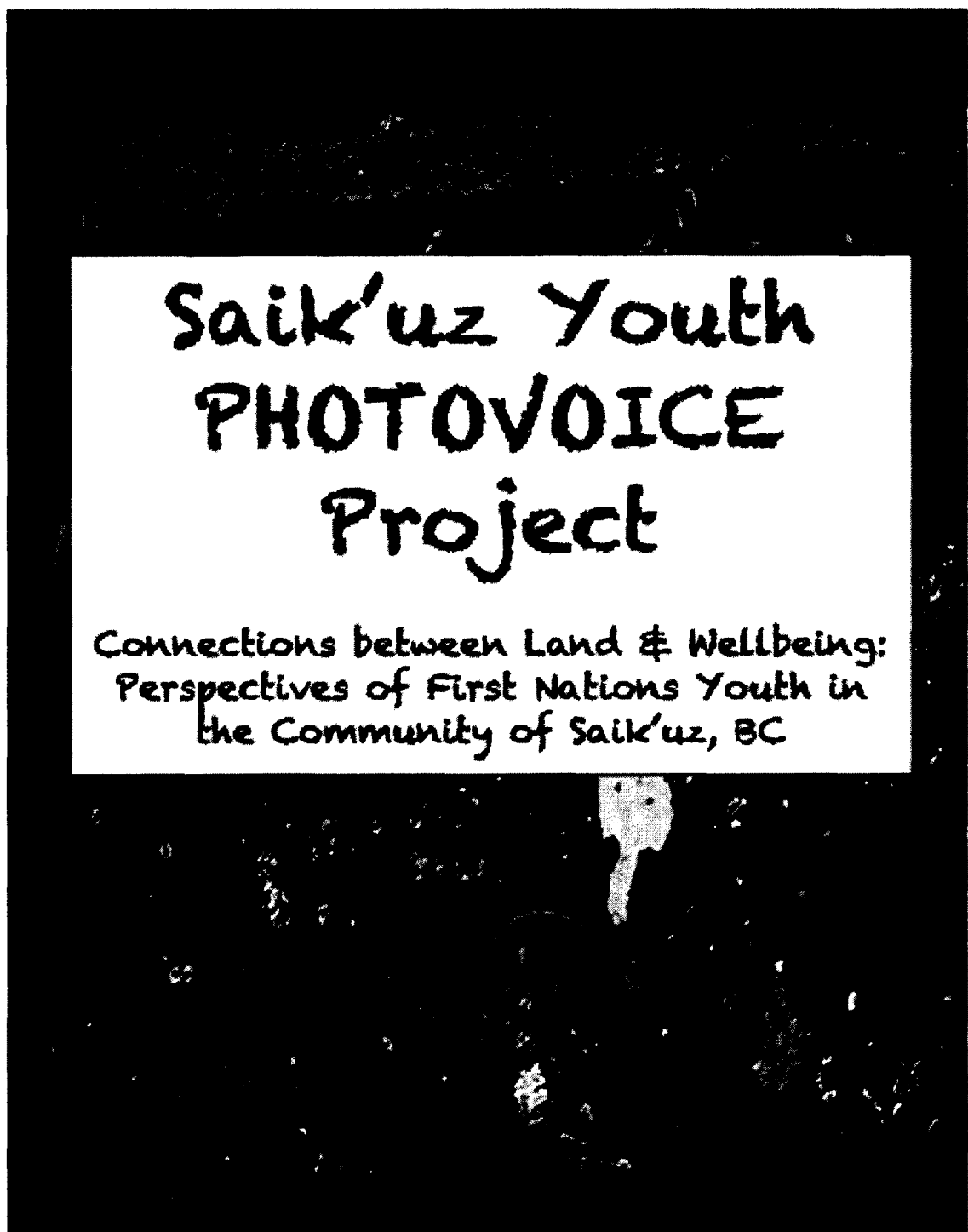
Signed: _____   Date: _____

Witness: _____   Date: _____

Saik'uz Youth
PHOTOVOICE
Project

Connections between Land & Wellbeing:
Perspectives of First Nations Youth in
the Community of Saik'uz, BC

Questions to Think About While Taking Your 20 Photos

PAST

From YOUR perspective, what USED TO BE the connections between the LAND and WELLBEING for people of Saik'uz?

PRESENT

Today, what is your connection to the land, how does that relate to your wellbeing (or that of your community)?

FUTURE

What could the connection between the land and wellbeing look like in the future? Also think of what could revitalize/revive/enhance the connection to the land for you in your community?

Photovoice Frequently Asked Questions:

How many photos do I take?	20 total. Each one with a description.
How long do I have?	About a month
Where?	Saik'uz traditional territory
Who do I give my camera to when I'm done?	Bring your camera to the Reflection/Storytelling Workshop and we will download your photos there.
Can I take photos of others?	Yes, but get their consent (they need to read and sign the consent form.
Can I take photos of people under 18?	No
Can I take a photo of a business?	Yes, but you must get a manager's consent if you can tell what business it is.
Can I bring in photos from the past?	We prefer current experiences, but you can bring 1 or 2 if they represent a story you want to share.
Who do I ask if I have questions or comments?	
What if the photo I am about to take could get me in trouble, or put me in a dangerous situation?	No photo is worth getting in trouble or hurt for. Avoid getting into any situations that may harm you just for a photo.

Photo Consent Form

Connections between Land and wellbeing: Perspectives of First Nations Youth in the Community of Saik'uz

Community Contact: _____

Phone Number: _____

Background: We are exploring the connections between the land and well-being. We are taking photographs to understand this better. These pictures will be analyzed and used in group discussions with researchers and participants to help talk and learn about the connections with the land. Selected photos will also be used to talk about the study, at presentations, at conferences or journals. We may also display them at a community event. Your name will not be attached to the pictures. The pictures will not be used for advertising.

CONSENT FORM

Consent:

"I, _____, agree that my photograph can be used for the following:

☐ Group discussions as part of this project

☐ Community events, presentations, publications, scientific journals in relation to this project.

Signature of Subject _____

(Printed Name) _____

Date: _____

Appendix V – Protocol for Workshop

Introduction (20 minutes)

- Have participants form a circle, introduce the research advisor and myself and welcome participants to group discussion (prayer?). Have participants introduce themselves briefly as well in a clock-wise manner.
- Jasmine- Provide a brief description of the study and how it fits into ongoing youth initiatives. (Given the upcoming, important pipeline activities, climate change etc. it is also important to think about what is happening right here in our traditional territory, in our communities on our lands. Something about health. Photography is a great way to explore these things, to learn about our lands and our communities and ourselves).
- Explain the purpose of todays workshop, which is to a) become familiar with Photovoice protocol b) receive a brief lesson on photography c) Discuss the themes of the project.
- Remind them that the discussion will last approximately 90 minutes.
- Have participants fill out a standard form to collect basic information (i.e. name, age, sex, community).

Photography 101 (30 minutes)

- Professional photographer to review basics of photography.
- Hand out the cameras

Photovoice

- Give brief intro about Photovoice. Images captured through Photovoice tell stories that identify concerns, depict struggles or show a particular view of a community. Through photographs, youth (who often don't have a voice) offer insight and teach others about their experiences. Photovoice is not just about individuals capturing images. It is also about discussing and critically reflecting on those images. This process can aid youth members in the community to understand that they have a right to have a say in shaping the decisions that influence their health and the health of their family and friends. This means that the information and evidence is not created simply for the sake of creating knowledge, but it is created for the purpose of social action and social change. It is not enough just to examine community problems and struggles; there must be energy put toward identifying community solutions and doing what is needed to implement those solutions.
- Group discussion about risk, safety and ethics of taking photographs.
- Hand out package including:
  - Pen
  - Instructions
  - 10 copies of Participant Photo Reflection Log
  - 10 copies of the consent form for any potential photographees over 18 years.

- We are doing this part last because we want you to go away with lots of ideas! This is the most important piece! Begin discussion that will prompt reflections on land and the connection to health. Hand out pieces of paper and ask the participants to draw their answers to the questions (2 minutes each and then discuss).
    - What does the 'land'/environment/ecosystem mean to you?
    - What does health mean to you? *WHO definition?*
    - How does the 'land' make you healthy? Sick?
    - How are you connected to the land? How would you like to be connected?
- Photographer to go over metaphors, ideas for photos. Alternatives (i.e. If you have an old photo that really represents something for you, feel free to bring it).
- Any questions?

Closing Remarks (10 minutes)

- I will arrange my planned check-in phone call 2 weeks later at which time I will arrange a date/time/location for the pick up of the camera/logs (~1 month later).
- I will ask the participants if they have any questions.

Appendix VI – Protocol for Sharing Circles

Up until this point, participants were asked to take up to 20 photos. They will have chosen their 4 photos and will be asked to talk about them. They will be printed ahead of time.

1. Welcome everyone and thank them for coming.
2. Ask everyone to please leave their captions & other remaining photos with us. 2. Remind them that the discussion will last approximately 60 minutes or more.
3. Discuss that the session is being audio-taped. Remind participants that I will not be putting real names on any comments (unless they want).
4. Remind them that complete confidentiality is not always possible in group discussions but that comments made by participants should not be discussed outside of group.
5. Smudge or Song. Pray for an open mind and an open heart, for the ability to articulate well, to speak, to hear, and see in a good way. Find a way of inviting open minds and hearts and wishing for an atmosphere where everyone is able to speak, listen, and participate in a good way.
6. Ice-breaker: facilitator/teacher/leader sits in the middle of the circle and has everyone draw him, giving the group 5- 10 minutes. Then, the drawings are taped on a wall or on a table and everyone can look at them and share comments and chuckles. Some people are kind. Others can be more realistic and catch those parts and angles that are not very flattering! It can be explained that the lesson is that while none of the pictures are the same, they all represent one thing, and each drawing represents the subject according to each person's perspective and talent. And NONE of them is wrong. It is all about having had a different perspective. Our opinions, beliefs and views are like that -they are different because we all have had different life experiences in different places at different times. The group is then asked to remember this exercise while circle work is being done.
7. Explain how the circle works: A "talking" rock or stick is used, and only the person who is holding the rock or stick can talk. The others listen carefully and respectfully. There can be no commenting or cross--talking or side-- talking. People are asked to try not to formulate what they are going to say but to just listen, to have faith that when the time comes for them to talk, when the rock reaches them, they will say what has to be said. The rock will travel around the circle in the clockwise direction depending on whose Land you are on. In this way, everyone gets to hold the rock, gets a chance to speak, to be heard. Everyone is encouraged to participate, but no one is forced to, the stone can be passed onto the next person. The participants are encouraged to speak from their own experiences, to share their feelings so that people won't be judging or trashing anyone else or anyone else's views.
8. Make sure participants have their photos in front of them.
9. The following questions will be read out loud and posted somewhere in the room before beginning:
   - PAST: From YOUR perspective, what USED TO BE the connections between the LAND and WELLBEING for people of Saik'uz?

- PRESENT: Today, what is your connection to the land, how does that relate to your wellbeing (or that of your community)?
- FUTURE: What could the connection between the land and well--being look like in the future? Also think of what could revitalize/revive/enhance the connection to the land for you in your community?

10. The talking stick will then be handed to the next participant. They will start with their first picture and explain the meaning and history behind it with the guidance of the initial questions.
11. The talking stick will be passed to their right and the next participant can comment/add to what has already been discussed and/or discuss their own photo(s).
12. Invite them to come to the final workshop where the feedback activity will be discussed.
13. Thank participants for volunteering their time and sharing their stories.

Appendix VII – Youth Participant Semi-Structured Interview Guide

The following guide represents the questions and topic areas to be covered in an interview with the youth participants. The protocol allows for a semi-structured, open- ended and conversational process. The interviewer will be open to topics or themes raised by the participants in the process and extra follow-up questions may be added as the interview progresses.
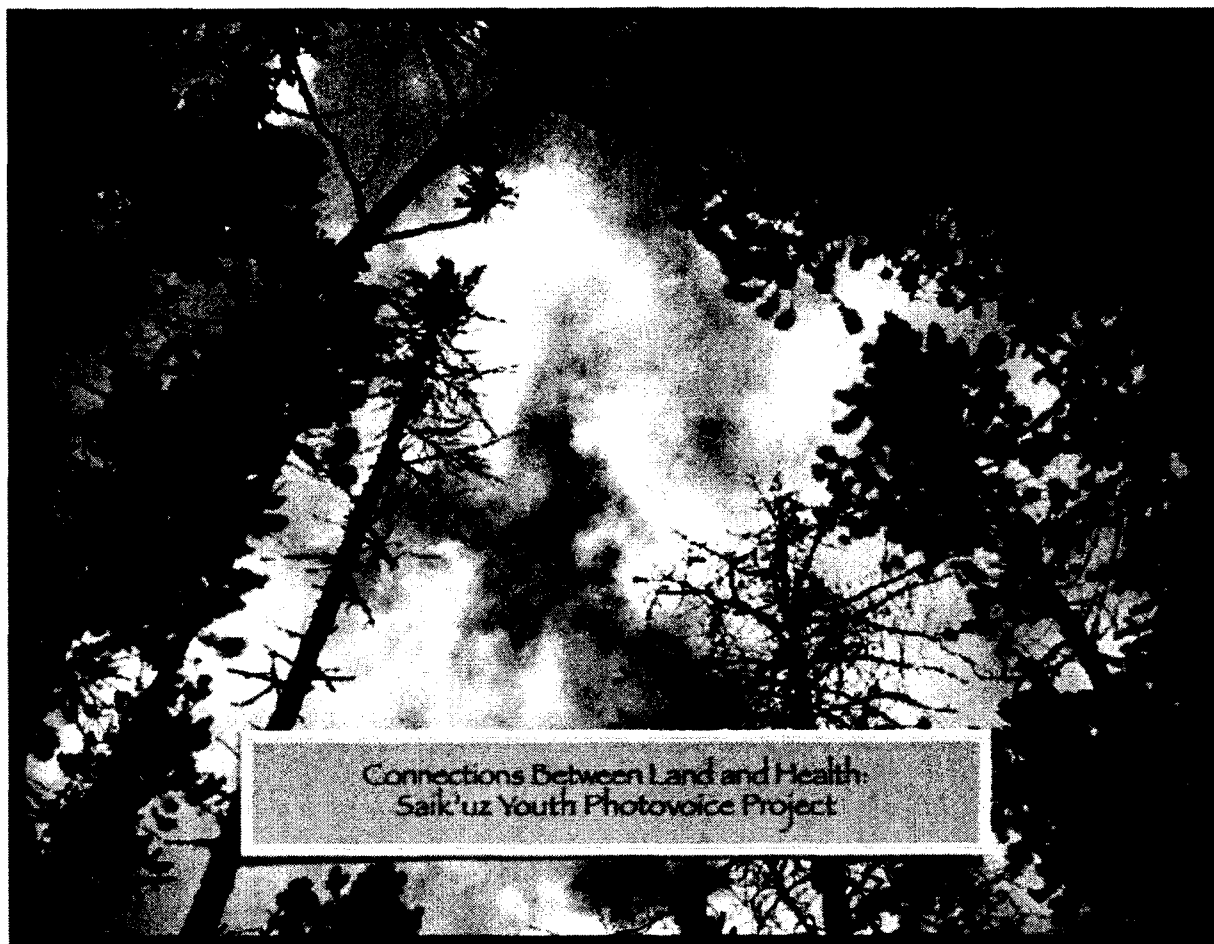
14. Thanks again for agreeing to participate in this interview.
15. As you know, I'll be recording our conversation on this tape recorder and taking some notes. Are you still willing to participate in this interview?
16. If there is something you don't want to talk about for whatever reason, that's totally fine. Let me know if you say something that you don't want written down and we can take it out. Even after you have completed the interview, you can decide that you do not want what you said to be used and we will not use your information. The best way to do this is by reviewing the transcript, let me know if you would like me to send you a copy after the interview afterwards. **Let's just review the questions that guided you while you took your photos:**
    - (PAST) From your perspective, what used to be the connections between the land and wellbeing for people of Saik'uz?
    - (PRESENT) Today, what is your connection to the land, how does that relate to your wellbeing (or that of your community)?
    - (FUTURE) What could the connection between the land and wellbeing look like in the future? Also think of what could revitalize/revive/enhance the connection to the land for you in your community? **So now, let's look at your pictures For each photograph:**
17. Where did you take this picture?
18. Tell me what you see here.
19. What is happening?
20. What does it mean?
21. How does this relate to land and health?
22. How does this relate to Saik'uz First Nation?
23. Why does this problem/strength exist?
24. What can we do to change it/protect it?
25. **Follow-up questions:**
26. Are there other pictures that you would like to share and talk about? e.g. pictures from the past or pictures that you would have liked to use for the study but were unable to take for some reason?
27. Which 4 photos would you want displayed at a community event?
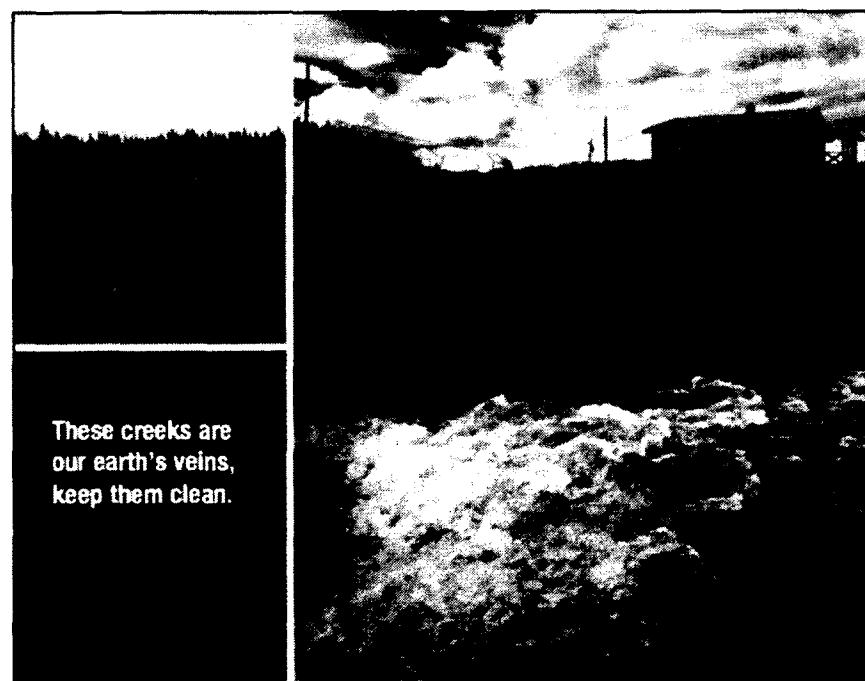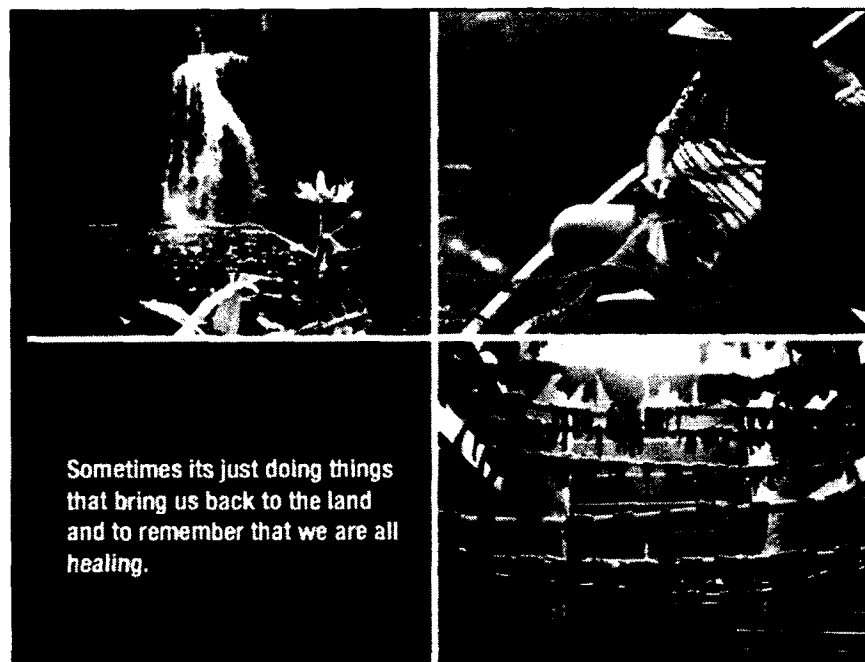
Appendix VIII – Post Project Follow-up Activities

A. List of Post Project Follow-up Activities

Activity	Description	Date	Location
Poster Presentation	International Ecohealth Conference	October 2012	Kunming, China
Poster Presentation	Northern Health Research Days Conference	November 2012	Prince George, BC
Poster Presentation	UNBC 8th Annual Graduate Conference	March 2013	Prince George, BC
Instagram Account	Creation of an Instagram account to display quotes and photos, which connects to social media	March 2013	Internet
Photo Album	Production of a photo album highlighting quotes and photos (using Apple iPhoto)	March 2013	N/A
Project Presentation at Saik'uz Career Fair	Display of photo album, quotes and photos at the Saik'uz First Nation Career Fair and presentation of album to Chief Stanley Thomas.	March 2013	Saik'uz First Nation
Project Presentation at Regional Stewardship Forum in Vanderhoof	Co-presentation of findings by Lindsay Beck and Jasmine Thomas	May 2013	Vanderhoof, BC
Ecosystem Approaches to Health Field School SFN site visit	Guided tour of SFN scared sites with Chief Stanley Thomas, Jasmine Thomas and Minnie Thomas (building on connections from the Photovoice Project)	June 2013	Saik'uz Traditional Territory
Mini photo exhibition at Grand Opening of Sophie's Garden at the BC Cancer Agency Centre for the North	Display of quotes and photos and a project poster	June 2013	Prince George, BC
Photo display at the Saik'uz Band Office	Enlarged prints and quotes now on display at the Saik'uz Band Office	Ongoing	Saik'uz First Nation
2013 SFN Culture Camp	Plans for building on project momentum at the 2013 culture camp- to be determined	August 2013	Saik'uz First Nation
Watersheds and Wellness: We Are All Connected	Jasmine and I participated in informal discussions with people from Takla Lake First Nation and Wet'suwet'en regarding potential future initiatives related to watersheds and wellness.	Ongoing	Northern BC

B. Project Photo Book (Front Cover)

Connections Between Land and Health:
Saik'uz Youth Photovoice Project

C. Photo Exhibition Example

Sometimes its just doing things that bring us back to the land and to remember that we are all healing.

These creeks are our earth's veins, keep them clean.

Saik'uz Youth Photovoice Project:
Making the Connections Between Land & Health

ABOUT THE PROJECT

What did we want to know?
- How do Saik'uz youth view their relationship with the land and its influence on individual and community well-being?
- What pathways and opportunities exist for SFN youth to heal, foster and improve connections to the land?

What is photovoice?
- People take pictures around their community to identify strengths and concerns, promote dialogue and affect policy. Photovoice brings "seldom-heard ideas, images, conversations, and voices into the public forum".

WHAT WE DID
- Four youth took part alongside two Elder mentors from Saik'uz First Nation
- Photography training workshop
- 6 months taking photographs (and writing captions) around their traditional territory and beyond.
- Sharing circles and interviews to gather their stories.
- Came up with youth-led ways to share the findings in a variety of ways, including through photo exhibitions, Instagram, digital stories, photo albums and community events.

YOUTH PERSPECTIVES ON CONNECTIONS BETWEEN LAND & HEALTH
- Land was more than just a physical space or geographic location, it was conceptualized in social, spiritual, emotional ways.
 - Land provides locations for place-based activities (e.g. stewardship, hunting), it houses knowledge, memories and stories, and it provides direct and indirect sources of sustenance and healing. All are closely linked and allow for building of social relationships or community and cultural identity, which are directly related to health and well-being.
- Resources from the land (such as medicines, water) provide a more direct link to health and well-being through their holistic healing properties. Being on the land, or in spiritually significant places can contribute directly to health, healing and well-being.
- The youth also identified many issues that disrupted the health enhancing pathways of the land: environmental degradation (e.g. from industry and development) and rapid socio-cultural changes.
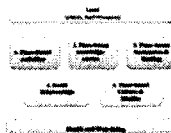
- This figure depicts the interconnected and interrelated youth-identified pathways between land & well-being.

CONCLUSIONS & NEXT STEPS
- The perspectives from the participants in this project indicated that the land is extremely important for their health and well-being
- The findings challenge us to think about ways to integrate 'land' or ecosystem considerations into the way we think about, plan and implement health, environmental and community programs for First Nations youth.
- The knowledge, photos, materials and momentum produced through this process will be built into ongoing work being undertaken in the community of Saik'uz revolving around water, sovereignty, and other youth capacity building initiatives.

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E. SFN Photovoice Instagram Account Screen Shot