EXPLORING INDIGENOUS-LED COLLABORATIVE STEWARDSHIP IN A WATERSHED CONTEXT: PRESPECTIVES FROM THE NECHAKO HEADWATERS

by

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ABSTRACT

This research explores collaborative stewardship on a watershed scale and how local insight can assist in shaping collaborative approaches to culturally appropriate stewardship. The Cheslatta Carrier Nation (Cheslatta) have called the upper Nechako watershed home since time immemorial. They enjoyed a self-sustaining and peaceful existence until forced to leave when the waters started rising as their shores were flooded to create a reservoir. Regardless of adversity, Cheslatta have worked with passion and tenacity to restore the health of the upper watershed and the well-being of their people. Guided by Indigenous research approaches and appreciative inquiry, this research reviewed literature, documents and interviews with residents of the upper Nechako. The gathered data was then analyzed and themes were identified. The themes identified offer insights into local perspectives on stewardship, pointing especially to the ways reconciliation and community well-being can all be enhanced through cooperative and collaborative methods.

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LIST OF ACRONYMS:

BC: The Canadian Province of British Columbia
CCN: Cheslatta Carrier Nation
FBC: Fraser Basin Council
FLNRORD: Ministry of Forests, Lands, Natural Resource Operations and Rural Development
IWRM: Integrated Water Resources Management
IWRG: Integrated Watershed Research Group
NEWSS: Nechako Environment and Water Stewardship Society
NWR: Nechako Watershed Roundtable
TEK: Traditional Ecological Knowledge
UNBC: University of Northern British Columbia
REB: Research Ethics Board

ACKNOWLEDGEMENTS

This thesis would not be possible without the incredible insight, perspectives and generosity of the Cheslatta Carrier Nation and residents of the Nechako. Thank you for your time, sharing your stories and allowing me to learn.

Thank you to my supervisor Dr. Margot Parkes who taught me so much throughout this four-year process. Notably to not leave a stone unturned, do the best work possible and how to apply "so what, now what?". Thank you to my committee members Dr. Agnes Pawlowska-Mainville and Scott Emmons for teaching me valuable aspects of this research and sharing knowledge to help me complete this journey.

I also want to acknowledge and share my gratitude for friends and family who have supported me. Thank you for the encouragement and providing me a distraction to rest my mind outside of the research. I am grateful to have such a wonderful group of people in my life.

CHAPTER 1: INTRODUCTION

This thesis documents community-based research exploring collaboration, stewardship and watersheds in central British Columbia. The research process was informed by decolonizing and appreciative methodologies and followed a qualitative research approach. The research was informed by literature, documents and data collected from local residents of the headwaters of the upper Nechako River and the traditional territory of the Cheslatta Carrier Nation. Combining the literature and documents with interview insights and perspectives from participants resulted in findings, discussion and implications and recommendations.

This research took place in central British Columbia during the time period of 2015 to 2018 and focuses on the people of the upper Nechako River located at the western reaches of the watershed: the Nechako headwaters. The upper Nechako headwaters are the traditional territory of the Cheslatta Carrier Nation (Cheslatta) peoples who called the area home for thousands of years. Settlers (people who have migrated to this part of the Province, usually of European decent) and Indigenous Dakelh peoples who call this region home have been both endured and benefited from of large-scale natural resource use. Forestry is a main staple of the economy; however, this thesis research focuses on a region directly impacted by a hydro development project which resulted in considerable landscape and socio-economic shifts for the local people. This project has had a particularly large effect on the Cheslatta peoples who, in the 1950's, were forced from their homes as a result of the hydro development project but have been determined to regain power and presence over their territory while reconciling and healing.

The hydro eclectic development, Rio Tinto Alcan's Kemano Project, created a large reservoir now referred to as the Nechako Reservoir. The health and well-being of the Cheslatta was altered the day this became a reality for the people who called these shores home. The health

of landscapes (land and water) are directly interconnected to the people who call that landscape home (Richmond & Ross, 2009). The Millennium Ecosystem Assessment (MEA) (2005) studied consequences of ecosystem change as it relates to human well-being and through this illustrated the importance of landscape management and stewardship. The MEA found that ecosystems influence human health and well-being through several components including access to basic material for a good life, freedom and choice, health and wholesome social relationships (MEA, 2005). These components and connections between humans and the ecosystems they depend on requires broader approaches that account for the interconnectedness, interdependencies and reciprocal relationships that exist between environments and inhabitants (Parkes & Horwitz, 2009).

In British Columbia (BC), Canada, land and water-use planning, decision-making, governance and management processes have been developed and executed with minimal attention to integrating community, health, and the environment (Gillingham, Halseth, Johnson and Parkes, 2016). Integrative and collaborative approaches are becoming increasingly utilized for land and water water-use planning, decision-making, governance and management (Clapp & Mortenson, 2001) and are helping to provide new insights that also underscore the need for a more fulsome approach. Increased demands for the extraction, allocation and stewardship of land and water resources alongside the improved legal recognition of Indigenous rights and title is creating fertile ground for innovative methods for local, collaborative and integrative approaches to natural resource management (Clapp & Mortenson, 2001; Cronin & Ostergren, 2007).

Informed by new collective approaches to watershed stewardship, this research explores the connections between Indigenous stewardship, collaborative approaches to land and water management and watershed- based integrated water resource management (IWRM) while exploring the perspectives of participants who live in the upper Nechako. Guided by an

Indigenous research methodology (specifically an Indigenous community-based approach to research informed by Smith (1999) and Wilson (2008)) and the appreciative inquiry method, this research explores how the Cheslatta are advancing their own objectives by increasing their presence on the landscape through openly sharing their knowledge, stories and insight in a novel 'arms open' approach. The Cheslatta history and current approaches to land and water stewardship provide extensive opportunities to explore the connections between stewardship, collaboration and IWRM in more depth.

This research was made possible through connections made as a graduate student at the University of Northern British Columbia (UNBC). I had the opportunity to be a research assistant (RA) working with my supervisor, Dr. Margot Parkes. One project this position allowed me to work on is the Nechako Watershed Portal. This tool, developed through the Integrated Watershed Research Group, is a geo-spatial tool for referencing places, memories, data or information to inform local decision making (IWRG, 2019). In conjunction with this project, the Cheslatta is in the process of creating their own portal to publicly display their archives.

Starting in November 2015, I was able to meet with Mike Robertson (Cheslatta senior policy advisor) and Jared Johnson (Cheslatta archivist) as both teams at UNBC and Cheslatta began discussions on the development of their portal project. This created a space for relationships to be built but also a place for myself to listen to community strengths, concerns, aims and objectives, which led me to the scoping stage of the research. My role as a research assistant in the community also enabled me to build connections with relevant members of the Cheslatta community who provided guidance and advice regarding participants (especially Mike Robertson, senior policy analyst for Cheslatta). This relationship is based on an agreed approach to communications and relations based on respect, reciprocity, relevance and responsibility, to ensure that the activities carried out with this relationship are beneficial and not harmful to the

beliefs and practice of both groups and are also delivered in a manner that is ethical for sharing Indigenous knowledge (Archibald, 2001).

Community support for this master's thesis was given support by Chief Corrina Leween on August 2, 2016 through a Letter of Support for this research to formally commence (Appendix A). This thesis will also be available to feed into a comprehensive community planning process that the Cheslatta community is in the process as of 2019.

1.1 Research Questions and specific objectives

This research is guided by the following questions:

Research question 1 (RQ1): How can local insight assist in shaping collaborative and integrative approaches to culturally appropriate stewardship in the context of the upper Nechako watershed?

Research question 2 (RQ2): What new insights can be learned from the Cheslatta Carrier Nation (Cheslatta) for moving towards culturally appropriate stewardship in a watershed context and understanding how this relates to the Cheslatta aims and objectives of reconciliation and community healing?

In order to answer these questions, the research was designed to address the following objectives:

Objective 1: To examine connections between Indigenous stewardship, collaborative approaches to land and water management and watershed-based integrated water resources management in the literature;

Objective 2: To seek perspectives and insights about the role of collaboration in culturally appropriate watershed stewardship;

Objective 3: To formulate place-based, locally informed recommendations to inform emergent strategies with the potential to enhance objectives of headwater stewardship in the Nechako.

1.2 Positionality and Locating the Researcher in the Research

It is important for the researcher to address and discuss positionality as it relates to the intended research. England (1994) discusses the position of researchers working and speaking on behalf of marginalized people or other cultures whom the researcher is not a member of.

I am a Caucasian female of European descent and third generation settler from the traditional territories of the Coast Salish First Nations, specifically the Lekwungen and Songhees territory (more recently referred to as Victoria, BC). Growing up my family traveled across the Province of BC to visit heritage sites as my father was managing the Heritage Branch for the BC Provincial government. Curiosity with Indigenous/settler relations was born through these years of travel and led to both my academic and personal path of moving to rural communities in BC and Yukon to work and study. These experiences I believe gave me space to learn a basic/foundational perspective and knowledge base to allow me to learn and absorb knowledge outside of the traditional western institutions I attended for formal schooling (primary, high school, university).

Guiding the research process of this study were the 4R principals of respect, relevance, reciprocity and responsibility. These principals were initially conceptualized by Indigenous scholars Kirkness and Barnhardt (1991). The 4 R's include respecting Indigenous cultures and communities by valuing their knowledge, showing relevance of research to culture and community, providing an exchange for mutual benefit through reciprocity and understanding and acting responsibly through engagement and participation (Kirkness and Barnhardt, 1991).

It is important to note that the text of this thesis does not give the reader the full experience I had during my thesis work. Efforts to document the knowledge of the participants is valuable in this research but only if the needs of the community are fully incorporated into the research process. Further the notion of "gathering" the perspective of Indigenous peoples is a challenge, while they work towards their own path of reconciliation, if the research process gives nothing back to the people or the community. This thesis attempted to make a contribution to on-going community initiatives and the thesis is given to the community as a resource. By documenting and sharing the voices, observations, perceptions, this thesis can demonstrate that local knowledge is a valuable source of local expertise that can complement existing understandings of related research in the upper Nechako as well as guide for future research.

1.3 Thesis Structure

Following this introduction, this thesis begins with the study context of the watershed, the hydro-electric project and the Cheslatta. Chapter 3 introduces literature and document review to explore connections between three main themes for this study: stewardship, collaborative and watershed-based approaches to natural resource management, followed by methodologies, research design and methods in Chapter 4. Chapter 5 presents the study findings primarily drawing on interviewee's voices/stories collected from people in the upper Nechako, including members of Cheslatta. Participant perceptions of collaboration and watersheds are highlighted, along with the four main themes that were identified. Chapter 6 is the final discussion drawing on a combination of synthesis of the literature, documents and interview findings. Implications and recommendations are shared and described.

After reflecting on the research and research process, it is important to note the limitations that can arise from a thesis structured in this way, which may also result in linear (and sometimes binary) forms of writing that may limit ways that different kinds of knowledge are

presented in relation to each other (e.g. perspectives from the literature are privileged in Chapter 3, and local voices arising from the research are not presented until Chapter 5). The thesis has been structured using a temporal format where, overall, earlier chapters reflect work done earlier in the research process. This approach recognises that there could be other ways to structure a thesis (e.g. adopting a more dynamic interaction between past and new knowledge). Despite some limitations of a temporal approach, effort has been made to value and respect local voices throughout the research process and the writing of this thesis.

CHAPTER 2: STUDY CONTEXT

2.1 Introduction

Prior to the introduction of the literature guiding this research, this chapter includes an introduction and contextual information to the Cheslatta Carrier Nation, their territory, and their history related to the Nechako watershed. By describing the Nechako Watershed, the Cheslatta Carrier Nation and the associated Kemano 1 project which in 1952 altered the watershed forever, the chapter provides contextual insight into the Cheslatta community, the people, and their current path to reconciliation with the Province of BC.

2.1 The Nechako Watershed and the Cheslatta Carrier Nation

This research focuses on the western portion of the Nechako watershed: the upper Nechako River or the headwaters of the Nechako. However, I would like to introduce the entire watershed for geographic, ecological and social context as the headwaters landscape and ecosystems are reflective of the greater watershed. The Nechako Watershed is located in central BC with the most eastern section of the watershed reaching Prince George where the Nechako River meets the Fraser River. The most western section is bounded by the Coast Mountains along the Pacific coast. To the south, it meets Tweedsmuir Provincial Park and to the north it reaches to the headwaters of the Stuart River past Takla Landing (see Figure 1). The Nechako Watershed spans an area of 52,000 km^2 (Benke and Cushing, 2005), with a size comparable to the country of Switzerland (Picketts, Parkes, and Dery, 2017). Hartman (1995) describes the watershed as having three main branches: the Stuart, the Stellako-Nadina, and the Nechako, with the Stuart River being the largest tributary to the Nechako River. The Nechako Watershed, which before it was dammed, was the largest tributary to the Fraser River. Since the damming, the Nechako accounts for approximately 20% of drainage into the Fraser River, second now to the Thompson Watershed (Evenden, 2004; Macdonald et al., 2007). The Fraser River, one of the

most productive salmon rivers in the world, is the single largest undammed river (by volume flow) and the third largest river overall in North America (Benke and Cushing, 2005; Dery et al., 2012).

Figure 1– Map of the Nechako Watershed with the locations of major First Nations and non-First Nations settlements (Picketts et al. 2017)

The watershed is mainly a coniferous forest landscape dominated by sub alpine biogeoclimatic zones (BC Min. of Forests, 1998). Coniferous trees include hybrid white spruce, Engelmann spruce, sub alpine fir, and lodge pole pine (BC Min. of Forests, 1998). Lilies, ferns, blueberries, Devil's club, black huckleberry, and grouseberry are historically the key plants of

this ecosystem (BC Min. of Forests, 1998). This region of the Province is home to many native birds and mammals, including caribou, wolves, and bears. More recently, moose have moved into the watershed in addition to all northern areas of BC, due to anthropogenic activities such as logging and clearing, which create the preferred moose habitat (Scheideman, 2018).

Forestry and agriculture are the largest industries in the watershed (Hartman, 1995; Matthews et al., 2015). The agriculture areas in the lowlands of the Nechako River produces manly grains (oats, barley, and wheat), hay, and cattle. Since settlers started arriving in the late 1800's and early 1900's, logging of a variety spruce and pine species have been a staple industry in the Nechako which was once part of the largest annual allowable cut in the Province. Since the outbreak of mountain pine beetle, the industry has dealt with lack of supply and uncertainty (Ministry of Forests, Lands, and Natural Resource Operations, 2012).

Within the boundaries of the watershed there are two regional districts, five municipalities, and fifteen First Nation territories/governments. The traditional territories that overlap with the watershed include Binche, Cheslatta, Lake Babine, Lheidli T'enneh, Ts'il Kaz Koh, Nadleh Whut'en, Nak'azdli Whut'en, Nee Tahi Buhn, Saik'uz, Skin Tyee, Stellat'en, Takla Lake, Tl'azt'en, Wet'suwet'en and Yekooche.

With a population of 65,510 people, the largest city is Prince George, located at the confluence of the Nechako and Fraser Rivers (Statistics Canada, 2016). The population of the Nechako watershed is estimated at 104,051 people accounting for approximately 2.2% of BC's population (Fraser Basin Council, 2015). The population of Cheslatta is 85 people according to Statistics Canada (2006) but other sources range from 140 (per comm. M. Robertson May 2019) to 340 (Wikipedia, 2019) to 350 (per comm. T. Jack April 2017).

2.1.1 The Cheslatta community and territory

For a minimum of 12,000 years, the Carrier people (also commonly known as the Dakelh people) have lived in the area now known as north central BC on the interior plateau (BC Assembly of First Nations, 2017). The Cheslatta are also identified with one of the five distinct Carrier linguistic dialects in the Athabaskan language family which are Cheslatta, Lheidli T'enneh, Nakazd'li, Saik'uz and Wet'suwet'en (Carrier Sekani Family Services, 2011). The traditional territory of the Cheslatta spans a large section of the upper Nechako watershed (see Figure 2).

The Cheslatta Carrier people lived on the shores of local lakes and rivers, where they enjoyed a self-sustaining and peaceful existence. According to Robertson (1995), the Cheslatta have hunted a variety of moose, bear, deer, caribou, and other game over different timeframes (as food systems change with time) and had extensive trap lines that provided food and furs. This bounty also was used as barter at local trading posts. Their traditional territory provided a large variety of plants and herbs such as berries and useful medicinal sources. Ling cod, whitefish, kokanee, char, and trout were plenty in the Cheslatta, Murray, and Ootsa Lakes, with more in other local lakes and rivers (Robertson, 1995). The Nechako River was an important source of salmon species such as chinook and sockeye. These fish were smoked and dried for subsistence during the long, cold winters (Robertson, 1995). Following the historic events described in Section 2.2, the Cheslatta Carrier Nation is now based at Southbank, on the south shore of Francoise Lake (23 km south of Burns Lake), and is most commonly accessed by a boat named the Francois Forester. There are three reserves covering 1,400 ha. A minimum of 5 km separates each of the parcels from each other. The nearest town to the Cheslatta territory is Burns Lake, located 250kms west of Prince George. Access to Southbank is 23km by road due south of Burns Lake to a ferry crossing on the ferry "Francois Forester" that travels across Francois Lake.

As introduced in Section 2.1, Statistics Canada (2016) records the population of Cheslatta 1, Indian reserve (IR1) is 84 people, although this number is likely not accurate due to the number of members that live off reserve. Personal communications with interview participants have membership noted between 140 and 350 people. Regardless of an exact number, the Cheslatta is a rather small community. On IR 1 there are 53 house dwellings on 11 square kilometres (Statistic Canada, 2016). The average age is 32 and 15 people identified their mother tongue as Carrier (Statistic Canada, 2016). They have 17 reserve land parcels (Cheslatta website, 2019) covering approximately 1400 square kilometres and the parcels are located at minimum 5 kilometres apart from each other (Assembly of BC First Nations, 2019). According to the Cheslatta Carrier Nation website:

> People of the Cheslatta Carrier Nation lived for centuries on the shores of Cheslatta and Murray Lakes. We enjoyed a peaceful, self-sustaining existence. Through the centuries, the Cheslatta people developed a complex system of roads, trails and paths connecting our small villages to the communities of Grassy Plains, Fraser Lake and Vanderhoof (CCN, 2019).

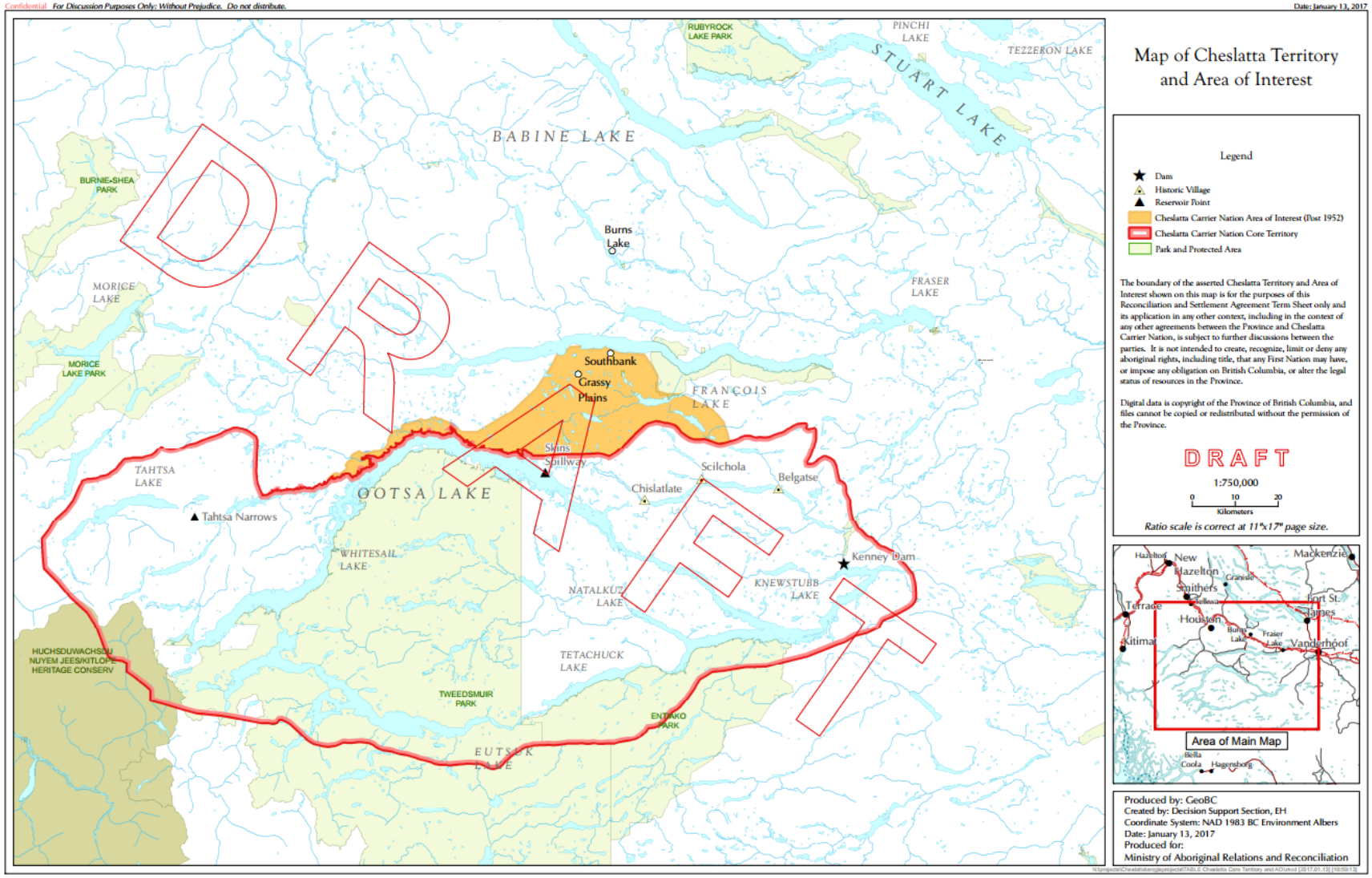

Figure 2 – Map of Cheslatta Territory and Area of Interest (Reproduced with permission of Cheslatta Carrier Nation: M. Robertson, personal communication.)

2.2 Kemano I - Alcan's Nechako River diversion project

Post-World War II, the BC Provincial government was considering the building of a large hydroelectric project along the Coast Mountains of BC. Several surveys were done and the government believed that the most feasible project would be a dam on the "Great Circle of lakes" in the Nechako headwaters with a dam placed at the "Grand Canyon" of the Nechako River creating a large reservoir (Sherwood, 2016). Through the Industrial Development Act and modifications to the Water Act in 1948, the BC Provincial government signed an agreement with Alcan (the Aluminum Company of Canada, now Rio Tinto Alcan) on December 29, 1950 (Christensen, 1995; Wood, 2013). This agreement gave Alcan a perpetual water license to all of the water in the Nechako watershed and the Cheslatta core territory for the purposes of building the Nechako Reservoir for a hydroelectric generation station to power the soon-to-be world's largest aluminum smelter being constructed on the coast in Kitimat, BC (Christensen, 1995; Picketts et al. 2017; Robertson, 1991).

In 1951, Alcan began the first phase of the Kemano I Nechako River diversion project (Figure 3). The project is comprised of three main components: a rock fill dam, a reservoir, and a penstock tunnel to carry water down to the turbine generators at sea level. The Kenney Dam was constructed in the Grand Canyon of the Nechako River, spanning 450 m wide (at the top) and standing 95 m tall (Christensen, 1995). During construction, the upper Nechako river suffered a 100% loss of flow and once the spillway was completed, flow resumed to 60%-70% (Day & Nelson, 2003). According to Day and Nelson (2003) when it was built, the Kenney Dam was the largest dam of its kind in the world. The earth filled dam created the subsequent Nechako Reservoir: a series of chained lakes and rivers shaped similar to a horseshoe, covering approximately 30% of the entire Nechako watershed's total area (Macdonald et al., 2007). At the

west end of the reservoir, a sixteen-kilometre tunnel carries water under the Coast Mountains and drops 792 m to sea level (15 times higher than Niagara Falls) to reach the hydroelectric turbines at the Kemano powerhouse (Macdonald et al., 2007). A power line transports the electricity to Alcan's aluminum smelter at Kitimat (Picketts et al. 2017; Sherwood, 2016).

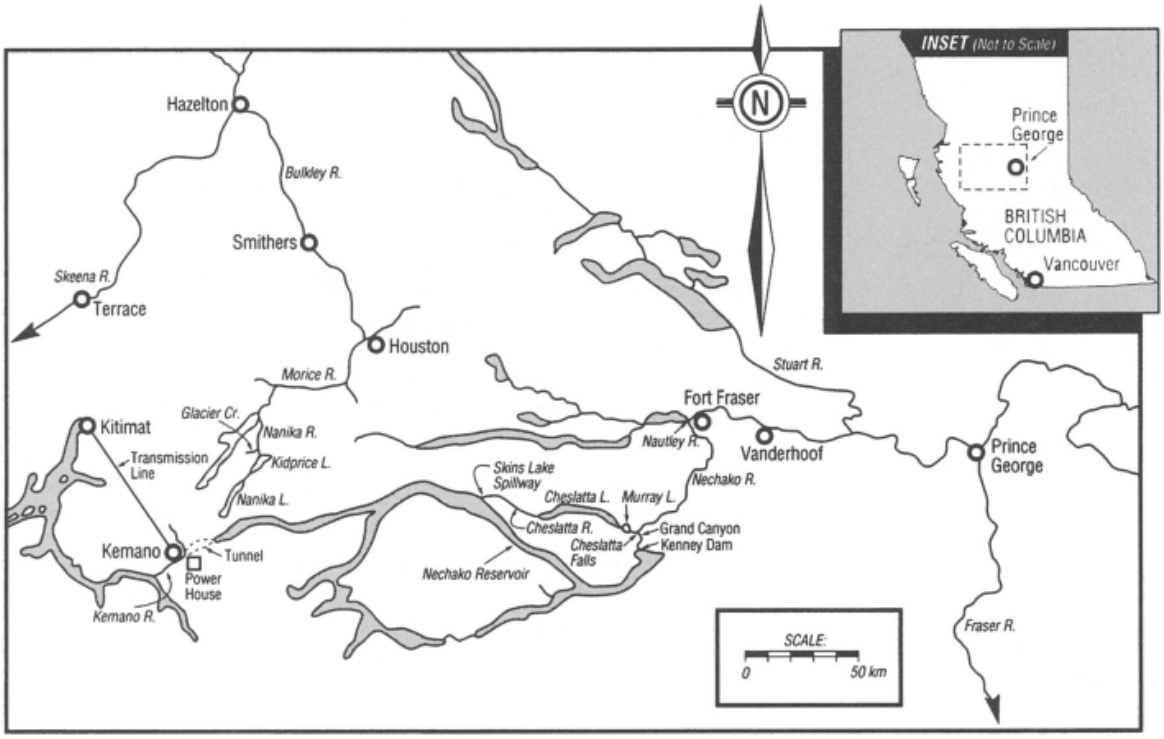

Figure 3 – The Kemano I Project Area (Windsor & McVey, 2005).

The Nechako Reservoir stores water from a drainage basin approximately 14,000 km^2 in size, and the reservoir itself spans 922 km^2 (Dery et al. 2012). This reservoir is now the man-made headwaters of three large rivers: Cheslatta, Kemano, and Nechako. The Kemano I mega-project has resulted in a massive landscape alteration dramatically changing the Nechako headwaters and river course. This has caused several negative impacts both up- and downstream. Hartman (1995) notes that it has resulted in alterations to the morphology of the river channel, fish and wildlife habitat, water health, and water flow direction. The following section expands on specific impacts in relation to the Cheslatta people.

2.2.1 Kemano impacts on Cheslatta

The impacts of colonization on the Cheslatta people have intensified considerably since the 1950s (Robertson, 1991; Christensen 1995; Larsen 2003a; Larsen, 2003b). Prior to 1952, the Cheslatta people lived on the shores of Murray and Cheslatta Lakes, moving between different camps and settlements depending on the season and what foods or materials were in season and/or available. Both the lands and waters in their territory were tremendously rich in food, fiber, and medicine. More specifically, Cheslatta Lake, where a majority of settlements once thrived, was converted into a spillway for the reservoir where continuous changes in flow results in an unstable and entirely disturbed interface of land and water today. Table 1 provides a timeline of key events in Cheslatta history relevant to the themes of this research. The table is not exhaustive and lists events pertaining to this study.

Contact with Department of Indian Affairs was minimal or non-existent until 1952 as the Nation was for the most part self-sustaining (Christensen, 1995; Robertson, 1991). As introduced in Section 2.2, the BC government granted the Aluminum Company of Canada (Alcan) the majority of water rights within the Cheslatta territory to build a hydroelectric dam (Christenson, 1995). This mega-project caused the upheaval of the culture and society of the Cheslatta people, who were forced to leave their villages with little notice and no consultation (Christenson, 1995; Larsen, 2003a; Robertson, 1995) As part of the project, the Cheslatta people were evicted from their land in 1952 by the Federal Department of Indian Affairs due to the agreement between Provincial/Federal governments and Alcan (Christensen, 1995; Wood, 2013). At that time, the project was two years in progress and the Cheslatta people were the most affected and last notified. The people were given ten days' notice of the flooding and were forced to evacuate their villages without taking a single item or possession along with them. They were removed from their traditional homelands and resettled on different properties on neighbouring

Wet'suwet'en territory to the north. For the most part, their possessions and homes were either stolen or burnt to the ground. Several Cheslatta settlements were then flooded, and now lay beneath fluctuating water levels as part of the Nechako Reservoir behind the Kenney Dam (Christensen 1995; Larsen 2003b; Robertson, 1991).

Due to the creation of the reservoir, the majority of traditional settlements, including cemeteries and a church – both of which provided a strong cultural link to history and family – were submerged under the rising waters (Bolsinger, 2015). Fluctuating waters that result from Alcan's reservoir management continues to damage Cheslatta territory; in June 2015 a cemetery was flooded, washing human remains downstream (see CBC News, 2015 for one example).

This mega-project completely unsettled the lives of the Cheslatta peoples forever as the shorelines of their villages slowly disappeared. Hartman (1995) states this controversial project, and the issues raised alongside it, generated approximately 220,000 pages of correspondence, reports, and fisheries publications up to around 1995. This has increased since then with the Cheslatta people contending that it has been "a lot of talking, not a lot of action" (M. Robertson, personal communication, November 26, 2015.) and has provided motivation for the subsequent and recent developments.

Table 1 - *Timeline of key events in Cheslatta history.*

Timeline	Event
Pre-contact	Cheslatta people live throughout their territory
1700's	European contact by boat and land
1871	BC enters confederation
1876	Father Lejac census – 54 Cheslatta members were recorded
1915	Catholic church built at the Belgachek
1916	Cheslatta Indian Reserves are designated
1922	Lejac Residential School opens
1950	BC issues water rights to Alcan
1952	Cheslatta people are forcefully evicted from their territory
1952 - 1964	Cheslatta people have no Indian Reserves
1993	Cheslatta people vote to accept a Specific Claim Settlement offer with Canada of $7.05 million
1995	Cheslatta filed Statement of Intent with the BC Treaty Commission
2001	Cheslatta Forest Products: open new sawmill and planer mill complex.
2002	Cheslatta acquires community forest and licence
2003	Southside Health and Wellness Centre opens
2011	Mill shuts down due to challenges such as phase 3 power supply
2013	Cheslatta submits application for water licence
2015	First Nation Major Projects Coalition is created
2016	Reconciliation Framework Agreement is signed by Chief Corrina Leween (on behalf of Cheslatta) and Premier Christy Clark (on behalf of the Province of BC).
2019	Settlement Agreement signed in Victoria by Cheslatta leadership

2.3 Post Kemano: Reconciliation and recent events

Since the construction and subsequent flooding of the Kemano project and regardless of adversity, Cheslatta people and the Nation have developed plans and processes to address economic, environmental, social, and cultural restoration (M. Robertson, personal communication, November 2015). Notably, these approaches have followed an open door or open arms approach regardless of any distrust or disrespect they have historically received from settler governments and industry (Larsen, 2008a, b). As examples, the Cheslatta have developed of a forestry company and halted further expansion of hydro development for the Nechako

reservoir. Arguably, these initiatives demonstrate self-determination for the Cheslatta and the greater community at large.

In a parallel pursuit of reconciliation with both the BC Provincial government and Alcan (now Rio Tinto Alcan), Cheslatta's actions have also displayed steps towards increasing their presence and influence on the landscape. A specific example is their current process of publicly displaying a large portion of their archives of photographs, videos, DFO reports, Kemano I and II documents, and traditional use maps (including the locations of harvesting, hunting, and fiber) through the Nechako Watershed Portal, their website and through community open houses. This exemplifies alternative ways to educate others through sharing their stories and spaces. Moreover, these approaches have the potential to be a useful tool in collaborative conversations with other governments, private sector, and industry (M. Robertson, personal communication, July 2015)

2.3.1 Recent and ongoing process of reconciliation and changes on the landscape

On September 12, 2016, the Cheslatta Carrier Nation Reconciliation and Settlement Framework Agreement was signed between the Cheslatta Carrier Nation and the Province of BC (CBC News, 2016). Under this framework, there are two agreements being negotiated that are meant to address the previous and current injustices related to the Kenny Dam and the associated Nechako Reservoir while covering advances towards Cheslatta's socio-economic well-being and cultural revitalization (Province of BC, 2019). Although this agreement framework was signed under the previous Liberal government, in May 2017, the NDP government has given all Cabinet Minsters instructions to review policies, programs, and legislation to determine how to bring the principles of UNDRIP into action in BC (NDP mandate letters, 2017). This implementation may involve changes to policy and legislation, and overtime will involve engagement with Indigenous peoples in BC, thus strengthening the reconciliation process for Cheslatta. The Settlement

Agreement provides restitution and redress for impacts suffered by Cheslatta ancestors when they were forcibly evicted from their homes in 1952 to make way for the Nechako Reservoir. The agreement provides a land package and financial compensation related to the continued impacts of the operational Nechako reservoir and an Interim Reconciliation Agreement intended to "strengthen the collaborative government-to-government relationship" between Cheslatta and the BC Government (BC Gov., 2017). On March 28, 2019, Chief Leween and Councillors Jack and Burt and members of the Cheslatta Settlement Agreement team gathered with the Minister of Indigenous Relations and Reconciliation, Scott Fraser, to sign the Settlement Agreement that was voted in favour by band members. The Settlement Agreement will remain confidential for one year (Cheslatta, 2019).

Cheslatta's territory was altered again in the summer of 2018 when a devastating fire season burned through the region. Cited as the "worst fire season in BC's history" (CBC news, 2018), over 1,000,000 ha of land burned in northern BC, and much of that was within Cheslatta. The figure below shows the extent of the fire burn once it was considered "out" on September 29, 2018. In the figure below, red and yellow areas show the extent of fire areas with a purple line outlining the Cheslatta territory.

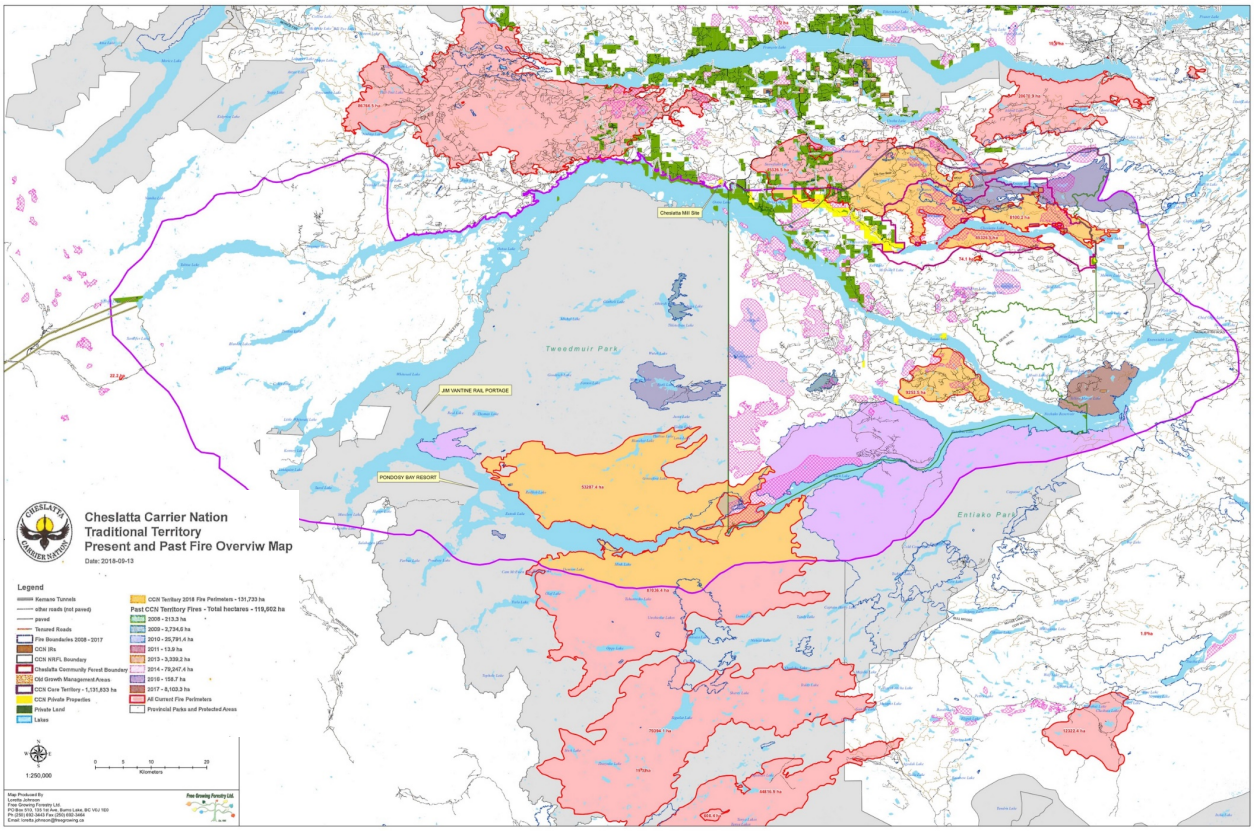

Figure 4 – Cheslatta Carrier Nation Traditional Territory Present and Past Fire Overview map (Cheslatta/Province of BC, 2018). Note: Legend enlarged for legibility.

The entire south side was evacuated in August 2018 due to the aggressiveness and speed at which the three main fires were spreading: Nadina Lake, Verdun Mountain, and Island Lake fires. On August 9, 2018, all of the small communities (Wistaria, Talalrose, Binita, Uncha, Danskin, Grassy Plains), ranchers, a bible camp, and tourism operators were forced to leave their homes, businesses, and for many, livestock, behind. Many wanted to stay and help, while others wanted to stay to harvest their hay, which is a central source of income and feed for livestock for farmers in the region. One of the people who defied the evacuation order was Jared Johnson, who works for the Cheslatta in the Archives department. He helped move loose debris away from homes and buildings and helped install water sprinklers on homes. Because of the extent of

the fires burning across the Province, resources were stretched thin, and this led to many civilians feeling as though they must stay to help.

2.4 Summary

The Cheslatta territory is remote from major cities in BC, however, the land and water has been drastically alternated to make a man-made landscape. The reservoir does provide economic benefits to the town of Kitimat but the way the project is managed for environmental mitigations and social aspects has been questioned. Despite relocation, the Cheslatta people still call their territory home and have been advancing their own dreams and aspirations. The following chapter will induce the key areas of literature for this research.

CHAPTER 3: LITERATURE AND DOCUMENT REVIEW

3.1 Introduction

This chapter builds off the introduction in Chapter 1 and 2 and provides a review of the literature and documents that informed the research. The purpose is to examine the connections related to stewardship of watersheds (and their associated natural resources), the ways Indigenous people view a watershed, and collaborative approaches to managing those landscapes. The review of literature and documents took place between 2015 and 2017.

Indigenous stewardship, collaborative natural resource management, and integrative water resource management within BC are reviewed in this chapter respectively. Two sources of information were used in this review due to the topic and context: academic peer-reviewed literature and some grey literature sources such as documents and reports. Adams, Smart and Huff (2016) define grey sources from peer-reviewed literature as "the diverse and heterogeneous body of material available outside, and not subject to, traditional academic peer-reviewed process" (p.1) and notes the materials are useful, depending on quality, for a more fulsome review of an area of work. For this research, the scholarly works gave insight to previous academic research, and the non-peer reviewed grey literature documents and reports provided site-specific information regarding the Cheslatta story.

The aim of the review of peer-revived literature was to explore and characterize connections between themes and highlight changes and developments within those topics. Literature pertaining to these topics was targeted through an online, web-based search. Between 2015 and 2017, keywords and phrases (and combinations of these keywords/phrases) were entered into Google Scholar and academic databases (e.g. Geobase, Geographical Association, Indigenous Collection) using the UNBC Geoffrey R. Weller Library search tools. Keywords/phases used were: Cheslatta, Cheslatta Carrier Nation, First Nations, Indigenous

stewardship, collaborative, collaboration, integrative water resources management, and traditional ecological knowledge. This search surfaced key foundational papers and documents. A snowballing technique was then applied (scanning references of those key foundational papers and documents) which led to additional applicable sources. The literature search was, therefore, an iterative, organic process which initiated the process of exploring and learning the foundational topics of the research. All documents were cataloged through the referencing software Zotero.

Although key findings of the literature review are presented in three overall sections (Sections 3.2 – 3.4), some key ideas are relevant across all sections. For example, the concepts of collaboration and collaborative approaches are referred to throughout the chapter, but are given most attention in Section 3.3. The insights from the literature review are compared and discussed in relation to the findings of analysis of participant interviews later in Chapter 6.

3.2 Indigenous Approaches to Stewardship

Indigenous approaches to stewardship have been be defined as more of a "model practiced by traditional communities (First Nations) that sees people not as separate from, but an integral part of, the landscape" (Adamson and Tawake, 2006, p. 29). This research focuses on stewardship of land and water versus simply natural resource management because Indigenous stewardship is an overarching ethical approach to planning, management, and governance of land and water. Indigenous practices and beliefs of natural resource stewardship are being widely examined as a promising approach to local resource management and stewardship (see Adams, et al., 2014; Sherman, Van Lanen, and Sherman, 2010). "Culturally appropriate", when referring to natural resources and stewardship, can be defined as a way of respecting and accepting cultural differences and including cultural values and uses (Lewis & Sheppard, 2006). In BC, Indigenous

actions, practices, and worldviews have been practiced and sustained as a way of life for thousands of years, built upon the passing of traditional knowledge and practices through generations for conservation of natural resources (Adams et al., 2014).

When reviewing literature from the western and non-Indigenous perspective, the most common approaches to defining the concept of stewardship encompasses the reciprocal relationship between humans and the environment as well as the duty to protect the health of natural resources (Carr, 2002; Lerner, 1993). Carr describes stewardship as an approach to natural resource management in a sustainable fashion that acknowledges humans are only one part of a complex ecological web (Carr, 2002). Chapin, Kofinas, and Folke (2009) add that stewardship allows for sustainable development of natural resources by designing socio-ecological systems that support and meet required societal demands. In reference to watersheds, Day and Litke (1998) define community stewardship as "the act of taking responsibility for the well-being of the environment and local biophysical and cultural feature" (p. 3).

3.2.1 Traditional ecological knowledge

Many First Nations communities have occupied a particular locality for thousands of years, and consequently have not only a deep-seated connection to place, but also an invested interest in ensuring the continuity of the land and its resources through sustainable management for both current and future generations (Natcher et al., 2005). The term traditional ecological knowledge (TEK) is often employed as a means to describe local knowledge systems, expertise, worldviews, practices, and stewardship in regard to the natural environment (Berkes, 1999; Castleden, Garvin, and Huu-ay-aht First Nation, 2009; Lertzman, 1999; Turner, Ignace, and Innace, 2000). Berkes (1999) defines TEK as a complex between knowledge, practice and belief. He suggests there are four layers interacting within the complex: local knowledge, resource management systems, social institutions, and worldviews (Berkes, 1999). Lertzman's (1999) commonly

referenced definition of TEK suggests “traditional ecological knowledge systems refer to the social relations and institutions (“social capital”) founded on shared beliefs, philosophy and values (“cultural capital”) mediated by the practices and protocols (“methods”) of oral tradition in given ecocultural regions developed over long periods of time” (p. 245). Karjala, Sherry, Dewhurst, 2004 note sensible resource use was a way of life through the teachings of unwritten laws and community morals. Recognizing the diversity of the terminology used in this review, terminology related to TEK is used to be consistent with the citing author (e.g. Ross et al, 2011 use “Indigenous knowledge”).

Some researchers have suggested stewardship is an overarching foundational key of TEK suggested by the definition of TEK (see Berkes, 1999; Castleden, Garvin, and Huu-ay-aht First Nation, 2009; Lertzman, 1999; Turner, Ignace, and Innace, 2000). Indigenous peoples of BC have a close relationship with their landscape and therefore care, protect, and honour those relationships through their own cultural practices developed and sustained over thousands of years (McGregor, 2014) and “TEK is generated by resource users” themselves (Tsuji and Ho, 2002, p. 346). McMillen et al. (2014) discuss the influences of Indigenous and local knowledge systems on social-ecological resilience, depicting their ideas in a Figure (reproduced, below, as Figure 5) that “represents Indigenous and local knowledge systems from knowledge to worldviews” (adapted from Berkes 1999). An important feature of this figure is the way that “the external circles identify what local ecological knowledge systems can contribute to resilience in the context of climate change” (p.2).”

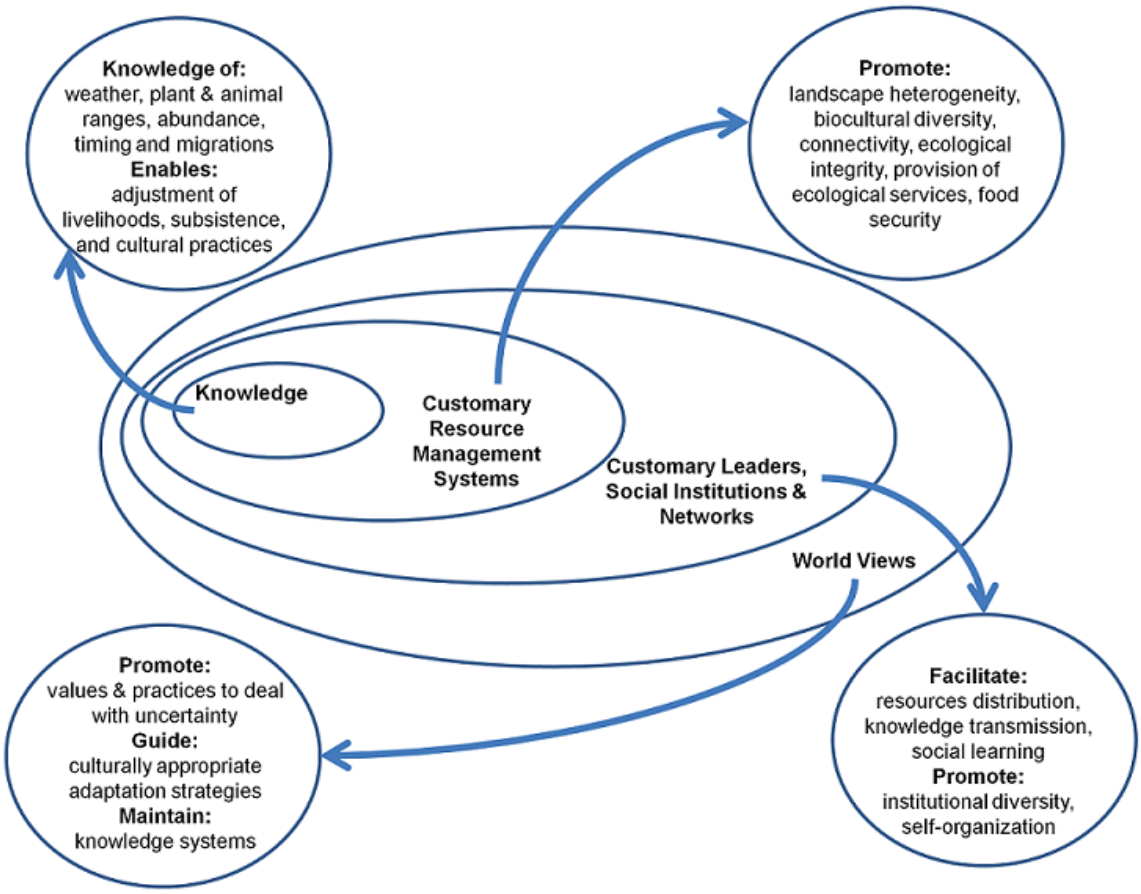

Figure 5 – Indigenous and local knowledge systems from knowledge to worldview (McMillen et al., 2014, adapted from Berkes, 1999).

Turner et al. (2000, p. 1275) note that prominent features that encompass TEK include the recognition of the interrelatedness of all components of the natural environment, respectful attitudes and philosophies towards all things in life, a close identification with traditional lands, and belief systems that recognize the power and spirituality of all things living and non-living. (Castleden, Garvin, and Huu-ay-aht First Nation (2009) argue that the spirituality of all components of life and the spiritual connection between humans and nature can be considered a foundational piece of First Nations ideologies and worldviews. Turner et al. (2000) further supports this by discussing that spirits are powerful entities that play an essential role in guiding actions that are respectful for First Nations. They write that all things are perceived as possessing

spirit (frog, beaver, bear, caribou) and protocols guided by TEK are needed to ensure respectful treatment of these entities and thus support and promote stewardship (Turner et al., 2000).

TEK has become acknowledged as having a fundamental weight in "the management of local resources, in the husbanding of the world's biodiversity, and in providing locally valuable models for sustainable living" (Turner et al., 2000, p. 1275). In Turner's et al.'s (2000) figure of components of traditional ecological knowledge and wisdom of aboriginal peoples of northwestern North America (Figure 6), the authors note that the core of TEK is both a worldview and philosophy encompassed by communication and exchange of knowledge and practices and strategies for sustainable living. Figure 6 depicts this, as well as Turner's emphasis that TEK flows and develops with time.

Since settlers arrived and colonization began (~150 years in BC), Indigenous groups in BC (and Canada) have experienced a loss of connection (through access) and influence over their territories, while the knowledge of these lands and waters were thought to be inferior to "Western science/knowledge" (Karjala et al., 2002; see also Duerden and Kuhn, 1998). More recently, TEK is increasingly becoming more common in approaches that balance both Western science and Indigenous stewardship around the globe (see Agrawal, 1995; Emmons and Hardin, 2014; Lewis and Boyd, 2012). Agreements (e.g. the Great Bear Rainforest Agreement), research, and case law court cases (e.g. the Tsilhqot'in Nation v. British Columbia 2014, in particular Section 2.2.2) have all contributed to an increase in awareness and incorporation of TEK into recent decisions surrounding natural resources in BC.

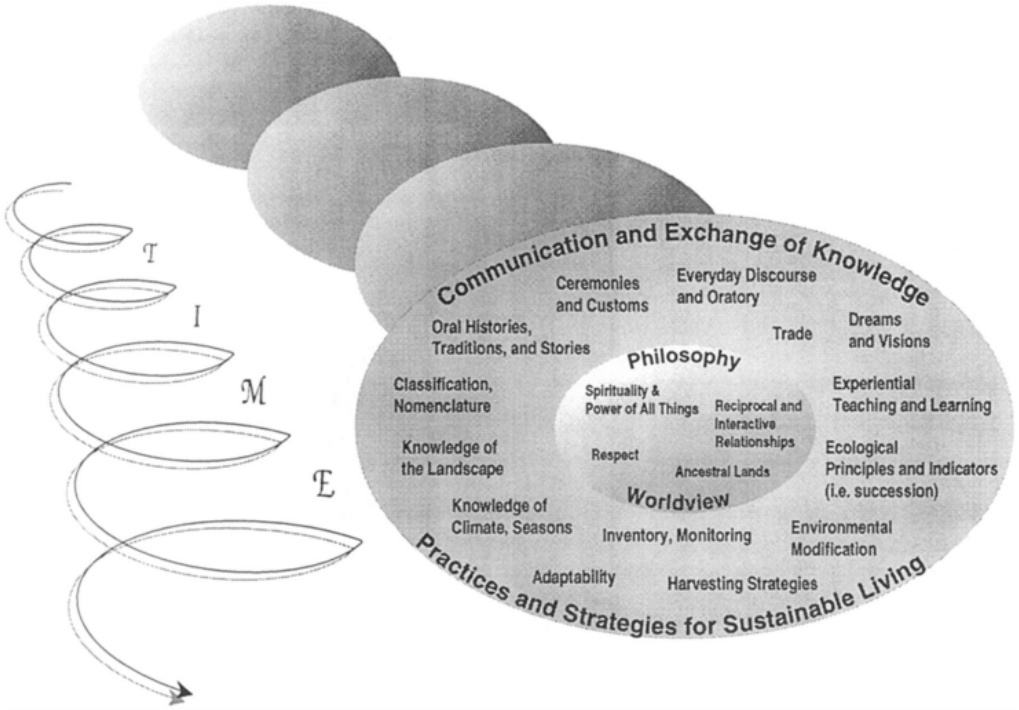

Figure 6 – Components of traditional ecological knowledge and wisdom of aboriginal peoples of northwestern North America (reproduced from Figure 1, Turner et al., 2000, with permission).

Traditional use studies to document TEK have been implemented in many BC First Nations through collecting and documenting local languages, practices, places, cultures, and food and fibre related to resource use. Many of these studies took place in the 1990s under provincially funded programs to build technical and research capacity for the Nations and the documentation of this information. The program assisted the Province in meeting its legal obligations in land use management as defined by the Court of Appeal in Delgamuukw v. The Queen (1993) according to the Ministry of Sustainable Resource Management (MSRM) in 2003 (Ministry of Sustainable Resource Management, 2003).

Karjala et al. (2002) contend that the majority of First Nations and Indigenous peoples are hesitant to share traditional use studies (and other sources or documentation of TEK) with "outsiders," as this information could be used for purposes that work against the values or ethics of those who documented the knowledge. When this information has been shared, there has

tended to be little recognition by those who collect it (e.g. by industry, government, or researchers).

3.2.2 Alternate approaches to stewardship of land and water

Indigenous peoples have been developers and innovators of resource management on their traditional territories for thousands of years (McGregor, 2014). Indigenous knowledge systems are fundamental to informing the interactions of Indigenous groups to the land and water. While discussing ecological knowledge and its applications to natural resource and ecosystems management, Holmes and Janipijinpa (2013) highlight a range of differing perspectives in relation to the definition of ecological knowledge, mainly between traditional knowledge and Western science. They argue that from an Indigenous perspective, this knowledge is a way of living that strives to sustain healthy people and their environments through "relationships of reciprocity" (Holmes and Janipijinpa, 2013, p. 1). These relationships of reciprocity mean healthy environments sustain healthy people through "functioning cultural systems that support people's physical and mental health" (ibid.).

In *Indigenous Peoples and the Collaborative Stewardship of Nature*, Ross et al. (2011) introduce the Indigenous Stewardship model (ISM) and identify the structural and conceptual obstacles that create barriers for First Nations stewardship of natural resources. Fifteen epistemological and systemic barriers to Indigenous involvement in natural resource management and stewardship are identified by Ross et al. (2011) (see Tables 2 and 3).

Table 2 – *Epistemological barriers for Indigenous stewardship of natural resources at that are truly collaborative (*from Ross et al. 2011, Table 3.1).

Epistemological Barriers	
Barrier	**Description**
Indigenous knowledge not recognized	Lack of recognition that Indigenous knowledge once has a place in natural resource management.
Narrow definitions	Narrow definitions of concepts of "tradition" and "custom".
Non-validation of Indigenous knowledge	Indigenous peoples' expertise and connection to the land or seascape is not deemed to have been 'proven' to the satisfaction of scientists and natural resource bureaucrats.
Translation of Indigenous knowledge	The need for Indigenous peoples to translate their knowledge into the frameworks that are widely understood by scientists and managers.
Social/spiritual expression	When knowledge is expressed in a social or spiritual, rather than a scientific, framework, scientists often find the relevance of such information challenging.
Codification of local knowledge	The need to write down information, which can lead to Indigenous concerns about codification and appropriation of knowledge.
Ownership of knowledge	Barriers that arise when Western systems of property rights (including intellectual property rights) are imposed over Indigenous ways of controlling and managing ownership of knowledge.
Spatial/temporal boundaries	Barriers that occur as a result of a system that requires land and water to be bounded spatially and temporally via the demarcation of areas on maps or within chronically defined management planning systems.

Epistemological barriers include local knowledge (LK) not being recognized, few definitions, validation of LK, translation of LK, social/spiritual expression, codification of IK, ownership of knowledge, and spatial/temporal boundaries. The systemic barriers include maintaining "outsider" status, LK and management institutions, decentralization, racial/cultural inferiority, state power, the "benevolent" West, and globalization. Together, Ross et al. (2011) suggest these barriers highlight the imbalance in current management and promotes the strengths

of Indigenous knowledge and expertise. Kakekaspan et al., (2013) used Ross et al.'s (2011) inclusive approach to stewardship and found it includes cultural and spiritual perspectives, promotes sovereignty, and integrates economics and self-governance while engaging with the Indigenous group involved.

Table 3 – *Systemic barriers for Indigenous stewardship of natural resources that are truly collaborative (*from Ross et al. 2011, Table 3.1)

Systemic or Institutional Barriers	
'Outsiders' kept 'outside'	Bureaucratic agreements such as meeting requirements and government institutional structures make the involvement of any 'outsiders' difficult.
Indigenous knowledge & management institutions	Barriers that occur when Indigenous knowledge cannot be accommodated within reductionist and formulaic approaches to management such as found in management manuals.
Decentralization	Barriers that arise as a result of the decentralized nature of Indigenous concepts of governance and decision making.
Racial/cultural inferiority	Obstacles based on assumptions of racial or cultural inferiority; some 'races' or cultures are seen as categorically inferior, practicing inherently destructive or under-productive forms of livelihood, and incapable of possessing complex knowledge of nature.
State power	The State has more power than Indigenous people do, and so has greater control. Indigenous people must therefore strategize about how and when to assert their concerns more carefully than the State does.
'Benevolent' West	The State is assumed to act benignly, despite obvious resource degradation under the State's watch. Indigenous people must prove that State actions have been detrimental.
Globalization	Barriers that result from the need to meet global environmental challenges on global (often theoretical) scales, rather than on the local scale used in Indigenous knowledge systems.

3.3 Collaborative approaches to natural resource stewardship in BC

Stewardship and Indigenous knowledge were discussed in Section 3.2, and this section will pay specific attention to approaches described as collaborative. As noted above, the terms collaboration and collaborative approaches are threaded throughout the reviewed literature, and are also referred to in multiple places throughout the thesis. The different uses of the term suggest some interesting differences and links between the theory of collaborative approaches and practice of collaboration. In this thesis, the term "collaborative approaches" generally refers to planned processes that occur in more formal settings, involve working together across groups, and often involve actors *external* to a particular community. In comparison, the term "collaboration", has generally been used to refer to processes that are occurring in practice, both formally and informally, and may include processes of working together *within* a group or community. Section 3.3 and 3.3.1 outline these terms with examples and, as mentioned, are then discussed in Chapter 6.

This section will build on the concepts in earlier sections to examine how they relate and apply to collaborative approaches to natural resource stewardship, specifically with respect to water in BC. BC has a complex landscape of planning, management, and governance of land, water, and natural resources across administrative and jurisdictional boundaries (Cullen et al., 2010). Outside of BC, approaches to collaborative natural resource management have been described as problem solving efforts and partnerships that work together, typically within community-based groups (Conley and Moote, 2003). Conley and Moote's (2003) assessment of how scholars define collaborative efforts in natural resource management helps in understanding how collaboration is perceived within natural resource disciplines, and suggests there are a variety of ways it is applied or put into action. Cullen et al. (2010) suggest BC has been employing collaborative approaches with Indigenous and interest groups for 20 years, and that

BC is one of the only jurisdictions in the world to have embraced such collaboration, especially with the absence of historical treaties.

Von der Porten and de Loe's (2013) literature review of collaborative approaches to governance for water and Indigenous peoples in BC suggests that collaborative approaches contribute to more effective resolution of conflicts relating to land and resource planning; responds to the characteristics of increasingly networked societies; advances user relations and knowledge; addresses complex and complicated natural resource concerns; and responds to perceived deficiencies in approaches that rely on Western or technical knowledge. From their literature review von der Porten & de Loe (2013) found arguments, incentives and benefits of collaborative tactics include the desire to:

- Create social resilience to adapt to change;
- Promote social and technical management efficiency;
- Leverage knowledge holders, experts and tools for integration;
- Protect through stewardship and human health; and
- Reduce opportunities for conflict by increasing collective dialogue.

Von der Porten & Loe's (2013) 5 points the advancements of the collaborative approach in efficiencies, integration of knowledge and the acknowledgment of different perspectives discussed in the next section.

3.3.1 On-going evolution of perspectives of collaborative approaches in BC

Two main perspectives of collaboration and land stewardship in BC are reviewed here. Rutherford, Haider, and Stronghill (2015) state that there are two main perspectives on the BC landscape in regard to land control and ownership. One perspective is the settler mentality, where these lands are conquered (colonized) and, therefore, owned and controlled by the Crown (e.g. Provincial/Federal governments). The other perspective is that of the First Nations and Indigenous peoples who have been sustained on these same lands for what is estimated to be at

least 10,000 years and who assert they never surrendered their rights and title (Rutherford, Haider, and Stronghill, 2015). It has been argued these two opposing perspectives on ownership and tenure have caused significant barriers for all governments to make meaningful and effective strategies for the land and water management (Low and Shaw, 2012; Ross et al., 2011).

The ways the term collaborative has been used in planning, management, and governance does not typically follow the ways in which the word is used in literature or from local perceptions of the word; and in turn has led to decisions and results that have not been made collectively by the parties involved, argue Low and Shaw (2012). In one example, the BC Provincial government used the word "collaboration" in the 2014 reform of its water legislation, yet recognition of First Nations rights and title are not fully included in the new Water Sustainability Act (Water Sustainability Act, 2014). For an approach or process to be considered "collaborative," Ross et al., 2011 argue it must be collective and cooperative by nature. This supports conversations by some scholars and researchers of whether or not collaborative methods have been or will ever be legitimate or appropriate by First Nations in BC (Brandes et al., 2014; Bowie, 2013; Cullen et al., 2010; von der Porten and de Loe, 2013).

Indigenous people's approach to TEK as a collaborative concept can be considered through the lens of environmental philosophy. For example, Whyte (2013) discusses the differing definitions of TEK and how these definitions can play out in facilitating (or discouraging) cross-cultural and cross-situational collaboration in environmental stewardship. An example of different perspectives used by the author can assist in understanding:

> Cross-cultural divides are simply the differences in worldviews, languages, lifestyle and so on that obtain between Indigenous and non-Indigenous populations. For example, Indigenous people may see the goal of restoring a native fish species as rekindling the relationship between that species and humans living in the region, whereas a non-Indigenous population may see restoration of the same species as a matter of achieving

> certain population numbers conducive to a recreational outcome like increasing tourism in the region. (Whyte, 2013, p. 8)

The different understandings of what is at stake in restoring fish populations can serve as an example to illustrate different points of view about the same issue which may, nonetheless lead to achieving the same goal. Whyte (2013) encourages the engagement of different knowledge systems for the greater understanding of the issue at stake, noting the potential for people of different or diverse backgrounds to recognize and combine knowledge systems and origins (including those that cross-cultures) in ways that achieve goals that are common to all involved, but do not necessarily involve the collaborative effort of working together to do so.

A planning or governance approach that views First Nations simply as one stakeholder among many is argued to be ineffective due to the way Indigenous peoples view themselves and their traditional territories (Bowie, 2013; Cullen et al., 2010). As of 2019, it is no longer common to refer to First Nations communities and Indigenous as stakeholders in the decision-making processes of Provincial and Federal government agencies. A stakeholder is now commonly used to identify a private land owner or industry actor, while First Nations are increasingly identified as title or rights holders (see Section 3.3.2 below).

3.3.2 Rights and title: treaties, agreements and case law

Directly related to the two perspectives discussed above are is the duty to consult and accommodate First Nations with respect to rights and title. This is a complex and dynamic area of law in BC that is rapidly changing (Nikolakis and Nelson, 2015).

The majority of BC's First Nations maintain they never surrendered their claims on water or land through a treaty or other agreements, and therefore possess title to these territories. This viewpoint places questions on the Crown's claim to ownership of land and water in BC and, as a result, has led to treaty and agreements between Provincial and Indigenous governments. Some

examples include the Nisga'a Treaty (2000) and the Clayoquot Sound (1994), and Great Bear Rainforest Agreements (finalized in 2016) (Brandes et al., 2014; Low and Shaw, 2012). For example, the Nisga'a Nation and the BC and Canadian governments collectively negotiated an agreement that gives the Nisga'a Lisims Government authority to make certain laws and administers their own government and management of the Nation's lands and assets. The Treaty operates alongside BC and Canadian laws (subject to "meet or beat" those law standards) where, for example, forestry, are cooperatively held to a certain standard. However, von der Porten et al., 2015 point out that treaty agreements were only reached through lengthy planning processes and/or through legal systems causing intensive impacts on the resources and capacities (e.g. time and finances) for all involved. Recent court cases (case law) such as the 2014 Tsilhoqot'in Supreme Court of Canada decision reaffirmed the impacts land and water decisions have on First Nation communities and further support the argument for more collective policies (Bankes, 2015; Nikolakis and Nelson, 2015).

In 2014, the Supreme Court of Canada upheld the appeal by the Tsilhqot'in Nation and ruled that the Nation has Aboriginal title to the Tsilhqot'in land. In this landmark case, the court declared the Tsilhqot'in Nation (located in the BC interior southwest of Williams Lake) holds exclusive Aboriginal title over 1,700 km^2 of land (Bankes, 2015). The significance of this ruling is unparalleled in that the Tsilhqot'in now have exclusive control over land use decisions in certain situations and has set case law that is recognized by settler governments (Bankes, 2015; Morse, 2014; Newman, 2015).

This decision carries significant weight on unceded territories (non-treaty lands), which covers the majority of BC, including the Cheslatta Carrier Nation who have not been signatory to any agreement or Treaty. Bankes (2015) discusses the implications of this decision for industries in the natural resource sector and how the decision states that governments and industry cannot

claim a right on lands protected by Aboriginal title without seeking approval from the title-holder.

3.3.3 Capacity to collaborate with First Nations

Several authors note that due to a lack of capacity within Indigenous and settler governments, processes meant to engage with First Nations in BC has generally been slow moving, expensive, and in most situations does not meet the expectations of either the Provincial or First Nation government in the end (Kakekaspan et al., 2013; von der Porten & de Loe, 2013; von der Porten et al., 2015). Stemming from a variety of reasons, both Provincial and First Nation governments have different perspectives on why and how this is the case. It has also been proposed that lack of knowledge surrounding roles and responsibility of all involved may contribute to this (von der Porten et al., 2015). A strong disconnect between Provincial government and First Nation perspectives could have significant implications for gaging success of collaborative processes, and ultimately moving forward with culturally appropriate decisions and actions (Cullen et al., 2010; Booth and Skelton 2012).

3.4 Watersheds and Integrative Approaches to Water Management, Ecosystems Services and Well-being

The previous sections have introduced stewardship and collaborative approaches to resource management. This section will introduce the water and watershed aspect to resource management, starting with the concepts of an integrated method to manage water and watersheds.

A watershed, also described as river basin or catchment, is defined as "a region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water" by the Merriam-Webster dictionary (2016). A more detailed definition is provided by the United States Geological Survey (2015):

> A watershed is an area of land that drains all the streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. The word watershed is sometimes used interchangeably with drainage basin or catchment. Ridges and hills that separate two watersheds are called the drainage divide. The watershed consists of surface water--lakes, streams, reservoirs, and wetlands--and all the underlying groundwater. Larger watersheds contain many smaller watersheds. (USGS para.1)

Watershed management tends to focus on the management of water in a watershed setting. Morin (2009) described water to be the heartbeat of all economies, societies and cultures. Falkenmark and Folke (2000) describe watersheds as "an asset that delivers a bundle of water and ecological goods and services" by hosting a complex system of ecosystem services including regulation, provision, and cultural practices (p.351). Several authors have suggested watersheds to be an optimal spatial unit for the management and governance of land and water resources and the associated ecosystem services (Baird et al., 2016; Bunch et al., 2011; German et al., 2007; Parkes et al., 2008).

However, as Day and Litke (1998) highlight, watersheds are rarely found to have protection through decision-making processes and land use planning in BC. Although their paper is 20 years old, many of the areas discussed are still relevant to today's watershed issues, challenges, and concerns. A notable example is that there are many barriers to groups and individuals lacking the tools, skills, and knowledge to integrate decision-making, planning, and collaboration (Day and Litke, 1998).

Integrated water resources management (IWRM) is a holistic systems approach to the planning, management, and governance of physical landscapes and natural resources. It is

comprehensive, collaborative, and builds on previous approaches such as adaptive management (Mitchell, 2005). Building upon the concepts of Integrative Resource Management, IWRM supports the coordinated development and management of water and watersheds, to balance maximum economic output and the functions of social and ecological systems (Global Water Partnership, n.d.). This is a highly intensive approach, and there are several strengths and weaknesses that make this approach extremely challenging. As a result, it is argued, IWRM frameworks must be flexible and adaptive (Morin and Cantin, 2009).

3.4.1 Ecosystem services and systems thinking in watershed management

The ecosystem services concept has been advanced and widely adopted as a framework for identifying and weighing the social and ecological values at stake in comprehensive management schemes (Chan et al., 2012). Cultural ecosystem services (CES) are defined by the Millennium Ecosystem Assessment (2005) as "the nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences" and contribute greatly to well-being. Cultural values are the foundation of a community's wellness, identity, knowledge, practices, cultural products and laws (David Suzuki Foundation, 2012). Healthy watersheds can provide many services to societies that depend on them, according Postel and Thompson (2005) who break down those services into twelve goods and services. Those services are water supply for agricultural, industrial, and domestic uses, water filtration, water flow regulation, flood control, erosion and sediment control, fisheries, timber and forest products, recreation/tourism, habitat, aesthetic enjoyment, climate stabilization and cultural values (as discussed here).

Although cultural interactions with ecosystem remain poorly understood for the most part, Poe et al. (2014) state that cultural dimensions of ecosystems are rooted in local knowledge, which are linked to livelihood and well-being dynamics. The cultural aspects of ecosystem

services can include the "nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience, including, e.g., knowledge systems, social relations, and aesthetic values" (MEA, p. 894).

A systematic consideration of the cultural values associated with ecosystems could therefore benefit many kinds of initiatives, including spatial planning and integrated management (Chan at al., 2012). Cultural values and local landscape knowledge are increasingly required as part of planning in resource management. Ecosystem services have the potential to foster new intangible links between a range of social and ecological issues (Milcu et al., 2013; Postel & Thompson, 2005).

3.4.2 Watersheds as a foundation for health and well-being

Bunch et al. (2011) note that water management includes (but is not limited to) issues of health, natural resources, environment, spirituality, climate change, and livelihoods. The World Health Organization (WHO) defines health as "...a state of complete physical, mental and social well-being and not merely the absence of disease of infirmity" (2003, p. 1). Commonly, "health" is associated with an illness, disease or aliment that affects the physical body, whereas well-being is more than the absence of physical and mental disease or infirmity; well-being considers the person in their total socio-ecological. Watersheds host complex ecosystem services that provide a range of benefits to human health and well-being (Parkes et al., 2010; Parkes & Horwitz, 2016; Iniesta-Arandia et al., 2014). Human well-being is linked to the watersheds in which people inhabit, yet there is little experience managing watersheds for human well-being and health (Parkes et al., 2008). Parkes et al. (2008) describe how human well-being is not only reliant on watershed ecosystems but also is a direct product of management, and argue, therefore, that IWRM (conducted in watersheds) can provide a promising approach to addressing human health and well-being. These ideas are consistent with Richmond and Ross's (2009) work

highlighting the direct reciprocal relationship of humans and their landscape and how the health of one affects the other. Richmond and Ross's (2009) work showed the relationship between healthy landscapes and how that is linked to health people. Human well-being has several aspects including access to basic material for a good life, freedom and choice, health, and wholesome social relations (MEA, 2005). This connection requires broader approaches that account for the interconnectedness, interdependencies and reciprocal relationships that exist between environments and their people (Parkes & Horwitz, 2009).

Bunch et al. (2011) argue that planning, management, and stewardship strategies that consider both social and biophysical aspects of a watershed can potentially create a "double dividend" that promotes sustainable land and water use while also enhancing the social determinants of human health and well-being. The "double dividend" that is the result of acknowledging both the social and biophysical aspects of a watershed can also directly affect the health of Dakelh peoples who have called the Nechako home for over 12,000 years. Indigenous health and well-being, although not a main theme of this work, is an important area of research that is commonly tied into natural resource management literature. For example, the First Nations Health Authority (the Province-wide agency responsible for providing health services to First Nations people living both on and off reserve in BC) defines traditional wellness as:

> A term that encompasses traditional medicines, practices, approaches and knowledge. Traditional wellness is based on a holistic model of health and is often overlooked in the prevention and treatment of chronic conditions and in the promotion of health and wellness. (2014, p. 13)

In an allied document produced by the First Nations Health Society in 2010, the First Nations Traditional Models of Wellness: Environmental Scan in BC, determined and defined

traditional wellness as "a person feeling well emotionally, physically, and spiritually and leading a healthy lifestyle, which involves connection to the land and one's culture and beliefs" (p. 37). The document also states that traditional practices such as berry picking, hunting and fishing for example can maintain wellness.

The literature reviewed for this section discussed a close relationship between watersheds and well-being. This relationship can be positively or negatively affected due to changes in watershed health, or the individual ecosystems that nest within a particular watershed. The next section briefly explores ecosystem services and systems thinking especially in relation to well-being.

3.4.3 Integration of differing knowledge systems in land and water stewardship

As introduced in Section 2.3.1 discussing differing knowledge perspectives, there has been a movement towards integrating different knowledge systems into land and water stewardship. Nowlan and Bakker (2007) suggest these changes stem from the introduction of new watershed-based delegated governance models in several Canadian Provinces, including Alberta's Watershed Planning and Advisory Councils, Ontario's Source Protection Committees, and Québec's Basin Organizations. These changes come from several elements, including increased emphasis on integrated management of watersheds and the increased acceptance of the legitimacy of IWRM (Nowlan and Bakker, 2007). Certain advantages can facilitate positive change, such as access to and inclusion of local knowledge, empowerment, increased trust, greater cooperation in information sharing, and greater local "buy in" (Nowlan and Bakker, 2007). Disadvantages can include focusing on local concerns (versus the larger, Provincial picture), unequal representation of views, values and interests, long-term sustainability undermined by large amounts of people hours required and greater use of resources (time and money) to produce desired outcomes (Nowlan & Bakker, 2007).

Parkes et al. (2008) discuss the field and practice of ecohealth as one example of an integrative approach to the relationship between effective ecosystem management outcomes of human health and well-being. It is an approach to research that associates ecological and social determinates of health; ecohealth posits ecosystems and the social systems within them are complex and relatable to systems thinking and resilience theory (Bunch et al., 2011). The increasing acknowledgement of resilience theory for bridging sustainability, ecosystem-based management, and human health and well-being across scales is also described by a number of authors (Berkes and Ross, 2013; Bunch et al., 2011; Fleming and Ledogar, 2008; Hassin and Young, 1999). Natural resources, and the ecosystems they are part of, have not been typically managed or governed in the context of integrating different knowledge systems in BC. Standing on similar principles the manner in which people practice and live life can be directly related to the health of the landscape (Parlee, Berkes, and Teetl'it Gwich'in Renewables Resources Council, 2005). Additionally, this shows support of differing approaches to watershed planning for sustainability and human well-being and, as a result, may be improved with the integration of different forms of knowledge.

3.4.4 Approaches to watershed stewardship in BC

The review of literature of watershed management approaches and the relation of human health and well-being to health of a watershed provides a foundation from which to consider the current practices and stewardship in the Province where this research is based.

Integrated planning at the watershed level was first introduced by the Canadian government in 1987 through the Federal Water Policy. This federal policy was based on the notion that watersheds are the preferred spatial unit for water management (Nowlan and Bakker, 2007). Since comprehensive watershed approaches should incorporate both the quality and

quantity of groundwater, as well as surface water and land use, only a few Provinces have implemented this approach (Nowlan and Bakker, 2007).

The BC Provincial government manages lands and water through a patchwork of jurisdictional boundaries at different scales applicable to governments, stakeholders, rights holders, land-owners, and interest groups. The exception to this is the West Coast Region of the Strategic Land and Resource Planning Coast Area. The Clayoquot Sound Land Use Plan has eleven nested watershed plans within it. These include: Clayoquot River, Cypre, Flores Island, Fortune Channel, Hesquiaht, Kennedy Lake, Sydnery-Pretty Girl, Tofino-Tranquil (Onadsilth-Eekseuklis) and the Upper Kennedy (BC Government, 2006). The development of these planning units alongside recommendations and principles were developed from the mid-1990s to the 2000s by the Clayoquot Sound Scientific Panel and local First Nations, particularly the Tla-o-qui-aht First Nation, to assist in sustainable ecosystem management in the Sound. Core to these watershed plans are the understanding the physical and ecological landscapes and human values such as culture, connections, and access to land and water. Watershed integrity, protection of biological diversity, and protection of human well-being are all detailed aspects of this initiative (BC Ministry of Forests, n.d.).

Outside of the BC Provincial government framework, there are various examples of place-based, civil society-based initiatives supporting and utilizing integrative approaches to watershed-based planning, governance, and stewardship. Four notable examples include the Cowichan Watershed Board, the Columbia Basin Trust, the Fraser Basin Council, and the Nechako Watershed Roundtable (Morin, 2009).

The Fraser Basin Council (FBC) is a not-for-profit, non-governmental organization born from the Fraser Basin Management Program in 1997. The FBC is a first of its kind in Canada

with a two-tier governance structure consisting of a society and board of directors (Nowlan and Bakker, 2007; Morin, 2009). FBC has participated in several major projects within the Fraser River basin (in which the Nechako is a sub-watershed), including resolving user conflicts and helping to resolve local concerns issues within their boundaries. Awareness of the ecological, economic, social, and cultural well-being aspects that are provided by healthy watersheds has furthered FBC's reputation and acknowledgment of its progressive and innovative approaches (FBC, n.d.; Nowlan and Bakker, 2007).

Specific to this research and study area, the Nechako Watershed Roundtable (NWR) is a collaborative initiative made up of several user and interest groups from the Nechako basin (NWR, 2019). The NWR includes First Nation government representation (including Cheslatta), municipal and regional district governments, Provincial agencies (e.g. FLNRORD), community-based organizations (e.g. the Nechako Environment and Water Stewardship Society - NEWSS), industry (e.g. hydro, forestry), the Integrated Watershed Research Group (IWRG) at the University of Northern British Columbia (UNBC), and concerned citizens. The FBC, alongside others, supported and facilitated a collaborative process to develop the NWR's Nechako Watershed Strategy (the Strategy) to advance stewardship throughout the region. The Strategy profiles the key watershed health issues and concerns as identified in a watershed health report and through outreach and engagement with decision makers, interest groups, and the public. More importantly, the Strategy identifies priority actions to be undertaken by organizations and individuals, and collaborative efforts to improve the health of the watershed through stewardship actions, implementation of best practices, and improved decision-making (NWR Strategy, 2016).

3.5 Summary

From the review of literature on Indigenous stewardship and collaborative approaches to natural resource planning with First Nations, it appears that there are challenges and obstacles to First Nations and other governments in BC working together in a collaborative way. Some authors suggest there are significant differences in perspectives among those seeking to engage in collaborative approaches which means that the desired goals or objectives of all parties involved are not reached (see Rutherford, Haider and Stronghill, 2015; Low and Shaw, 2012; Ross et al. 2011). Notwithstanding, there are several examples of bottom-up approaches that are striving for a more shared and cooperative and decision-making processes, reflecting a collaborative ethic whereby different groups work together towards a common goal over time, as demonstrated by the Fraser Basin Council and the Nechako Watershed Roundtable.

Further, from the review of literature discussing integrated approaches to watersheds as ideal settings for stewardship it appears there is a strong agreement that watersheds (and their ecosystems) support economic, environmental, and social necessities of life. Watersheds provide a boundary that encompasses working and flowing complex systems that also directly affect human health and well-being.

Both stewardship and IWRM operate in boundaries that rarely align neatly into current governmental boundaries (such as regional districts, cities, town limits, and First Nation territorial boundaries), making them particularly difficult to develop and implement in a collaborative fashion. The literature also underscores the need to understand context and specific place-based experience which is the motivation and fuel for this research design. Further, the current pursuit of Reconciliation and jurisdictional power for First Nations (in this case, the Cheslatta) and the journey of reclaiming traditional territory boundaries within watersheds is suggested as an area requiring further attention and exploration (M. Robertson, personal communication, August 2, 2016). As noted at the end of Chapter 1, this chapter forms one part of

a temporal thesis structure that reflects the research process of reviewing the published literature prior to designing the research. As notes above, there can be limits of this approach, which can be seen to privilege published knowledge rather than emphasizing relationships between different forms of knowledge. The following chapters, shift the emphasis to highlight the connection to research design that value local knowledge and perspectives.

CHAPTER 4: METHODOLOGIES AND METHODS

The literature review in Chapter 3 introduced important concepts in Indigenous approaches to stewardship, collaborative approaches to natural resources, and watershed management. This review helped to develop a foundational understanding of different approaches to management across the BC landscape. The study context in Chapter 2 introduced the background and story of the Cheslatta people, their contemporary history, the connection to the Nechako watershed, and the associated Nechako reservoir. The two chapters provide background for designing a research approach that will be appropriate for gaining a more detailed understanding of local knowledge, local perspective and lived experience. This chapter will outline the research approach and accompanying methods that were selected in the research design to answer the research questions and objectives introduced in Chapter 1.

4.1 Methodology and Research Approach

A methodology indicates how the study was managed through a set of rules and practices that assist in choosing research methods (Kirby, Graves & Reid, 2010). A given methodological approach, or lens, is central to the design and outcomes of research. This section outlines the methodological approach that was used in order to address the research objectives. The objectives, introduced in Chapter 1, Section 1.1. To formulate place-based, locally informed recommendations to inform emergent strategies with the potential to enhance Cheslatta's objectives of headwater stewardship in the Nechako.

As well as addressing these objectives, the research methodology and research approach also needs to be designed to respond to and engage with the goals and aims of local community members and experts throughout the entire research process. As a result, this research was informed mainly through an Indigenous community-based approach to research and appreciative

inquiry (Smith, 1999; Wilson, 2008), which focused primarily on the Cheslatta people and also some engagement with the Nechako watershed residents and professionals with an understanding of the Nechako watershed as it related to the Cheslatta community. These approaches shaped the research design, which comprised of: a scoping phase, literature and document review, collection of data through interviews, research diary, analysis of all data sources, process of feedback and sharing with the participants and discussion of findings in relation to the literature and document review. Details of the research process, phases and timeline are outlined in Section 4.3.

4.1.1 Indigenous research approaches

Although there is not a singular definition of Indigenous research, this thesis is informed by understanding of Indigenous methodologies as an alternative approaches to thinking about research processes (Louis, 2007). An Indigenous research approach was chosen as a suitable lens to incorporate values and principles to all stages of research including design, approach, communicating the voices of interview participant through this thesis, and sharing back to the community. Such approaches lead to research strategies that prioritize a holistic approach to research (Lertzman, 2010). Indigenous research approaches provide a means to ensure that research involving Indigenous populations is conducted in a more respectful and ethical manner from an Indigenous perspective (Louis, 2007). In parallel, this approach also provides an ethical approach for my research with the Cheslatta community and is described in more detail below.

A critical aspect of this research design was to use and combine methods that are beneficial, ethical, and respectful with Cheslatta people. This research was therefore informed by decolonizing methodologies to explicitly engage participants and work with Indigenous participants through lenses that recognize power imbalances between marginalized and dominant peoples (Smith, 1999). There are two primary reasons why I chose a research design informed by Indigenous research approaches for this project.

First, “Western” styles of research have historically silenced First Nations communities and therefore, I felt that an Indigenous research approach provides the most ethical method for this particular research project working with an Indigenous community. My intention was that by designing research that is informed by an Indigenous research approach, I would highlight the objectives and perspectives of what Cheslatta themselves deems important for their own community. My approach was to provide an alternative to the top down, positivist approach to research, and instead employ a bottom-up perspective that reflects the interests and values of the communities (Fraser et al., 2006). Indigenous research also includes a heightened sense of the historical and current effects of colonization and as such this methodology is important to ensure a respectful and reciprocal relationship with all people involved in the research, through consistent and open communication, sharing feedback and updates and ensuring benefits of my work to participants and the communities.

Secondly, “Western research” interprets Indigenous knowledge from a Western framework (Cochran et al., 2008). Like many other First Nations communities in Canada, Cheslatta perspectives of the world—and the protocols which mediate these worldviews—operate under unique principles, which cannot always be translated into the dominant Western thought. Because of the gap in these two knowledge systems (as discussed earlier in the literature review; see Chapter 3), if I had approached this particular research from only a western perspective it would prove to be ineffective in recognizing some of the central features of the different worldviews from a culture different than my own. Having non-Indigenous researchers, such as myself, making an honest effort to engage “Indigenous ways of knowing” (Cochran et al. 2008, p. 26) will hopefully contribute to the necessary fundamental shift in research methods in order to situate Indigenous worldviews in a more accurate and respectable manner.

As discussed by Wilson (2008, p.58) in *Research is Ceremony*, Indigenous research paradigms can be used by people who honestly follows its preconditions or rules. He introduces Atkinson's (2001, p.10) principles to guide Indigenous research:

- Indigenous people themselves approve the research and the research methods;
- A knowledge and consideration of community and the diversity of and unique nature that each individual brings to a community;
- Ways of relating and acting within a community with an understanding of the principles of reciprocity and responsibility;
- Research participants must feel safe and be safe, including respecting issues of confidentiality;
- A non-intrusive observation, or quietly aware watching;
- A deep listening and hearing with more than ears;
- A reflective non-judgmental consideration of what is being seen and heard;
- Having learnt from the listening a purposeful plan to act with actions informed by learning, wisdom and acquiring knowledge;
- Responsibility to act with fidelity in relationship to what has been heard, observed and learnt;
- An awareness and connection between logic of mind and the feelings of the heart;
- Listening and observing the self as well as in relationship to others; and
- Acknowledgement that the researcher brings to the research his or his subjective self.

The principals listed above emphasize a strength based, asset-based approach, which when accompanying the Indigenous research approach, I chose to adapt an appreciative inquiry approach to assist in both having an appropriate lens to embark on the research, but to also focus on the optimistic aspects of the research concepts combined with the participants' voices gained through conversations (interviews).

4.1.2 Appreciative inquiry and relevance to Indigenous research

Appreciative inquiry is a methodological approach that focuses on what is working within people, organizations and communities rather than focusing on what is not working. It looks to expose the best in people, organizations and communities to discover what are the strengths verses the weaknesses (Sweeny, 2014; Judy & Hammond, 2006). Moreover, it is a way of seeing the best in "what is" and "what could be" (IISD, 2001). This premise is well described by

Cooperrider and Whitney (2001) as "appreciative inquiry is about the co-evolutionary search for the best in people, their organizations, and the relevant world around them. In its broadest focus, it involves systematic discovery of what gives "life" to a living system when it is most alive, most effective, and most constructively capable in economic, ecological, and human terms" (p. 3).

Appreciative inquiry was chosen for this research was influenced for three reasons. Authors such as Sweeny (2014), Cram (2010), Ashford and Patkar (2001) and Batten and Stanford (2012) introduce appreciative methodology within the frameworks of an Indigenous research paradigm and argues that this is promising approach to Indigenous research. Also, Wilson (2008) asserts a western research approach can "focuses on problems, and often imposes outside solutions, rather than appreciating and expanding upon the resources available within Indigenous communities" (p. 16).

Second, appreciative inquiry has been used (and promoted) in Indigenous research before. Examples include the International Institute for Sustainable Development (IISD) and Skownan (Waterhen) First Nation (2001) work integrating Indigenous values into land-use and resource management. Cram's (2010) appreciative inquiry article surrounding Kaupapa Māori research explores ideas such as appreciative inquiry's ability to create a sense of ownership in new initiatives and suggest it can also be a very useful feedback tool.

Thirdly, the positive, strength-highlighting approach that I observed working with Cheslatta is shown in their mentality of an open arms/open doors method of collaboration and creating space for meaningful conversations, efforts and results. Their approach is strengths-based, therefore, I deemed this an appropriate methodological lens, along with appreciative inquiry methods. Ashford and Patkar (2001) suggest appreciative inquiry can be useful in

developing a community vision, articulating shared values and developing strategies and therefore, this approach has the potential to be useful to the community as they move towards the development of a community plan and other future planning, decision-making, management and overall reconciliation in the watershed.

The appreciative inquiry approach has four formal stages. Both Cram (2010) and Ashford and Patkar (2001) describe the stages as discovery, dream, design and delivery. Discovery is similar to storytelling about "peak experiences", or in other words, stories about experiences that were great, positive or a highlight to an individual. Dream is the time to imagine a future when the people and community are at their best and achieving goals and objectives creating a clear results-oriented vision in relation to discovered potential and in relation to questions. With a better understanding of strengths and core values, the design stage discusses a path for what can get the people and community to reach desired outcomes.

4.2 Research Process, Phases and Timeline

Informed by Indigenous research approaches and appreciative inquiry, this study followed a qualitative design incorporating scoping, literature and document review, appreciative interview method and observations/critical reflections and feedback and sharing with Cheslatta and the participants. Table 4 outlines research phases and their associated timeline.

This section will outline the research process, phases and timeline. Below will discuss the stages in greater detail starting at Section 4.3.1. The four main phases to the research summarized in Table 4 are described here:

The first phase was the scoping stage of this research. I was familiar with the Cheslatta, the associated story of the Nechako reservoir, and the band's engagement in strategies to

increase their power and presence on their traditional territory. However, as briefly mentioned above, the research questions, and associated methodologies, need to be developed in parallel with the community and resonate with their own undertakings. The scoping phase consisted of additional research (reading relevant materials), spending time in the community, meeting one-on-one with members of the community, starting with Senior Advisor to the Cheslatta Carrier Nation, Mike Robertson. This process led to the second phase of cooperatively solidifying the research questions and objectives, and research agreements. Because reciprocity is a key value in this research approach, it was important that I offered my time (e.g. through offering to assist with any Cheslatta/BC reconciliation process work, time working on the Cheslatta archives and working to assist Cheslatta in the watershed portal project with UNBC). This offer of 'giving my time back to the community' was a consistent open offer through the entire 4-year research process, not just in phase one.

The second phase led into a literature and document review (Chapter 2), background and study context review (Chapter 3) and ultimately the creation and presentation of a research proposal to my committee. The scoping also flowed into this phase with ongoing time spent in the watershed communities (e.g. Vanderhoof, Burns Lakes and the Southside) and continuing to listen to community members' insight while also sharing any updates or questions I may have had. A Letter of Support from Cheslatta leadership (Appendix A) outlined the cooperative development of the research topic. The letter was signed by Chief Corrina Leween on August 2, 2016. Following this, an application for this research was submitted to the UNBC Research Ethics Board for ethics approval to begin the research. This research was granted ethics approval on November 18, 2016 (Appendix B).

Table 4 - *Research phases timeline*

Phase	Research action or activity	Date(s)
Phase 1 - Scoping	Background research, scoping work within the Nechako Watershed and with Cheslatta community Participation in the Nechako Watershed Roundtable	May 2015-May 2016
	One-on-one meetings with Cheslatta members	
	One-on-one meetings with residents of the Nechako	
Phase 2 – Research, learning and continued relationship building	Researched literature and document review prepared, wrote and presented thesis proposal. Shared proposal with Mike Robertson (Cheslatta) for feedback, comments.	May 2016
	Continued relationship building and meeting with people in the Nechako. Field notes and research journal.	August 2016
	Received Letter of Support from Cheslatta Chief Leween, received Research Ethics Board approval (see Appendix A & B)	
	Participant recruitment through snowball sampling: Relationship building and maintenance with Cheslatta members and Nechako residents.	August - November 2016
Phase 3 – Data collection and sharing	Interviews with participants, field notes and research journaling.	Fall 2016-Summer 2017
	Interview transcription Sending transcriptions back to participants (member checking) for feedback, comments.	
	Coding and analysis Field notes incorporation Identification of codes and ultimately the four themes.	Summer- Fall 2017
	Compiling notes for draft findings chapter	
	Leave of absence from graduate studies – no work completed during this time.	Nov 2017-Summer 2018
Phase 4	Synthesis of findings with literature and document review	Fall 2018
	Write draft of findings chapter. Development of implications and recommendations	Fall 2018
	Sent Chapter 5 Finding to Mike Robertson (Cheslatta) to share with anyone interested to incorporate feedback.	February 2019
	Writing and completion of discussion chapter	Jan-Mar 2019
	Drafts sent to supervisor and committee for comment and review Edits are made, finalization of drafts.	April-June 2019
	First full draft sent to Mike Robertson (Cheslatta) to share with anyone interested to incorporate feedback.	April 2019
	Continued process of incorporating feedback Went back to interview participants to ask for permission to use an alias (rather than given name) Shared where and when their voices have contributed to the research.	May – June 2019
	Submit copy of thesis to UNBC Office of Graduate Studies	June 2019
	Thesis defence	Aug. 2019

The third phase ran from fall 2016 to summer 2017. It was a stage of continued relationship building with community members, recruitment for interviews, interviews, transcription, coding and analysis and writing of Chapter 5: Findings. The relationship building consisted of staying in contact with members of the band, dropping by the band office and staying in touch with people about the process of the thesis. This was paralleled with the snowball sampling approach to identify potential, and willing, interview participants.

Interviews were completed and all conversations were then transcribed. The transcribed interviews were sent or made available to all participants for their review, comments and/or corrections. Participants were asked to respond to me, either via email, on the phone or in person that they were satisfied with the transcription record they had received. I did follow up with participants I saw in-person after to ask if they had any questions or comments on the recorded transcript of the interview. Due to my wording/use of words on the follow up, if they did not respond, I considered the transcript was approved by the participant. This led to an oversight on my part. This is discussed further in the fourth stage. Also, all transcriptions were reviewed (and listened to) several times to ensure accuracy and to allow what the participants were saying to 'sink in' with me as the researcher. This led to the coding and analysis stages and, ultimately, the identification of four themes for Chapter 5.

Between phase 3 and 4 (November 2017-Summer 2018) there were two unanticipated events that interrupted the process and flow of the master's thesis. Cheslatta was participating alongside the Government of BC in intense reconciliation agreement conversations. This demanding process understandably was very time consuming and top priority and ultimately led to the signing on the Settlement Agreement on March 28th, 2019 (CCN, 2019). Additionally, I was required to take a leave of absence from my graduate studies due to health reasons and no research or thesis work was completed during this time.

The fourth stage, commencing in Fall 2018, was the last phase of the research. Chapter 5 was shared with Mike Robertson at Cheslatta with an offer to share with any of the participants or community members. Next steps included revisiting and comparing the interviewees' insights and voices alongside the literature and document review in order to discuss new insights gained. This created the material for the final chapter (Chapter 6: Discussion) where the two sources of information where synthesized and discussed. Methodological insights were written along with implications and recommendations. At this stage, my supervisor and I noticed an error regarding the signed consent forms. The final consent form approved by UNBC's Research Ethics Board (REB) was not given to participants at the point of interviews. The version used was an older version that did not request participants to provide an alias (instead of their given name). Detecting this error required a correction. The error was rectified by revisiting all of the participants in person to explain and ask them to provide an alias name (also discussed in section 4.3.2). This process was combined with a final point of contact with the participants prior to completion of the thesis, creating a great opportunity to sit down in person with research participants, discuss when and where their voices were presented in the thesis and ask for comments and feedback. Through this last stage, drafts were sent to the committee for review and comments and edits/alternations are made. The final phase of thesis examination and defence process (July and August 2019) provided an opportunity to make plans for how and where the research will be shared with different audiences (as detailed in Section 4.3.5).

4.3 Data Collection and Analysis

This section outlines how participants were involved in the research process starting with the sample strategy and recruitment stage which outlines the interviewee criteria. The interview method used, appreciative inquiry questions, are introduced, including how the interviews took place and then an outline of how observations and field notes where documented. Transcription

process and the choice of thematic analysis is introduced followed with how and when the research was shared.

4.3.1 Sample strategy and recruitment

Since this work was built on existing relationship between UNBC, Cheslatta and local residents of the Nechako there were several points of contact that were created for the foundation for recruiting participants. I placed importance on purposeful sampling as that will ensure appropriate individuals or experts are selected. This method focuses on "selecting information-rich cases whose study will illuminate the questions under study" (Patton, 2002, p. 230).

Saunders (2012) states the "choice of research participants should be determined by the focus of our research, thereby enabling us to meet of our research aim and answer our research question". As discussed in Chapter 2 with traditional ecological knowledge, there is a growing trend to incorporate local and traditional knowledge into land use planning, governance and stewardship because these techniques have been passed down from generation to generation, being tested over time, it has showed the best knowledge, practices, methods and ideas. Therefore, it is important that the participants of this research met the participant criteria listed below. No demographic information (e.g. age, gender and ethnicity) was asked from the participants and therefore there is no definitive demographic information available for the participants. Section 5.1 introduces the participants and their voices to give some context, but does not provide a definitive demographic profile.

Informed by the research questions, objectives and the appreciative inquiry approach, the following selection criteria for interview informed participant selection and it was mandatory the participant must meet two criteria, whereby each participant needed to:

i. Have past or current involvement with land/water planning, management, stewardship or land-based activities, and either be an employee or member of the Cheslatta community

or through local government or stewardship activities. Participants need to be well versed in the Cheslatta story. The latter could include awareness of the land base, hunting, or a community knowledge holder; and

ii. Be over the age of 19, with the aim to include a range of ages. This included opportunities to interview with Cheslatta Elders in the community. Younger participants could provide insight to more contemporary observations or whereas older participants could share stories from a different perspective of wisdom and experiences. 19 and over was chosen because the research aims to discuss issues of land and environment and I wished to interview people who have adult experience with the land and water issues of Cheslatta and the Nechako over time (building off of point i).

Although the participants were located in the study area, it does not necessarily mean they had the skills or knowledge of land and resource management, planning or governance. For this reason, participant recruitment also involved finding people who had been involved in land activities, either through employment or being a knowledge holder in the community. Still, it is key to note that all participants may not be subject matter experts.

To recruit interview participants, I began contacting existing contacts and referrals, in a process commonly referred to as snowball sampling (Noy, 2008). All communication occurred through either telephone calls, email correspondence or in person. Once a participant had verbally (or in writing) agreed to participate, I arranged a date and time to meet (or call) individually with each person to go into deeper details of the project, review the information and consent form.

Consistent with Sanders (2012) approach to selecting participants for interview, Onwuegbuzie and Collins (2007) suggest the sample size of participants should be informed by the project objective, questions and design. As a researcher, I must have acknowledged and

understood the trade-offs between breadth and depth of this project, quality and honest open conversations with the right people was better than the number of interviews in total. The goal of the interviews was to not generalize, but to obtain insights and perspectives.

Qualitative studies are very contextual in rules surrounding sample size (Baker et al. 2012; Morgan, 2008). Baker et al. 2012 advises qualitative researchers to put directed thought towards asking our self if "we have or believe an excellent range of high-quality pieces of advice that will serve as a valuable guide" (p.4). This is the attempt to reach 'saturation', or not a certain number of interview participants, but rather high-quality insights and perspective to help illustrate the community's voice and ultimately, their advice. I aimed to balance the aim of reaching saturation (where the data starts to repeat itself or no new information is being revealed) while gaining adequate experience in planning and structure interviews (Fusch and Ness, 2015). A wide range of participants were selected from a desire or willingness to want to participate in the project and share their stories and how they met the criteria. After an interview period of one year (approximately fall 2016 to fall 2017) the sample size was 13 participants with a wide range of backgrounds and experience.

4.3.2 Semi-structured interviews

The interviews were designed to gain insights and perspectives that could not otherwise be highlighted or surfaced due to their local context. The interviews provided the participants an opportunity to share stories within their region but also share areas of strength that can be built upon within the context of answering the research questions (Section 1.1).

Semi structured interviews were conducted with 13 interview participants. All informants were interviewed over telephone or face-to-face sessions ranging from 25 minutes to over 2 hours. I allowed the participant to choose the location because I wanted them in a place that was comfortable and familiar. I was flexible in booking dates and times (to an extent) due to the

nature of people's schedules. All participants were given a $20 gift certificate to a local grocery store to show appreciation for their time, participation and insight.

The appreciative interview was the method chosen for the semi-structured interviews. Appreciative interviewing is a method for interviewing participants to envision a time and space that they would like to live within and describing how they would get there (Schultze & Avital, 2011). This method of interviews directly builds off the appreciative inquiry methodological approach (introduced in Section 4.2.2) of looking for the best in people and communities. Appreciative inquiry interview questions generate rich narratives that reflect individual, group and community achievements, values and aspirations from well-crafted "good" questions by invoking storytelling (Norum, 2008).

The research interview questions (Appendix C) were pretested with people outside of this research project (non-participants) to test the clarity and intended purpose of the questions. Pretesting interview questions is an extremely important aspect to asking the right questions to achieve answers to help answer the overarching research questions (Collins, 2003). Prior to any interviews commencing; all participants will be provided with an information sheet (Appendix D) and an interview consent form. As introduced in Section 4.2, nearing the end of the research process, it was recognized that I had made a mistake by using a consent form that did not include the final request from the UNBC REB to ensure all participants provided an alias name rather than their given name. The consent form used allowed the participant to choose their real name or alias. To rectify the error, I returned to each participant and asked them to complete a "Permission to use an alias" form where they indicated what alias they would like to be referred to in this thesis and any other publications or presentations relating to this research. Participant choice of alias's ranged from single or double letters (e.g. A or DT), to full names (e.g. Trout, Grandma, Cyrus Whitefish).

4.3.3 Observations and field notes

Observations and field notes are important aspects of qualitative research, particularly in the analysis stage. Hay (2005) discusses that observations require the researcher to capture an environment or situation using all of the senses while critical reflections ask the researcher to be "self-conscious" (p.293) think through our observations and ideas. To document observations, I developed field notes and a research diary throughout the development phase, the data collection phase and through the analysis and coding phase of the research.

Field notes are written summaries taken during the entire research process that document dynamics that are collected separate of interviews and literature reviews (Ritchie & Lewis, 2013). Field notes are records of specific field experiences that are intended to document many aspects of research that are not documented by other methods. Taylor et al. (2015) state good field notes will include descriptions of the researcher's feelings, actions while describing people, events and conversations. The notes are to add to theories or themes surfaced in the literature while also to discover what is not being discussed in the literature (Taylor et al., 2015).

Informed by the ongoing process of recording field notes, important phases of observations and critical reflections were documented during the research development, appreciative interviews (including the transcription of interviews) and throughout the overall research process to the end. During and directly after the participant interviews, I consistently processed what the interview participant was saying and what had been said (so as to not rely solely on the digitally recording) as well as noting and recorded emotions, tone and anything that I thought may be important during the interview. I would ask myself if I understood what the interview participant was saying, how and why they were saying it and made note of specific emotion given to certain words, topics or sentences. Silence is also important to document what wasn't being said (non-

verbal cues). This was informed by both Tracy (2013) and also influenced by Braun and Clark's (2006) approach to using thematic analysis.

Insights from interactions with the community since Fall 2016 had already informed my choice of the appreciative interview methods, as an example of how observations and reflections are an important aspect of any meaningful research. Keeping detailed notes with the intention to be reflective throughout the research process helped to ensure I created dependable work.

4.3.4 Transcription and thematic analysis

I completed transcription of the recorded interviews manually. I listened to each interview and wrote the transcripts verbatim on to Microsoft Word. Transcribing the interviews manually myself was part of the process of beginning to be well acquainted with the words spoken (Dunn, 2005). I also added any laughs, pauses, or anecdotes that would help me remember what the mood or nuance was, which were recorded alongside the interview as part of my field notes (Dunn, 2005). The transcription of interviews was sent back to each interview participant for their review via email or mail depending on each participant's preference. This process is also referred to as 'member checking', as it is used to check validity and accuracy of my manual transcription. I followed-up with each participant to check if she/he agreed with the transcription to make all and any appropriate or requested changes. Once transcription of interview data was completed, the analysis stage could commence.

The task of qualitative analysis is to reach across all aspects and levels of the researcher's data sources and condense them to illustrate patterns (Miles and Huberman, 1994). Through the qualitative content analysis process, data reduction, organization, identification of codes and introduction of themes was conducted. There are a number of methods for analysis organization that includes the identification of terms, codes and themes (Creswell, 2007; Tracy, 2013). This

research used a thematic approach to analysis following the flexibility in the stages outlined by Braun and Clark (2006). Braun and Clark (2006) describe thematic analyses as a "method for identifying, analysis and reporting within data. It minimally organizes and describes your data set in (rich) detail" (p.80).

Analysis during data collection and transcription occurred through observations, field notes and actively searching for themes. Systematically organizing and preparing the information (in this case, people's voices, insights and perceptions) is a first step in analysis (Tracy, 2013). Through writing my field notes I was analyzing the data collected and beginning to generate initial codes as the research was proceeding. I started by reading through all field notes and printed hard copies of transcripts and making notes and comments as I went through them. At this stage, I would underline, highlight, star, comment or note anything that either stood out to me in some way and or helped answer the research questions. This was a preliminary stage that assisted in both familiarizing myself with the data and allowed themes to slowly (or sometimes rapidly) appear. That stage followed the first and second phases of Braun and Clark's (2006) approach: familiarizing with the voices and insight while generating the first codes. The next phases included organizing those initial codes into themes, while constantly reviewing them for a "fit". I did this by first colour coding (with different highlighter colours) codes, then building a spreadsheet of the codes (the quotes from participants). Alongside this, I also began to write early themes that were emerging on more sticky notes. After revisiting several times, reflecting on the field notes and sometime re-listening to the interview recording itself, I could see the defined themes developing. Phase 5 and 6 of Braun and Clarks (2006) encompass the finalizing of these themes, naming them and then finally discussing them. However, it is important to note that this approach to thematic analysis is not linear, and does ask

the research to jump back and forth between the phases, while keeping the literature and research questions in mind to find and locate the comparisons and differences, as discussed below.

Analysis includes evaluating the literature, documents, observations, field notes and interview data to integrate and connection the different kinds of information. The research adopted an inductive approach to analysis whereby the researcher is consistently trying to discover "patterns, themes, and categories in one's data" (Patton, 2002). Inductive processes were engaged to allow meaningful aspects to surface and show any recurrences that may not have been assumptions shape discussion around observation and not expectations (Patton, 2015, p. 453). Further, an inductive approach to analysis was chosen because it is concerned with the generation of new theory emerging from the information and insight gained, versus testing a theory with emphasize on positive or post-positivism (deductive). Each form of information (literature, documents, and interviewee's voices) is a pillar of the research and therefore must inform each other to identify data to answer research questions (Taylor et al., 2015). Fraser et al. (2006) discusses integrating participatory 'bottom up' data (in this case interviews and field notes) with the traditional 'top down' approaches historically used in environmental management. They concluded that 'top down' approaches from "highly trained experts or managers rarely had the benefit of detailed local knowledge and failed to generate community support" (p.126). The authors found that incorporating the literature and participants' voices and insight in a more equal 'top down' and 'bottom up' fashion could lead to more inclusive and comprehensive research findings through their work on coastal BC (more specifically in this case, the Clayoquot Scientific Panel and Coastal Information Team).

4.3.5 How and where the research was shared

There were a number of conferences and events where the research was shared with audiences. Starting in 2016, before participant interviews commenced, the research was

presented at Northern Health Research Days in Prince George. This gave the opportunity to share the research objectives, questions and design to an audience of people who work or research in the health field. In 2018, once participant interviews were completed, the preliminary findings where shared at two events: Cumulative Impacts Research Consortium meeting and UNBC Graduate Student conference on a graduate student panel on community-based research. Both gave the opportunity to share with students and researchers the preliminary themes of my findings and have questions asked. After each participant interview was completed, the interview was transcribed and sent back to the participant for their review and record. I asked each participant, in person, to contact me if they had any concerns with the way I had written their voice.

2019 was a busy year for sharing the research with three presentations (not including the defence) and sharing and creating space to discuss the findings and discussion with interview participants individually. Before sharing with the public, the preliminary findings chapter was sent to Mike Robertson at Cheslatta to review and share with anyone interested alongside me sharing the date, time and location of all presentations. Feedback incorporation was important to the research and therefore I strived to provide as many opportunities as possible. Two presentations took place at UNBC: first full presentation of research work and the Three Minute Thesis competition where competitors are required to follow a framework of criteria to present their entire thesis in 90 seconds. The final public presentation, before the defence, was at an audience at the Annual Meeting of the Canadian Association of Geographers in Winnipeg, MB in May 2019. Following the thesis defence, I will continue to offer to share the research with communities and organizations and am actively working with community partners to plan a presentation at Cheslatta.

4.4 Ethical Considerations and Research Quality

It is paramount to acknowledge and understand the social space this research took place and the sensitivities surrounding these spaces (Kershaw, 2014). Further, it was important to be mindful and considerate of my ethical practices to better address unethical research that has occurred historically with Indigenous peoples (Castleden, Sloan-Morgan & Lamb, 2012). For my participants, I was open about my intentions through open communication, information sheets, use informed consent and ensure confidentiality to the best of my ability. Along with this, I completed the appropriate ethics application through the Office of Research at UNBC (filed under E2016.1025.084.00). Ethical clearance was received November 18, 2017 before any of the formal research process began (Appendix B). Using Indigenous methodologies lens for this project also required special attention respectful and reciprocal relationships that must be followed. This research aimed to reflect this throughout the scoping phase (to make sure the research itself was in line with current aims and objective and would create a product that was useful to the community) and asking for a Letter of Support from Cheslatta leadership outlining the cooperative development of the research and research topic. Then sharing updates on the project, asking for feedback and sharing how voices were represented in the final thesis (and accompanying posters, presentations, and any other means of sharing).

4.4.2 Risks and benefits

This project met the Tri-Council Policy Statement 2 (TCPS2) definition of minimal risk because as there is no greater risk in partaking in an interview for this research than the participant would encounter in their everyday life. However, I did recognize there may be certain emotions or reactions to interview questions and, due to historical events that still have an impact on the participant's territory (e.g. Rio Tinto Alcan's operations: Kenney Dam and associated

Nechako reservoir), our interview conversations may provoke sensitive thoughts, emotions and/or reactions. I intended to do my best to ensure participants felt comfortable during the interview and explained they would not need to feel self-conscious, regardless of the topic. I would like to note that, although there were some passionate conversations surrounding health and land use, no participants became upset or distressed.

The project met the TSPS definition of low participant vulnerability because the participants will have had experience (and hold knowledge) with the issues surrounding the historical and contemporary topics that was covered in this research. From my experience and knowledge, I did not consider the participants vulnerable. Following the themes of Indigenous and local knowledge systems and traditional stewardship, the participants may have insights/perspectives that could not otherwise be highlighted or surfaced.

4.4.3 Confidentiality

Confidentiality and respect for privacy is a right for research participants as per Chapter 5 of the TCPS 2 (2016). Since all interviews were digitally recorded alongside observational notes and transcribed on to MS Word documents, participant information will be kept confidential for five years (until mid-2022). At the time of the individual interview, the participant was given the option to use an alias or their initials for referring to the participant in this thesis and any associated documents or presentations. However, nearing the end of the research process, it was recognized that all participants should have been identified by an alias name only (initials were not confidential enough). I returned to each participant and asked them to complete a "Permission to use an alias" form where they indicated what alias they will be referred to in this thesis and any other publications or presentations relating to this research.

All information collected through this project has been downloaded/removed from the digital recording device and stored on secured hard drive, in locked filing cabinet in a locked room at the University of Northern British Columbia. This room is the lab belonging to my supervisor Dr. Margot Parkes. All interview data and notes will be destroyed after 5 years (mid 2022). This information is also outlined in the UNBC research ethics board approval (Appendix B).

4.4.4 Research quality: evaluation and rigour

Self-reflectivity asks the researcher to question him or herself and question their understanding and calls on the researcher to examine their own origins of perspective and how they (I) stand in the research process, at all stages (Tracy, 2013). Critical reflexivity is defined by England (1994) as "a process of constant self-conscious, scrutiny of the self as a researcher and of the research process". Reflexivity is an important component to qualitative research as it enables the researcher to explicitly reveal their own positionality in relationship to the research at hand (Hsuing, 2008). Reflexivity requires the researcher to expose any preconceived perceptions or experiences that may potentially influence the way the study is being managed and interpreted. This includes being self-reflexive through personal documentation of the process through a research journal. The journal should be reviewed throughout the study and added to consistently as good practice. A journal was kept throughout this research process which also housed my field notes.

As described by Baxter and Eyles (1997, p. 512-516) evaluation criteria is critical in qualitative research, especially if the results are to be considered valid to outside groups of practitioners (such as this research). The criteria include credibility, transferability, dependability and conformability:

1. Credibility is accurate representation of experiences. These are based on the idea there are multiple realities and no single reality. Because of this, it is important to acknowledge that the researcher is likely to never know the whole story, and therefore, should not argue they do. Credibility is especially important in the sampling process and interviewing process. The researcher is an instrument of the research and therefore it is critical to gain and embrace rapport with all interacting with the outsider.

2. Transferability is the generalization of findings that allows them to be useful outside of the study. This includes findings from case studies such as the Cheslatta story. It was important to consider the researcher's (my) responsibility to construct the study and its findings in a fashion which other groups or people, can understand and find useful. This was achieved by presenting my findings at conferences, providing the presentation PowerPoints, verbally sharing the findings in casual conversations with participants and other community members and asking staff at Cheslatta how, and what format, would be best for them to have a copy of the thesis (or sections of).

3. Dependability is implicated with the record of the research context, design and structure. LeCompte and Goetz (1982) introduce five strategies to increase the strength of the researcher dependability. These strategies are: low inference descriptors (narratives and field notes), mechanically recorded data (audio or video recordings), participant researchers (similar to member checking) and peer evaluation (further examination by peers) (Baxter & Eyles, 1997). Audit inquiry is very important for dependability as it asks for checking of procedures/design and documentation throughout the study (Tracy, 2013). This was achieved by keeping field notes/research journal, physically transcribing all interviews with Microsoft Word for accuracy and getting more familiar with the voices, sending or sharing copies of the transcripts with

participants and asking for any questions or comments from them and finally having my thesis reviewed by two graduate peers.

4. Conformability is concerned with both the representation of the researched and the researcher. This is similar to perceptions of objectivity (Baxter & Eyles, 1997). The researcher must represent their work in a manner that displays the character of the data, which was achieved by clearly communicating and accurately representing what the interviewees said. This was achieved by recognition that the researcher is an important part of the research, however, in the manner that the researcher is the vehicle to synthesize the information, voices and insights and accurately represent what the participants said and shared. This also focused on the reciprocal relationship I, as the researcher, have with the community and participants of the study.

Flow of the research process is also important to the research quality. This research took place from May 2015 to August 2019: a four-year period and is outlined in Table 4. As mentioned in Section 4.2, as the research process started moving forward, the Cheslatta entered into intensive negotiations and discussion with the BC Provincial government and from Fall 2017 to Summer 2018, I took leave of absence from graduate studies/research. This resulted in a period of time were the work was not progressing in a typical research flow where the researcher is immersed in the work. However, the research did resume and time was taken to re-familiarize myself and the participants with the research.

4.5 Summary

Decolonizing and Indigenous research principals that underscored this research provided a methodology and methods for seeking insights and perspectives for Indigenous-led collaborative stewardship. Through the four phases of this study, a research design was crafted through

knowledge gained over the research process. Interviews created space for local insight and perspectives to be shared and through analysis findings are presented in the following chapter.

CHAPTER 5: FINDINGS

This chapter presents the findings that were identified through the thematic analysis process described in Chapter 4. The first objective of this research was to examine connections between stewardship, collaboration in the natural resources field and approaches to watershed management while the second objective was to seek perspectives and insights about the role of collaboration in culturally appropriate stewardship. The third objective was to also formulate place-based, locally informed recommendations to inform emergent strategies that have the potential to enhance objectives of watershed stewardship. The findings, and subsequent discussion in Chapter 6, are organized around themes that connect to the two guiding research questions:

Research question 1 (RQ1): How can local insight assist in shaping collaborative and integrative approaches to culturally appropriate stewardship in the context of the upper Nechako watershed?

Research question 2 (RQ2): What new insights can be learned from the Cheslatta Carrier Nation (Cheslatta) for moving towards culturally appropriate stewardship in a watershed context and understanding how this relates to the Cheslatta aims and objectives of reconciliation and community healing?

The findings come from the voices of the 13 participants and analysis of their individual semi-structured interviews transcripts. This chapter begins with an introduction to the participants and their voices. Although no individual demographics were collected on each person, I will introduce people's differing experiences, background and knowledge to get a sense of where the insight and perspectives are coming from. Participant quotes are identified by the participants' chosen alias, which permission was given to use and identify by. This chapter is

divided into sections according to theme and gives supporting quotes (voices) from participants. Section 5.2 is the findings from the questions I asked about definitions of 'watershed' and 'collaboration' at the beginning of each interview. The subsequent sections are the themes that resulted through the thematic analysis of the interview questions, answers and insight and perspectives given by participants. The findings are then presented in relation to themes of 5.3 Closeness and remoteness, 5.4 Community teaching and Leadership, 5.5 Passion and tenacity to achieve local dreams and 5.6 Healing and reconciliation in the watershed.

5.1 Participants and their Voices

There were 13 participants who took part in individual semi-structured interviews. The majority (ten), worked for or were members of the Cheslatta Carrier Nation. The three others were heavily involved with stewardship activities or local government within the Nechako watershed and were well versed in the Cheslatta story. All participants met the interview criteria by having current or past involvement with land/water planning, management or land-based activities within the Nechako upper watershed (the latter included awareness of the land base, hunting or being a community knowledge holder). Participants need to have been well versed in the Cheslatta story as well. No participant demographic was collected from the interviewees but there was an almost equal number of females and males, with a range of ages from the youngest being in their early 20's to the oldest in their 80's. The younger participants could be able to give insight and perspectives to contemporary observations whereas the older participants could share stories from a different perspective of wisdom and experiences. There was no information gathered in regards to Indigenous or non-Indigenous heritage or background of the participants.

The participants were interviewed individually using a semi-structured appreciative interview guide. The questions started with asking the participants about the terms 'watersheds'

and ‘collaboration’ and the subsequent questions followed the 4D cycle of the appreciative inquiry described in Chapter 4, Section 4.1.2. I asked about connection to the land and water, asked them to share stories about when ‘things were great in the community/watershed’, what they envision for the future of their community/watershed, what they see in the future and what their suggestions are for getting there.

Interviews were held in people’s homes, at their place of employment or at the Cheslatta office. I let the participant choose, and I met them there. All the interviews were light in mood, typically lots of smiling and laughing, and everyone appeared to be very comfortable. Some were shyer than others and some were very generous with their knowledge. One interview went two hours just sharing stories and knowledge. Each participant was very friendly and some were even excited to participant in the interview. Overall, the interviews were extremely optimistic as many participants shared stories while laughing, and told tales of past times and things they look forward to in the future. The interviews were an enjoyable experience for me as the researcher, as I was able to listen to participants share parts of their life. I felt very grateful after each interview. As outlined in Chapter 4, participants were asked to provide an alias which ranged from single or double letters (e.g. A, or DT), to full names (e.g. Trout). Participant quotes are shared here using the alias provided

5.2 Watersheds and Collaboration

Each participant was asked to provide their own definition of the words ‘watershed’ and ‘collaboration’ and asked to provide how and when they may use that term in practice. The reason this question was asked is twofold. First, the question was asked to set the tone for the interview in a way that got the participant thinking about those terms. I wanted each person to keep that in their mind as they thought about and answered the following interview questions.

Even so, I cannot be sure that each participant did keep those terms in their mind throughout the interview. The second purpose was to reveal how these terms are thought of and how they may be used by the participants. Since watersheds and collaboration, and focusing on local perspective, was such a large part of this research, it was important to hear what these terms meant to the people participating.

5.2.1 Perceptions of watersheds

A formal definition of watershed is offered by Merriam-Webster dictionary: "a region or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water". One overarching theme mentioned by many of the participants was how they describe a watershed as a system of water. The words system or family were the most commonly used in the participants' definitions and descriptions of these terms.

Cyrus Whitefish reflected on his own self discovery of a watershed, and how they are all nested within one another and how they are "distinct but not distinct":

> I started doing mapping of the smaller lake watersheds going up to the size to the Cheslatta lake and then up to the Nechako watershed, we did a lot of hand drawn maps, kinda only then I did I understand that a watershed is a collection of watersheds. It's not necessarily a full and distinct watershed, in our area in the upper Nechako watershed is also a combination, or a family, of the White Sail Lake watershed, Tahtsa Lake watershed, Oosta River watershed, Morice Lake watershed, Francois Lake watershed, it's a capital watershed is a family of capital watersheds. (Cyrus Whitefish)

One participant emphasized that watersheds were hard to describe but again linked all the water in the area:

> I would define watershed just as the tributaries and just all the lakes and all the various water that we have in the area. The connections, the connections that it makes, what it proves for the people, what it proves for the animals, the tree, everything in the area. Just what the water does. (DT)

This description by DT has similarities to other comments from participants on what the water naturally does in the area. DT also described watersheds as "Just what the water does"

referring to its natural process and notes that is it giving and providing for everything else in the area (people, animals, trees, everything). Rose Emma Watson described the watershed as "it's where we all live, it's here, we are in the watershed now. All the water here will go into the Nechako" (Rose Emma Watson). Another participant response reinforces these ideas of the range of connections as well as changes and damages over time:

> Our watershed is, ya know, everything…well like, my watershed is Cheslatta and you know, well just water! It's freaking, ya know like, the whole Oosta Lake system, that's like a watershed. They totally wrecked, you know, I wish I could have seen it before the flood, ya, but then when I went to Eutsuk Lake, that's what Oosta used to looked it before it flooded. Have you ever been to Tweedsmuir Park...But anyways that's like...my...the watershed to me is everything. That's in our...every lake is connected pretty much (C).

Cyrus Whitefish provided a reflection when asked about watersheds: "that's a good question because I never really thought about it. I remember when I found out that the Cheslatta watershed used to be a distinct and separate watershed from the Oosta lake system". These examples underscore the range of different perspectives that resonate with and also extend beyond formal definitions, emphasizing how all water is nested within each other and the ways that watersheds are a system where we all live, including all of the animals and how they must take care of it. Some of the participants described to the term as having a potentially negative context (or feeling) especially when referring to the range of impacts on the watershed:

> Just that the impact that the watersheds situation here has had on our people, the impact it's had on Oosta Lake, it's changed the whole, we used to get salmon that came from the coast right? And we don't get that because they diverted the water system. All the wood that's just wasted, they didn't plan to log it or anything. They just freaking put the water there!! [That's] kinda what I think about when I hear watershed…that's a big deal (Jessi Rose Boyd).

Jessi Rose Boyd's reference to Oosta Lake (which is now part of the Nechako Reservoir) knew what a watershed was, and yet when asked, she quickly went to describe a range of impacts on the watershed. This was a common response to the opening questions. One person described the negative impacts on the water system due to the Nechako Reservoir "the entire

system is hurting because of the dam, you can see the affects everywhere. Even right down here from my house" (Rose Emma Watson).

Although participants' descriptions of watershed sometimes used different words than dictionary definitions, there were also many similarities. For those who didn't answer the question, they went straight to talking about the water:

> The water here is our life. It gives us life. We depend on it. Some of it is polluted now, we used to drink right out of Frances Lake. That is why we have to do something about it (P).

5.2.2 Perceptions of collaboration

The semi-structured interviews were also designed to commence with an orientation to a second key concept: collaboration. A formal definition of collaboration is given by Merriam-Webster dictionary: "to work jointly with others or together especially in an intellectual endeavor" and "to cooperate with an agency or instrumentality with which one is not immediately connected". When asked to define this term, participants offered descriptions that had very similar key features. Many of the participants' responses followed themes of working together, coming together, working well together, working with people, helping each other outworking to accomplish something, and working to make something more positive. After explaining how they collaborate to work towards their own goals and objects of reconciliation and healing, Jessi Rose Boyd began her description of collaboration by explaining how well their group works with other First Nations "I think we work really good with other First Nations, we try to make an effort". Miss Marie Jack also concluded her answer with the statement "just a busy place for 12 people [working], like we sure accomplish a lot". Miss Marie Jack expanded on this in her comments around collaboration:

> We work really good. As a team. Our 12 staff get a lot of things done. There is always, like you said, there is something happening here all the time. Whether it's meeting or training or there just a busy place for 12 people like we sure accomplished a lot (Miss Marie Jack).

Miss Marie Jack listed several ways, or definitions, of collaboration and noted that she had gained new insights into the idea of information sharing as a method of collaborating only the day before the interview:

> Working together with people. I guess. Collaborating…working together I guess...ummm to create...to a collective means to an end, I guess. You know what I mean? You're working towards something together to accomplish the same outcome. So helping each other out? Working together to achieve a common goal? Ya, information sharing, I just learned that yesterday! (Miss Marie Jack).

When describing the word collaboration or collaborating, one participant spoke of the term being a positive one and working towards something more positive "sounds like you're like trying to build…move towards a more positive...like make it more positive" (Rose Emma Watson). Building on the positive nature, and linking with the systems approach from the previous watershed questions, another participant describes that collaboration it was "all coming together. The whole system coming together" (Trout).

Cyrus Whitefish offered a valuable perspective from his own experience beginning by describing as "two or more parties come together with their common goal to achieve common result". He expanded on this by sharing his perspectives on the challenges of achieving collaboration in the context of the Nechako watershed.

> I guess it was always a dreamy concept I had with regards to the watershed management because the concept of cooperation or collaboration was completely impossible, or, a foreign concepts and it remains so to this day because the term collaboration and I don't have a Webster's dictionary with me but I'm sure it means two or more parties come together with their common goal to achieve common result and in the case of the Nechako watershed that in itself is an impossible task because no matter how many like-minded people or groups or communities want to collaborate in order to accommodate everybody. And if there is one person singing out of key or doesn't even want to come to the concert, the show doesn't go on (Cyrus Whitefish).

One participant linked in working with their neighbours (DT) while defining collaboration. Another participant, N, mentioned the "Cheslatta has definitely spearheads any sort of infrastructure that goes on in this area. It would be nice to see if any of the white settler communities, the Mennonite community and stuff like, everyone involved in this area should probably have a share in how the area develops". DT's description spoke to the collective approach to having all residents of the area involved in area activities and development. All of the participant answers to the question about collaboration had the general theme (perspective) that collaborating was working together (internally with each other and externally with neighbours) and working hard to achieve an objective alongside each other.

Both questions surrounding how and when a participant would use these the words watershed and collaboration were very valuable in showcasing how different concepts can mean very similar things to each other, yet sometimes stated using different words. The next sections will present the findings of the analysis of the participants' responses to the appreciative inquiry interview questions and present the themes that were identified through thematic analysis.

The development of appreciative inquiry interview questions and the process of thematic analysis of interviews is outlined in Chapter 4. The findings that were identified are presented in the follow sections and then discussed in relation to the literature in Chapter 6. The 4 themes presented here were identified based on their relation and relevance to the two guiding research questions and are presented here in relation to the headings: 1) closeness and remoteness, a theme about the geographic context of the watershed 2) community teaching and leadership, a theme about knowledge exchange, 3) passion and tenacity to achieve local dreams, a theme about how the community is attaining their own aims and objectives and 4) healing and reconciliation in the watershed which was the overarching dream for the participants.

5.3 Closeness and Remoteness

The findings noted in this section emphasize how the relationship of living close to their territory yet feeling remote, or in nature, contributes to the participants' dreams and aspirations for healing the people and land. Those interviewed described a number of ways that both the closeness to and remoteness of the territory gave them a sense of connection to and appreciation of the land and water. In particular, participants shared insights about the ways that closeness to the Cheslatta territory, and Nechako headwaters, offers almost everything they needed, despite the reality of being remote from main urban centers (cities, for example). The participants' provided a variety of examples of this ranging from food and medicine gathering nearby, engaging in activities close to home and room for teaching and learning and economic development.

The closeness to their land and waters was mentioned by many participants stating they were immersed with "all they needed was in their backyard…like all our food and medicine is out there" (P). Also described was how the Nechako River is their lifeline and "without that river, we are nothing…and it is right there" and they were "self-sufficient" (P) and "never went hungry" because their territory "contains what they need and what they need for the future" (Rose Emma Watson). However, participants noted that when they were forced off their traditional villages, things shifted for the worse (referencing the creation of the reservoir). Traditionally and contemporarily, the interviewees spoke of how important the health of the land and water as directly related to the health of the community.

> The river is us. It's a land, it's everything that lives in and around it. It's the fish, human, mankind cannot survive without that. So, without a healthy river, you can have all the resources around like timber, minerals, but without a fully functional river, which is a life blood of the land and the weather, the environment, without that river, we are nothing. And that totally gets disregarded and forgotten about so many times (Cyrus Whitefish).

Jessie Rose Boyd, who was born and raised on Cheslatta territory, described how pleased they are to be able to engage in more "remote" (Jessi Rose Boyd) activities right in their backyard. She was referring how she "felt like she was in the middle of nowhere but I was home" (Jessi Rose Boyd). Another participant echoed this with different words with "home is here. And the bush, the forest and that is ours, the food is out there and the fishing...family" (C). Participants offered a variety of descriptions of the benefits the land and water gave them including "life, existence, nutrition, and nourishment. First and foremost," (DT) and "the forests and the rivers just being themselves" (Miss Marie Jack). Many participants described ways that members of the community enjoy the recreation the territory has to offer, even though this was not necessarily described it using the word recreation. Individuals described their connection to the landscape and linked this to appreciation for the land the describing that "I loved being out here...I just love living out here" (Jessi Rose Boyd) and "I grew up out here so I've lived here my entire life" (Miss Marie Jack). One participant spoke of taking his daughter camping weeks after she was born and "camping almost every weekend when she was growing up…that's how she knows this land so well" (C).

The interviews asked the participants to think about a time when the community was "at its best" and many responses linked back to the closeness and remoteness them of using the land and water. The Cheslatta host an annual Camp Out down at a traditional village site on Cheslatta Lake and is held during the summer. The camp is a time when members of the community come together, appreciate the land and water, learn outdoor skills and spend time together sharing stories and knowledge. The Camp Out was described as time when people are "thriving" (Jessi Rose Boyd) and issues are left behind.

> I mean we do so much with the water, we do a lot of camping, a lot of fishing like this time from now right until August. So, we used the water. And swimming!! It's such a big deal! And that's my connection is using what we have here. Lots of people find, I mean

> as long as you're out there doing the outdoor activities this is an awesome place to live…And go kayaking, and go to tubing, and swimming, and fishing! And there is just, that's just our life! We are so lucky, I think! (Jessi Rose Boyd)

When describing the Camp Out, the same participant shared "I am so inspired all the time. I wish I could live off the land completely with electricity but I can't do that" (Jessi Rose Boyd).

Several participants also noted that the remoteness was an important feature of the Camp Out since they were in an area where there was a lack of cell phone service. This was described as adding "togetherness" during the event. "I like those moments when we can still socialize, I think we are lacking that. There is so much technology and with the internet and so much social media that we are losing the hub to socialize with other people" (Jessi Rose Boyd).

Several interviewees also mentioned, the idea that they "thrived" most when they were out at the Camp Out, for example. This was described as they were "living together out there, arguments are left behind" (C) and being due to "everyone is leaving the technology behind" (Jessi Rose Boyd) there are more space and time for connecting with others.

> We're fishing, were swimming, were cooking, we're visiting with each other, going on walks…that's something we do every day normally at home together. There are a lot of distractions when we're at home but when we're out there everybody's just, they want to get along, get back, connect with each other again." (C)

In addition to the Camp Out, there is another outdoor opportunity close to home: an annual fishing derby during the summer months. Similar to the Camp Out, the derby was "close by so everyone can participate" if they wish or are able. When talking about the derby, participant A described "all the kids participate and then you know sometimes we get a moose…and Hazel [current Councilor] and Corrina [current Chief] will come and teach the youth how to do it it's like, it brings everyone together" (A) and "sometimes Hazel will bring a

bunch of fish to the community and then we have an all-day thing where they teach the young kids how to cut the fish" (A).

The descriptions of the Camp Out and fishing derby both provided examples of closeness to the land and water which was identified to provide an ideal arena for skill building and knowledge sharing. Participants emphasized how they learn, or they teach or how intergenerational teaching occurs because of their location. Rose Emma Watson described how her father teaches her young children, and "although that he doesn't speak Carrier [traditional Cheslatta language] but he knows how to survive in the bush if he ever had to" (Rose Emma Watson).

Several participants described examples of the location of the upper Nechako offering unique opportunities for economic development that are the result of the unique features of the area (e.g. access to forestry and tourism), providing a combination of proximity to nature and closeness to other amenities. This surfaced in a couple of different ways including as an opportunity for independence:

> Just to see the members living on their own with a job. Whether you decide to build a resort, for example, and have ten members that are working in that resort or we wanted to build a gas station, to have members working there. But for them to have, to not rely on the band office so much. That's what I want to see, like independence (Jessi Rose Boyd)

This utilization was brought up by another person saying that they would like to promote the area because the remote region is incredibly unique and that not many people know the area is a "giant playground just sitting here in the back of everything" (C).

The relationship between remoteness and closeness also arose in the context of discussing collaboration and stewardship. A participant brought up a story of when the community came together to save grave houses from rising waters (at the reservoir). She noted this was because it

was remote to everyone else, but people who were able to help were able to get there in a moment's notice because this was their home and their ancestors that needed them.

> There was one time, I think it was only working here for a year maybe or two years but we got a call from Rio Tinto… it was a Thursday and there were only a few of us in the office and they said the water is going to be rising that we need to get a crew together to be ready to go work on Saturday. So, we had two days, we had to round up as many people as we could because they were rising the water level and we had to get done [save the grave houses] by the weekend. (Jessi Rose Boyd)

The geographic location of Cheslatta, and the upper Nechako headwaters, was identified as unique because it was remote and nested in nature, however, everything the people need, such as health and medicine, activities on the land/water, learning, economic development, were local. Closeness and remoteness emphasize how the relationship of living close to their territory yet feeling remote, provides what is needed to reach the participant's dreams and aspirations for healing the people and land. The perspectives shared by participants described a number of ways that the upper Nechako and Cheslatta territory is nested in forests, rivers and lakes making it remote, yet closely knit with everything they need.

5.4 Community Teaching and Leadership

Thematic analysis of the interviews identified many insights and perspectives that linked teaching and learning as a method to achieving dreams within the watershed. Education and knowledge sharing were strongly linked with the Cheslatta band and the leadership of the band. According to participants' voices, the passion, alongside teamwork, that the Cheslatta band and leadership has demonstrated has assisted in them reaching their aims and objectives. This theme was particularly identified by participants in the dream and design interview questions (asking interviewees for insight on how they can achieve their dream for the community) of the appreciative interview questions. Aspects of teaching, knowledge sharing and learning were suggested as ways to meet the participants' dreams.

The Cheslatta band office/team was brought up by many of the interviewees in relation to a thriving community, now and in the past. The band was described as being "extremely productive and proactive" (Miss Marie Jack) and "very hard working, but willing to work with others, share information for the greater good of the Nechako" (DT). A reason for their reputation of sharing and achieving goals for the stewardship of the territory was described in relation to consistent hours of operation in the band office: "I think we are one of the best for hours of operations. We are here from 8 in the morning to 4 o'clock. There are some other bands on this side that don't have regular work hours. We are really good at responding to what our members' needs" (Jessi Rose Boyd). The office was also described as being an active and welcoming place with food and educational courses being offered almost every day to encourage and support those members to come and share, learn and be involved in the activities of the band. One band employee quoted:

> We are based around food. You don't even have to buy lunches. There is always food here. It's insane! And you just consistently eating all day long. "Oh someone decided, someone brought this fish" It's like "oh boy!" Which is cool... Last time it was the PAL [firearms certification course] course…there is actually a First Aid level one course going on right too" (Jessi Rose Boyd)

The descriptions of interactions with the band provided a strong sense of pride of the operations of the band, building of the above comments. The band office team were described as being really good at working with the other bands in the area, the Provincial government and Rio Tinto, and in turn the team helps build a relationship with them so the community can advance their stewardship objectives (Jessi Rose Boyd). These strengths were linked with why the current Chief and Council were re-elected to the office in the past election by acclamation.

> Our team, and our Chief and Council, like our election didn't even happen because our Chief and Council got in by acclamation, that's just a huge achievement to the work that we're are doing, and the faith that our 356 band members have in us and it's definitely our team. We all lean on each other, and its hard works, were all exhausted (C).

The leadership of the band (Chief Corrina Leween and Councillors Hazel Burt and Ted Jack) were described in relation to many teaching and leadership roles, where they were seen to be taking steps for the community towards their own aims and objectives of healing in the watershed. They were noted to be the people making things happen and working with Elders and young alike so they "can pass the knowledge on and then hopefully our future generation can keep that going" (A). People expressed their admiration of them in other ways such as "Corinna, our Chief, is really, really passionate. You think I'm passionate about it, she's the one got me thinking more about it" (Miss Marie Jack). The following statement summed up what was expressed by many participants when asked about how they are going to achieve their dreams for the community:

> Chief and Council. There are, I mean, we've had, leaders in the past, it's all you know "who's going to lead us?" into that. And before people are going to look back and say "these are the people that changed Cheslatta for the better" So ya I think it's definitely Chief and Council, our current Chief and Council. Because they have been leaders in the past that are totally, what's the word I'm looking for, not selfish, not greedy, like dictator-y...that's not a word but umm you get what I'm saying. And because they are fair, they are not out to get achieve the benefits for themselves, their there…Like everyone is going to look back and say Corrina, Ted and Hazel are the ones that you know, paved the way for a happy and healthy future for the rest of the band members. And me of course! And Mike! And Mike of course. Mike has only dedicated his entire life to Cheslatta. He's our redneck Indian cowboy (Miss Marie Jack).

Chief and Councillors were also noted for all the teaching they do at the annual Camp Out, fishing derby and other smaller events such as getting the smoke house going, berry picking, teaching how to clean and prepare fish. Explained by one participant, "when they come teach the youth how to do this, it really brings everyone together" (A). Even members that did not grow up in a family that had a strong relationship with the band itself, but now work for the band and really enjoy it.

When participants were asked to think of a time when the community was thriving, one participant noted having a vast forest in their backyard provided the resources to operate a

community forest, however, it eventually met its demise as “it went for as long as possible but the Mountain Pine Beetle and larger companies were at play” (N). When it was running, members were able to work close to home, many “family jobs there, community was thriving, not complaining about money as much” (N). Other answers to the “think of a time when the community was thriving” or “imagine a time in the future when the community is thriving” participants noted they did not want the area to stop all of the local economies, such as forestry for, but to reinvest and operate in a more sustainable fashion:

> We always tried to compel the government to reinvest, it’s a modern economic term, we have tried all other terms. Government of Canada, people of BC, reinvest into what the Nechako gave you folks. What it gave the north. It’s time to quit looking at it as a resource to be exploited, to maintain lifestyles that are not compatible with a sensible environment. Please reinvest in that river, fix it up so it's, even in a diminished way, at least it is sustainable and that is completely possible. You can still have your economic activity with hydro and aluminum but reinvest back into the river, and let it keep providing you benefits beyond money and electricity because without that river, if it finally diminishes, we have no future here. Nor does anything else that flies on it, swims in it, or lives in the gravel beds. (Cyrus Whitefish)

Family members and Elders where mentioned as integral pillars in sharing knowledge and skills. This was identified by participants through offering suggestions on how the older generations can teach the young ones. Father’s teaching their children or grandchildren was brought up a few times. One father in the community “isn’t a teacher” (Rose Emma Watson) but takes the time and effort to show his grandchildren the fundamentals such as hunting, trapping and how to skin a moose.

Elders were mentioned to be important to achieving goals of the community because of their knowledge of the Carrier language and keeping the language going as well as giving key insights to hunting in a sustainable manner that aligned with historical stewardship of the territory. An Elder describes the importance of hunting in a certain way to maintain the populations and at certain times of year in order to catch the best numbers of game.

> I hunt geese in the springtime and one or two geese in the fall and in the spring the same thing. Maybe a couple of ducks, the rosters not the hen. And we hunt moose, we look for dry cows. Got brown face and it's you know it's a dry one. Because the younger ones going to have a calf next year and we don't touch them (pause). The bull moose we don't touch them. Now look at the first bloody horn that comes by and down it goes. Now look…now look for moose. There is nothing. (P).

This comment was expanded on in relation to concern over First Nations being blamed for decreasing moose numbers/populations. He also spoke of how hunting knowledge needs to be shared to help with wildlife management. Members who were not Elders wanted to see the younger generations learn about the culture from the Elders themselves, on how they lived and the language. Rose Emma Watson wanted "more knowledge being passed onto the younger generations because they do not want their lands being disturbed and they wanted this to happen before it was too late because some of the Elders are getting older". This statement was noted when asking about dreams for the community, in which the participant shared teaching and knowledge exchange as a method to achieve less disturbance on the land. Aspects of teaching, knowledge sharing and learning were suggested as ways to meet identified goals throughout this theme.

5.5 Passion and Tenacity to Achieve Local Dreams

The appreciative interview approach, which focuses on strengths and assets in an organization or community, allowed the participants to share their dreams and suggestions on how to get there. Analysis of the interviews, and reflection on the field notes, identified a strong sense of passion and tenacity as a feature of those who call the upper Nechako watershed home. The interview participants communicated both a passion for the land, the people, the future as well as the tenacity it takes to achieve goals for the upper Nechako system. This was not an area that was explored in earlier chapters, rather it surfaced as a strong theme which required me to look into how to best understand these terms.

Rosaldo (1980) wrote about her ethnographic understanding of a group of Indigenous peoples in the Philippines and defined passion as a "focal analytical term based on the beliefs that these describe not only attributes of individual 'hearts' but also experiences, activities, and patterns of relation that encompass both civility and strain" (p.29). Although not commonly defined in natural resource management literature, tenacity is commonly considered the quality or fact of determination, continuing to exist and persevering. Escobar (2006) uses the word tenacity as a characteristic of women land defenders in natural resource conflicts in his work.

The findings on passion and tenacity also linked into other ideas introduced in other themes such as the previous teaching and leadership section. However, due to the frequency that the word 'passion' was used by participants when speaking of their connection to the land and working towards their dreams, it was clear that this theme warranted particular attention in relation to the research questions.

There was a general sense that the land, water, people and story of the Cheslatta gave spirit and motivation to people with many of them referring to "how lucky" they were. The land and waters are also referred to as the main "benefit" of living there and being who they are. When asked about benefits the land and water provides for them and their family, one participant described that he is "so very passionate about being on the land" (C) while another participant said "I'm just so inspired all the time" (Rose Emma Watson). Another participant noted "as long as you're out there doing the outdoor activities this is an awesome place to live. We are so lucky...appreciate what we have" (DT) which was reinforced by another saying "I just love being out here" (Miss Marie Jack). Miss Marie Jack tells about how she grew up on her territory and how it gives her a 'feeling':

> I grew up here so I've lived here my whole life and I like the beauty, I like the feeling of it, it's really laid back in the country it's not like busy all the time. And I think I'm

> connected to it just by, by my roots and my background. I'm connected through our people mostly because ya, we used to live off the land. (Miss Marie Jack)

Participants described ways that people can rely on one another to come together to make things happen, especially when it comes to the impact from the reservoir. Jessi Rose Boyd described a memorable moment when there was limited to time to get down to the grave houses to move them because they were given only days' notice from the company that water level we rising. This was identified in the past theme of community teaching and leadership, but also links with this theme of passion, respect, effort and motivation towards the current land and culture while respecting the elders of past.

There was a connection to how the people of the region do not give up, especially not when the "going gets tough" (P) in ways that also linked to, supported and fueled to both collaboration and leadership:

> Just being willing to go out on the last moment. And work as a team. Like the community members really have a passion for the grave houses and the land the waters so I think taking pride in like making sure we are watching over the grave houses like we couldn't just let them flood. Being willing and able to do the things at a moment's notice. To protect the, our ancestors basically, or make sure that we are respecting, like we are still respecting the land and the elders and ancestors (Jessi Rose Boyd).

Also related to the relationship and situation with Rio Tinto Alcan (introduced and discussed in Section 2.3), several comments really show passion and tenacity that has been experiences by participants:

> We still have a lot of fight. In case it comes down to it with Rio Tinto (laughter). We hope not but I could see it going sideways back to the days when we would have to go to Vancouver and protest. If it came down to it, I could see us doing that again (laughter). Which hopefully it doesn't have to, when we hear about the meetings the team has had and they tell us what happened it's just like "oh my goodness". But I still think we have so much fight in us (Jessi Rose Boyd).

Jessi Rose Boyd's words display the dedication and fight the community has in their struggle to come to agreement with the company that operates the dam on the Nechako Reservoir. For many years (mainly since the 1970s) people have tried to work with the different iterations of the company (Alcan, Rio Tinto Alcan, Rio Tinto) and although small advances have been made, they spoke of the importance of tenacity in keeping them driving forward:

> When we were the hungriest, when we were desperate, when we absolutely were on the edge of extinction and no other option than to fight or die. Now that's from the Southside perspective, Cheslatta perspective, all the way downstream to the collaboration once again of the downstream community like Fort Fraser, on the Nechako watershed, Save the Bulkley, on the Skeena watershed, all of these people were desperate at one time and together we gave each other energy and spirit and drive and hope that again collaborative way we stuck together to make change. And it's Cheslatta I can guarantee we were literally starving to death as a (pause) soul, heart, community. We were right on the edge of extinction (Cyrus Whitefish).

The participants also identified there was a link to the future, the next generation and how the passion of the Cheslatta is going to keep this moving forward, keep the healing going so the "future nation does not have to think about it" (C). When it came to the reconciliation agreement Cheslatta and the Province of BC were working on during the time of the interviews (see Section 2.3.1), Miss Marie Jack indicated people were well aware that "so many people are working hard to achieve this for Cheslatta" (Miss Marie Jack). The framework agreement was established between the two parties to negotiate addressing the pervious and current injustices related to the Kenny Dam/Nechako reservoir while advancing towards Cheslatta's socio-economic well-being and cultural revitalization. The same participant expanded on this, as follows:

> There are so many people are working hard to achieve this for Cheslatta, the Province with BC, the team over there, they have so much compassion for, I don't want to say our cause, but like, what we stand for and who we are as Cheslatta. Cheslatta is a very distinct brand. When we go into meetings and like people know, they respect us because we are fucking awesome. Ya know? Compared to the other bands, the Province, and even Rio Tinto, are working and negotiating with other bands, they're just like 'we have never worked with people like you, you're not easy but…easy'. We're accommodating, we know what is fair, we know what we want and we're good at it (Miss Marie Jack).

As described in Chapter 3, the resulting settlement agreement between the Cheslatta Carrier Nation and the Province of BC was signed in early 2019, after these interviews took place. The achievement of this agreement resonated with the emphasis, throughout the interviews, of the importance of passion for the land, the people, the future as well as the tenacity it takes to achieve those goals. The themes of passion and tenacity were reiterated though a range of stories and shared experiences that included talking about spirit, motivation, luck, appreciation and coming together for past and future generations. As noted at the beginning of this section, the themes of passion and tenacity were not ideas that were explored in earlier stages of the research, and stood out as a strong theme that surfaced during the scoping phase of the research, the time spent in community and throughout the interviews.

5.6 Healing and Reconciliation in the Watershed

The theme of healing and reconciliation, was identified to reflect how participants described a number of ways that both stewardship of the land and approaches taken by Cheslatta were directly related to health, well-being and healing, and ultimately reconciliation in/for the watershed. This theme emerged from dreaming, designing and delivering questions in the appreciative interviews. When asked about the future and how the participants imagined it, all of the interviewees commented on a community and environment that is healthy or "at peace" (Trout). This included health issues, harvesting and living off the land and ideas/suggestions on how to achieve Cheslatta's (and the greater Nechako watershed's) aims and objectives. Everything from being at the Camp Out, to doing things for people as they progress in life, fostering health though time with nature and reconciling with the Province. Comments or reflections related to health, well-being and healing were raised by almost all of the participants including a range of suggestions on how to achieve their aspirations.

Health issues tended to surface from interviewees answers to the questions "what to do envision for the future, when things are good and your dream is a reality"? The comments concerning health matters were especially focused on conversations of hope and ideas to help community members with unhealthy dependences to drugs or alcohol. Some participants brought this topic up with more emphases put on nature and how that could help with illness, saying that "members that are dealing with that [drug and alcohol dependences] but they don't go out to nature and deal with it" (Grandma). Many people just wanted a community where people were able to deal with addictions and maintain good health.

There were many comments that were similar to "I would envision a community as a healthy community, health band. Less drugs and alcohol" (A). Participants gave many suggestions on how to 'deal' with the situation and make those dreams come true. They noted that the potential opportunity for members to heal themselves through activities such as the fish camp that Cheslatta recently bought and the guide outfitters that would provide great places to send members "out there that can start to heal themselves by feeling productive" (Grandma). Also recommended were ideas such as healing workshops, a treatment centre on the Southside, returning more to nature (as mentioned above) and noted the Wellness Centre was a huge step in the right direction (Grandma). The proposed healing workshops were seen as a strategy to just to improve "health" but also to create well-being and reduce conflict:

> First, I think we need some kind of healing and building workshops because a lot of the people in the band don't get along. I don't know why, there seems to always be a conflict going on so we would need like workshops. Healing workshop and we just need to learn to build things together (A).

The Wellness Centre is a local health clinic built on the Southside due to growing demand for health resources to be located closer to Southside residents. A few participants spoke of how the opening of the Wellness Centre was a welcomed change in the territory, not only for

the Cheslatta, but for the community as a whole. One participant explained how it had brought in doctors to the area and it's not just benefiting the First Nations, but all the people of the Southside. This was linked into planning for the community for current and future generations:

> It starts with healing. Yes, and then just taking it from there. Because it's all generational based. If right now if we start healing the 50, 40-year old's, then the 30 years old's become the new generation of our babies now, the kids the youth now. Maybe they will be ok. (Grandma)

Closely related to the sense of healing were suggestions of a treatment centre for members. One spoke of how they were trying to get a treatment centre for years and, since many members have kids, it would be great if there was an outpatient centre on the Southside because there were so many people struggling with drugs and alcohol and mental health issues at home. This person said that a "[treatment centre] like that is just a huge step, a first step in getting everyone better (Rose Emma Watson).

Grandma noted that if those people had a job to do, but also "they are working in nature so it will be a natural healing facility for them". Another noted that when members have had opportunities, or local employment, in the past (referencing the community forest mill) that the "community was thriving" (N).

Many participants proposed that living off the land would be ideal for reaching health and well-being aspirations of Cheslatta, with one noting that "I think the best move I think they will ever make is (unclear)... is to be what we used to be. We lived off the bush" (P). The same person described their impression that since the people are no longer living off the land that there are diseases that they ever had before:

> We don't even see what's coming out of, the only way we will make our way around is, go back to the bush and live off the bush. Nope. and now look at cancer, cancer and liquor killing all the people. There is nothing we can do…that why I say we should go

> back to our own medicine. How many of us in my younger days have a cancer or heart attack? Never heard of that. Now cancer and heart attack and everything (P).

Another person described a similar thing, but added more to the context in the sense of living off the land historically and how that contributed to health:

> Before, our people were self-sufficient. Never went hungry, you know, like always living off the land and were happy! No alcohol. And then once it got forced out of there, of course the alcohol started and the shit hit the fan….. Like we have lost so many, actually Mike's actually got a running list of how our members have dead over the last what 50 years whatever or more, 60 years...and probably 75% of members has because of alcohol ya know very violent deaths, and it's sad eh! Like before they got flooded out, they never had any of that. They were just happy." (C)

Related to being on the land, and the theme of closeness and remoteness (Section 5.3.1), the annual Camp Out was described as a place and time when people are thriving and while they are there "they are feeling really good" because they are fishing, swimming, cooking, visiting with each other, going on walks (Jessi Rose Boyd). Participants mentioned that they "really like the feeling of it" (N) and another spoke of how a fishing camp (referring to the purchase of the guide outfitters) could be a place to "send members out there can that kinda start to heal them self by feeling productive" (Grandma).

The reconciliation agreement with the BC government was mentioned many times, mainly by younger interviewees. There was connection between the overall stewardship of the land related to this agreement/process and how it is exhausting, positive, rewarding and how the agreement was going to create a better life to the Cheslatta people and the upper Nechako. One of the people with close links to Cheslatta's reconciliation team was very passionate about their work on the team and described how inspiring it was to be part of the process and what it meant for their community and the upper Nechako watershed:

> In the end, we're in these negotiations negotiating a huge land package, one of the largest land packages that the Province has ever settled for that is not treaty and I mean it's totally inspiring. I'm one of the only Cheslatta youth that gets to be wholeheartedly a part

> of this huge thing, we're doing, were planning the future for my grandchildren. That is super inspiring. And even though people don't appreciate it half the time and how hard we work, it's so worth it in the end. We are setting up our kids, and our kid's kids' lives up (Miss Marie Jack).

Healing was described as a very important aspiration for the community and was linked to the reconciliation agreement. This was exemplified by the following response when asked about an ideal future for the community:

> I would say healing. I mean there is only about 6 or 7 elders left that walked out of Cheslatta in 1952. And umm which is sad. I mean like all the people that have gone before us are never going to see the benefit of what our reconciliation agreement like that they waited for over 60 years for it and now it's here and they are gone so (C)

This was especially important for Cyrus Whitefish who described working for all communities and how they were working so hard for the overall health and well-being of all things living and non-living.

In sum, the interrelated themes of healing and reconciliation were identified by a range of participants who noted ways that both stewardship of the land and approaches taken by Cheslatta were directly related to health, well-being and healing, and ultimately reconciliation in and for the watershed. Comments or reflections related to health, well-being and healing were raised by almost all of the participants, and included several specific suggestions for how to achieve health and well-being related goals for the community including, but not limited to, being at the Camp Out, doing things for people as they progress in life, fostering health though time with nature, and reconciling with the Province.

5.7 Summary

The appreciative inquiry interview method offered the opportunity and space to listen to local insights from people in Cheslatta territory and the upper Nechako. The findings from these interviews provided new insight and connections to literature in the areas of collaboration,

stewardship, watersheds and health and well-being. In the following chapter, the findings in relation to the literature are discussed and insights to the overall research process are shared and research questions are answered using the local voices and literature.

CHAPTER 6: DISCUSSION AND CONCLUSION

6.1 Introduction

This research explored connections between stewardship, collaboration and watersheds while seeking local insight and perspectives of culturally appropriate stewardship in the upper Nechako watershed. In parallel, this research explored how the Cheslatta Carrier Nation (Cheslatta) are advancing their own stewardship objectives by increasing their presence on the landscape through openly sharing their knowledge, insights and perspectives in a collaborative manner. The findings suggest that there are differing perspectives of collaboration, stewardship and knowledge systems within the watershed and identified a range of perceptions and experience that suggest, for those who were interviewed, health of the land is related to the health of the people. Further, geographic location, time spent learning from others and passion and tenacity are key to Cheslatta's pursuit to heal the watershed for all that call it home.

This chapter reflects, discusses and synthesizes insights from across the study context, the methodology and methods, and the findings. This discussion presents new insights and connects with existing ones in the literature, as well as raising questions and suggesting recommendations and implications for future work. The thoughts and concepts brought forward by the interview participants will be discussed to emphasize what the interviewees dream for the future of Cheslatta and the upper Nechako watershed. This chapter also presents answers to the research questions, and supports those answers with the findings from Chapter 5 and then links this to the literature and documents from Chapter 2. Consistent with earlier comments regarding thesis structure, this chapter concludes the thesis in a way that is consistent with a temporal flow. This also raised questions about whether, in a thesis valuing local and community knowledge there could have been a less linear way to present the final thesis. I recognize other approaches to

writing may have provided ways to incorporate local voices prior to Chapter 5. To re-enforce the power of the participants' voices, some quotes are included in this chapter.

6.2 Discussion of Findings

This chapter discusses relationships, connections and disconnections between the findings and the literature. The three discussion sections link to the objectives of this research to examine connections between stewardship, collaboration in the natural resources field and approaches to watershed management while seeking perspectives and insights about the role of collaborative approaches in culturally appropriate stewardship. Further, in keeping with the objective to formulate place-based, locally informed recommendations, the discussion will also identify emergent strategies that have the potential to enhance objectives of watershed stewardship in the upper Nechako and elsewhere.

Key insights derived from the combined analysis of the literature and participants' voices are synthesised and depicted in Figure 7 "Insights from Cheslatta", which is presented as a point of reference to frame the findings and outline processes to achieve healing and reconciliation through stewardship of the watershed. This figure is introduced at the start of the chapter as a basis for discussion in relation to the themes of partnerships, teaching and leadership, local insight, different knowledge systems, capacity and collaborating over time while depicting a bottom-up approach to achieving the overarching goal of healing and reconciliation in the upper Nechako watershed. Figure 7 illustrates the combination of three main discussion topics of this chapter: Section 6.2.1 aspirations for culturally appropriate stewardship Section 6.2.2 towards watershed reconciliation and Section 6.2.3. Working with tenacity: the future for Cheslatta. Discussion of these topics, is followed by recommendations for future work (Section 6.3.4).

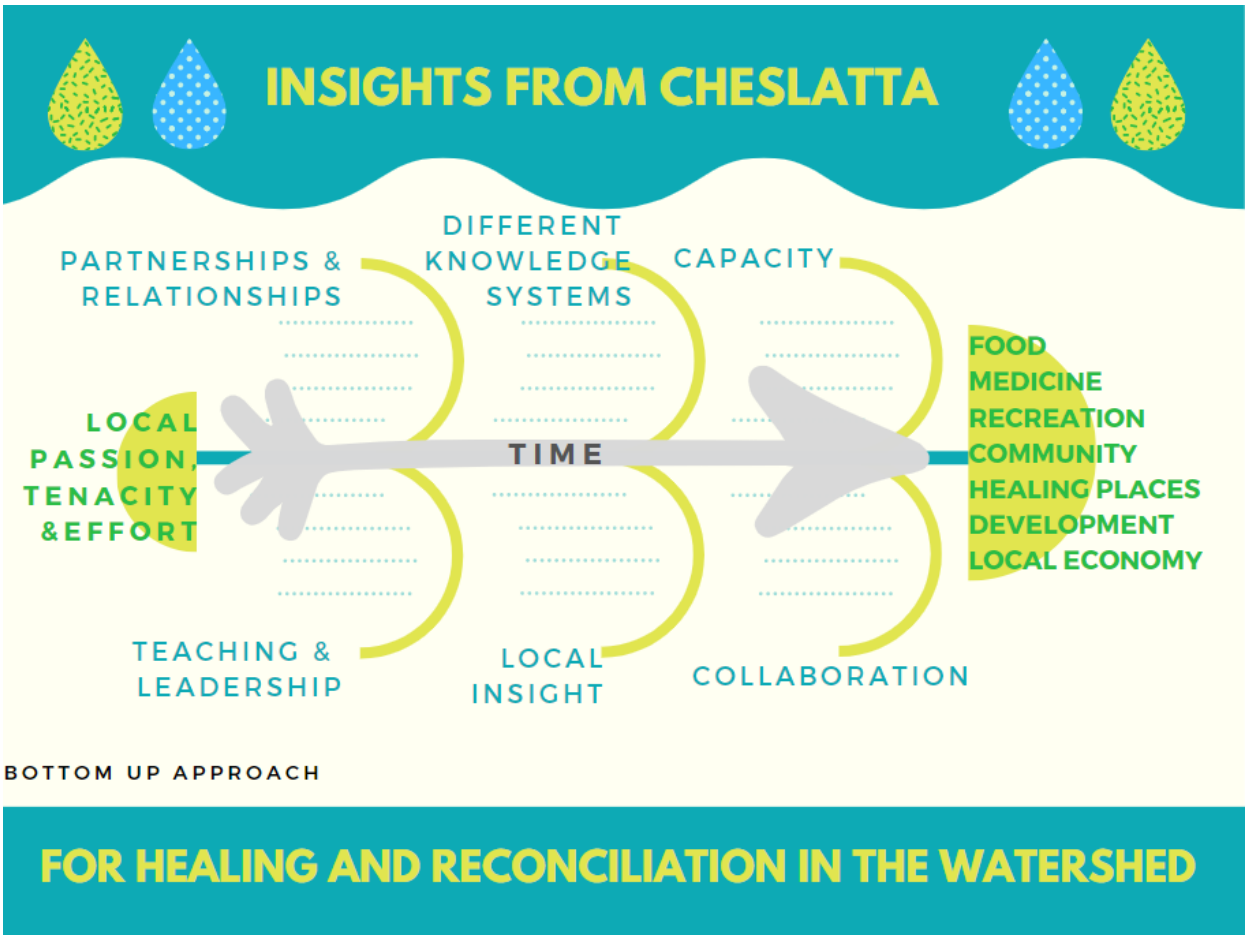

Figure 7: "Insights from Cheslatta" for local process for healing and reconciliation in a watershed and is a point of reference to frame the findings and outline the process to achieve their dream of healing and reconciliation through stewardship of the watershed.

6.2.1 Aspiration for culturally appropriate stewardship

The people that were interviewed gave insight to how they imagined their dreams of a healed people and a healthy watershed, and how to achieve that dream in a way that is culturally appropriate to them. There were many linkages between the topics of collaboration, stewardship and knowledge systems. After identifying the themes arising from the findings and reviewing them against the literature, I noticed there were interesting aspects to the connections, or disconnections, between these three topics.

One area of new insight was the connections and disconnections between the definitions in literature and in the response from the interviewees. The idea of collaboration and teamwork

was brought up directly and indirectly throughout the research stages. I found the findings from the participants echoed what has been written by authors such as Conley & Moote (2003) who described collaboration as a problem-solving effort and partnership that work together, typically within a community.

The language used by participants described their community teamwork in a way that demonstrates how important it is to work together among themselves internally as well as with others externally outside of their community. There were emphases on the role of teamwork and collaboration internally, and how that has grown over time, but also how collaborative approaches with others externally (e.g. neighbours, governments) has also grown over time alongside relationship and trust building. They described the process of the reconciliation agreement with the Province of BC would not be possible without working as a team together. They had to work together in a range of ways: whether it was moving graves when the waters were rising or working alongside the Province of BC's team, this teamwork was done intently and meaningfully.

Further, the participants' voices offer clear ideas of collaboration (working together to reach common goals) and state that this is the approach they have been, and still are, taking to reach the aspirations for stewardship and dreams for themselves with implications for residents downstream in the watershed (internally and externally as mentioned above). These aspirations also resonate with ideas presented by von de Porten & de Low (2013) who emphasize that collaboration leads to more effective resolution of conflict. Rutherford (2015) notes that different groups may view collaboration differently and, other authors note instances in natural resource management, where the term has been not used in a collective manner consistent with the literature which has led problematic outcomes (Low and Shaw, 2012; Ross et al., 2011).

This research has underscored that, although, the term collaboration has been used in planning, management and governance of natural resources in BC, the term has not been used consistently in ways that reflect its formal its definition. The insight into the variety of ways of using collaboration or collaborative approaches in natural resource management was highlighted through a survey done on the 'collaborative' Great Bear Rainforest Agreement. The agreement was said to be a 'very collaborative process', however, researchers did a survey after the agreement was signed asking both the Province of BC staff and local First Nations what they thought. Province of BC staff scored the agreement very high on the collaborative process, First Nations did not (see Cullen et al., 2010).

In this research, the Cheslatta and other residents of the Nechako watershed were asked to define what collaboration meant to them. One participant offered the perception that collaborative approaches are not always possible and should not be considered to be a prescriptive answer to stewardship (Cyrus Whitefish). The participant emphasized that when differing parties have opposing desires for outcomes, this may not be suitable to attempt a collaborative approach. Yet this research also showed that reaching common goals alongside each other can be possible, but that this process takes time, especially in order to develop relationships, partnerships and trust. Further, time is an essential element to gaining trust among all parties in collaborative natural resource management (Stern and Coleman, 2015), and without combining knowledge systems, the outcome may not be as effective (Davenport, Leahy, Anderson and Jakes, 2007). A meaningful attempt of collaboration and collaborative approaches should include an honest commitment to the people you work with directly and indirectly and being transparent on your goals and expectations.

Having more information and perceptions (e.g. science and Indigenous knowledge) available to inform a comprehensive approach (natural resource based or not) is recognized to

inform a more robust outcome (Low and Shaw, 2012; von der Porten and de Loe, 2013). Ross et al. (2011) argue that different knowledge systems are noted as a way to incorporate experience into a typically western science dominate planning, management and governance structure of natural resources. These ideas also align with literature that explores new or different ways of collective decision making or collaborative action research such as Valerie Brown's work (2008). She describes how collective decisions must include different bodies of knowledge and methods of inquiry which, in turn, can provide effective solutions to multifaceted natural resource issues. These different pillars of knowledge and collaborative approaches feed into the end goals that are depicted in Figure 7 and which also have some similarities to the ideas depicted in Figures 5 and 6 in Chapter 3. Although Figure 5, illustrates "Indigenous and local knowledge systems from knowledge to worldview" (McMillen et al, 2014), and was developed in relation to changing climate, it still resonates with the ideas depicted in Figure 7 in that Indigenous knowledge plays a central role, and that leaders and partnerships (networks) are also important. The ideas depicted in Figure 7 also have connections with themes in Turner et al.'s (2000) illustration of "Components of traditional ecological knowledge and wisdom of aboriginal peoples of northwestern North America" (Figure 6), including the emphasis on different knowledge systems, dreams and visions and the value of teaching and learning alongside acknowledgement of the time taken to develop approaches.

6.2.2 Towards watershed reconciliation

As introduced in Chapter 2, definitions are valuable and the word watershed is often used in literature without a clear definition USGS, 2015). In order to have an understanding of how participants understood watershed, participants were asked to directly share their perspectives on what a watershed meant to them. In response, participants often described their local watershed as a system that is interconnected and is something that can be nested (smaller

watersheds/systems within larger ones). Insights from Indigenous and non-Indigenous participants resonated with the descriptions in the literature agreeing that watersheds are linked, connected and part of a greater system (see Section 5.1.1). A related emphasis from participants was that a system that can be nested within another system (for example smaller watersheds are found within larger ones such as the Cheslatta watershed in within the Nechako, which is part of the Fraser).

Falkenmark and Folke (2000) describe watersheds as "an asset that delivers a bundle of water and ecological goods and services" as they host a complex system of ecosystem services including regulating, provisioning and cultural services (MEA, 2005). The participants' voices clearly explained that the health of their watershed/system is of direct concern and has implications for the health of the people who call it home. These ideas resonate with descriptions of a reciprocal relationship between the degradation of the watershed and the health and well-being of the people (Iniesta-Arandia et al, 2014). What settlers or non-Indigenous people may refer to as 'recreation' are also recognized as activities for healing for Cheslatta.

Insights from the participants underscore the relevance and build a strong case for watersheds as an optimal spatial unit for the management and governance of land and water resources and the associated ecosystem services which was also resonates with ideas from many authors (see Bunch et al., 2011; German, Mansoor, Alemu, Mazengia, Amede & Stroud, 2007; Baird, Plummer, Moore & Brandes, 2016). The participants described a number of ways that human well-being is linked to the watersheds in which humans inhabit. This reflects the emphasis by authors such as Parkes, Morrison, Bunch & Venema (2008). Efforts in the Nechako have the potential to help redress the lack of rehabilitation in the upper Nechako watershed. These efforts are also echoed in Parkes et al. (2008) who describe how human well-being is not only reliant on watershed ecosystems but also is a direct product of management, arguing,

therefore, that using an emphasis on watersheds and land-water systems can provide a promising approach to supporting and fostering human health and well-being, in ways that resonate with experiences in the upper Nechako.

Participant suggestions for reaching their dream of a healthy watershed and people are consistent with Richmond and Ross's (2009) work highlighting the direct reciprocal relationship of Indigenous peoples and their landscape and how the health of one affects the other. This is especially notable given that no participant was prompted or asked or introduced by the researcher through the interview questions to discuss health nor well-being. This was intentional strategy to see what would surface when discussing the land and water in the upper Nechako. The majority of participants mentioned this more than once and clearly stated that the health of the land has a reciprocal relationship of the well-being of the residents. More recently, this idea is underscored by researchers such as Ratima, Martin, Castleden and Delormier (2019) who describe the "interconnectivity between humans, other-than humans, and the land, water, and air on which we rely" (p.1).

Participant responses to the appreciative inquiry questions provided a range of insights regarding watersheds as a context and setting for reconciliation. A healed people and a healed watershed were seen as connected and mentioned by multiple interviewees. Reconciliation is a commonly used word used to describe the steps taken between settler and Indigenous peoples as a step towards reaching greater involvement of Indigenous peoples in natural resource management in ways that include intellectual and legal traditions followed by Indigenous peoples (McGregor, 2014). Reconciliation is also a term used to describe regaining relations between disputing groups. Insights from local participants in the upper Nechako, have demonstrated ways that an expanded approach to reconciliation can also offer holistic approach to healing the connections and relationships between all living things.

Cheslatta people and residents of the Nechako have been working since the degradation of the Nechako from the Kenney Dam to restore the health of the land, water and the people. The largest step forward was when the Reconciliation Framework Agreement was signed between the BC Government and the Cheslatta Carrier Nation in the summer of 2016 (as introduced in Section 2.3.1). The interviews helped underscore the variety of ways that health of the watershed and the people are directly related to the reconciliation for the Cheslatta.

In relation to reconciliation and water governance in BC, the BC First Nations Water Governance Roundtable released a report and statement in November 2018 on "Requirements for Water Governance in BC in Relation to Crown Commitments to Reconciliation" (BC First Nation Water Governance Roundtable, 2018). The group identifies 16 principals and relates each principal with UNDRIP, Truth and Reconciliation Calls to Action, and the Draft Principals that Guide the Province of BC's Relationship with Indigenous Peoples. Although this 2018 document was released after the interviews were conducted, it is notable that many of the same principals were also identified in this research, including the emphasis on: water and traditional knowledge; ensuring ecological and spiritual integrity of all parts of the aquatic ecosystem for current and future generations; water values and collaborating between different values; building collaborative institutions, processes and approaches; water being at the centre of all other land use planning and decisions; and communication and education.

Figure 7, derived from insights from this research process with Cheslatta, provides a way to frame different factors involved in a holistic method to planning, managing and governing their territory on a watershed scale emphasizing a time scale of several decades and the importance of this for relationship building and learning. A watershed-based strategy supports a coordinated approach to the development and management of water, and watersheds, to balance both the economic output while balancing social and ecological systems (Falkenmark & Folk,

2000). Participants shared a mindset of healing both the watershed and the people who call it home, in ways that supports Bunch et al.'s (2011) argument that planning, management and stewardship strategies that consider both social and biophysical aspects of a watershed can potentially create a "double dividend" that promotes sustainable land and water use and can also enhance the social determinants of human health and well-being. Ratima et al., (2019) also describe how Indigenous-led approaches to create wellness through their own knowledge is a suitable solution to reaching the internal aspirations of communities while respecting the vital relationship between humans and their landscape. This is especially obvious from participants' vision of having a local economy (forestry, tourism) that employs members and residents, reinvigorating culture and getting more frequently back on the land for food and teaching, with the goal of a community that 'at its best'.

Despite these advances and insights from the interviews, the findings underscore themes that highlight that there has been a lack of capacity between governments, industry and First Nations to collaborate and reconcile. This lack of capacity has often resulted in processes and engagements that have been slow moving, expensive, and in most situations does not meet the expectation of either government (von de Porten & de Loe, 2015 and others). Even so, the finding from this research has shown what can be possible over time. Working within Indigenous communities must be done with respect, awareness and in reciprocal relationship. Authors such de Leeuw, Cameron and Greenwood (2012) and Castleton, Sloan-Morgan and Lamb (2012), emphasize that working within communities is contextual and has risks (relating to colonialism, for example) associated with it and can only be done in a fashion that is respectful of capacity, knowledge and time. Figure 7 offers a way to depict these interconnections of partnerships, relationships, capacity that are all required for doing work that is beneficial and respectful to all parties involved, underlining it should be developed over time. Friendships and cooperative

partnerships can be foundational and can also grow through the process of engagement (de Leeuw, Cameron and Greenwood, 2012; Castleden, Sloan-Morgan and Lamb, 2012).

6.2.3 Working with tenacity: The future for Cheslatta

The interlinked notions of passion and tenacity were underscored by participants as core features of life in the upper Nechako and on Cheslatta territory, regardless of adversity. Tenacity was used to describe the quality or fact of being very determined and continuing to exist through persistence. Passion and inspiration were often linked, by participants, with healing and moving forward. Inspiration to become a healed person, in a healed community in a healed watershed. Relationships and partnership were key and gained through the approach taken.

The passion described by participants continuously revolved back to the respect for the current leadership and staff of the band and the teaching and learning that occurs. Participants noted that the passion of Chief Corrina is what gives them passion. The Cheslatta team has worked diligently, often involving substantial personal and collective strain to negotiate a reconciliation agreements that includes one of the largest land packages that the Province of BC has tabled outside the context of a treaty. Members of the team stated that is it inspiring for them to be a wholehearted part of this process where they are planning the future for their grandchildren. Cyrus Whitefish from Cheslatta used the term “reinvesting” in the watershed in its negotiation with the Province. Participants mentioned it is time to give back to the Nechako in return for everything it has given people of the North. The emphasis on reinvestment in natural capital (the natural resources themselves) is consistent with literature that notes reinvestment is necessary to keep natural capital sustainable, otherwise it will diminish (Hernandez-Blanco and Costanza, 2018).

The local voices described various features of Cheslatta's approach to partnerships, which involved a collaborative approach with the Provincial government, downstream First Nations, towns, environmental groups such as the Nechako Watershed Roundtable by recognizing they are all working towards a common goal and have all been affected by the Nechako system alternation. Together they give each other the energy, spirit, drive, hope and experience, that when they work together, they can make change happen as reflected in Larsen's (2003) article.

The insights gained from Cheslatta and partners is reflected in Figure 7 and outlined in the recommendations below (Section 6.3.4). The approach starts at the bottom, or within the community with drive, effort, passion and tenacity. Over time (in this case decades) partnerships, teaching and learning, local insight, different knowledge systems, increasing capacity and collaborating (internally and externally) were all ingredients in working towards the dreams and aspirations community members identified. The overarching dream or aspiration identified by the participants was healing and reconciliation in their watershed, which includes access to traditional foods and medicines, recreation, healing places, economic development and local economy.

The internal collaboration and external practice of collaborative approaches demonstrated by Cheslatta and other residents of the Nechako can be discussed in relation to Ross et al. 2011 (introduced in 3.2.3, especially Table 2 and 3). These authors identify structural and conceptual obstacles that can create barriers for First Nation stewardship of natural resources, whereas the findings of this research suggested that these were not obstacles that Cheslatta had needed to avoid or work around. For example, 'codification of local knowledge' is considered an epistemological barrier, however Cheslatta have been openly sharing their traditional knowledge for many years. A systemic or institutional barrier is 'state power' in which the state

government(s) have more power and control than Indigenous peoples (also discussed in Section 3.3.3 by authors such as Kakekaspan et al., 2013) and thus the Indigenous governments must be more strategic in the methods in which they assert their concerns. Although this has been the case in Cheslatta history, they have found an approach that worked alongside government in partnership to reach the aims and aspiration of both governments through their reconciliation agreement.

From insights given by the participants, and illustrated in Figure 7, there are areas of new understanding in relation to local and culturally appropriate stewardship between what the literature and documents revealed coupled with the insight given by participant interviews as discussed in Section 6.2, and outlined in Chapters 2 and 5. A process of partnerships, teaching and learning, local insight, differing knowledge systems, capacity and collaboration are all fundamental in achieving the "dream" for the participants of the upper Nechako watershed.

6.3 Synthesis and Recommendations

This section will revisit the research questions introduced in Chapter 1, provide insight on the methodological approaches taken and outline the strengths and limitations of the research approach and process. The section will conclude with the research recommendations and implications followed by the conclusion.

6.3.1 Revisiting the research questions

This master's research project set out to answer research questions that were designed through the scoping stage. This was to ensure the research aligned with the literature and what was heard from those in the upper Nechako who have local insight. The research questions asked how has local insight assisted in shaping collaborative approaches to culturally appropriate stewardship in the upper Nechako watershed context (RQ1) and what insights can be learned

from the Cheslatta for moving for culturally appropriate stewardship while relating to Cheslatta's aims/objectives of reconciliation and healing (RQ2).

6.3.2 Methodological insights

The research methodology of Indigenous and appreciative inquiry approach was important as it was the lens that guided me as the researcher. Fundamentally, Indigenous research approaches provide alternative ways of thinking about the research process (Louis, 2007). Learning about this approach to research with Indigenous communities, and "weaving" that lens through the research process assisted me greatly.

It is important to note that although literature and documents can describe, explore, and discover arguments and suggestions, these sources of information will support and not replace the understanding derived from the living realities of Indigenous peoples of BC and that of the Cheslatta (von der Porten & de Loe, 2013). This research responds to an opportunity to work in a partnership with Cheslatta in order to gain a better understanding of these realities and share those insights and reflections back to the community.

Appreciative inquiry is an applied methodological approach that focuses on what is working within people, organizations and communities rather than focusing on what is not working. It looks to expose the best in those people, organizations and communities to discover what are the strengths versus investigating weaknesses (Sweeny, 2014; Judy & Hammond, 2006). Reflecting on appreciative inquiry, as both a methodological approach and a method, it was evident the approach encouraged a forward-looking orientation: rather focusing on problems and issues. This approach enabled the interviews to draw out strengths and assets, highlighting what is working in the community, and how to build on those strengths. It allowed the participants to share and profile their values, aspirations and hopes for the future, and these

perspectives have now been given a wider audience through this thesis and related presentations, creating a space for the visions and intentions of the participants to be heard and shared in ways that may not otherwise have occurred. The participant perspectives, vision and intentions were also invaluable to answering the research questions and were critical contributions to the recommendations for future work (outlined in Section 6.3.4).

When asking an interviewee to describe a dream for their community (for example) the participants were typically happy or excited to answer and to share stories about what they envision. When asking someone to talk about a time when things were going well in the community, the participants enjoyed sharing 'good time' stories of the past. The appreciate design helped guide the structure and flow of the interview but also to introduce and frame the interview as an opportunity for participants to explore strengths, assets and the dreams for the future of their communities and the watershed. This reinforced the intention of the interviews as a positive experience that went beyond a focus on problems or disturbing memories. In keeping with Sweeny (2014), this approach can be considered an asset when working with Indigenous communities. This is not to say negative comments, challenges or problems were excluded or avoided in the interviews since the participants did have space to mention or discuss and topics or stories that they wished, including for example certain topics relevant to the upper Nechako such as the role of Alcan, the Kenney Dam and rising waters and the reservoir. My experience as a researcher using an appreciate approach was that participants did not want to focus more on the problematic stories or memories, and were pleased to elaborate on times that were good in the past and what they dream for the future. Cooperrider and Whitney (2001) unscored the participant's direction or "urge" (p. 20) to speak of the 'good' because "relationships thrive where there is an appreciative eye – when people see the best in one another, when they share their dreams and ultimate concerns in affirming ways" (p.20-21).

It is also important to note the potential limitations of an appreciative approach, which is sometimes critiqued for not creating sufficient space for participants to voice dissatisfaction or frustrations regarding important topics, such as the terrible and traumatic events that have occurred since the 1950s in Cheslatta territory. Appreciative approaches can be perceived to limit opportunities to document and share topics, issues or concerns that the community wishes to answer, fix or work on. Reflecting on these possible limitations, it was notable that no participants expressed a desire to spend more time talking about problems and negative historical events and, instead, seemed comfortable reflecting on experiences within a positive, forward looking context which provided opportunities to share and explore creative and innovated alternatives for the future. This aligns with and reinforces the findings of Batten and Stanford (2012) who note the appreciative methodology differs from the 'problem-solving' approach that focuses on the idea that people or communities are 'broken' and need to be 'fixed' but rather as full of assets, capabilities and resources. Participants seemed to benefit from the opportunity and orientation of appreciative inquiry, as a means to profile and give attention to "local insight" in relation to what is working, and steps to move forwards towards identified dreams (Cram, 2010). Further, Cram (2010) also underscores the notion of appreciative inquiry as a suggested decolonizing method for research with Indigenous populations in which the "collaborative improvisational nature of appreciative inquiry allows the [Indigenous participants] to be in the 'driver's seat' during the research" (p. 11). In this research, I would argue that this approach also assisted in surfacing both inspiration and passion as illustrated through participants' voices and stories.

6.3.3 Strengths and limitations

Strengths and limitations involved with the research process are discussed in this section along with how they were addressed. These include: the methodological approach, relationship with the community and residents, being an 'outsider' and time constraints.

Consistent with the methodological insights noted above in Section 6.3.2, the decision to have this research guided by the appreciative inquiry was found to be a strong point in this research process. The existing relationship with Cheslatta, and other residents of the Nechako, was another strength to this research design that also informed the choice of method.

Although there were established relationships and I had the opportunity to work with many people, I was still an 'outsider'. I was introduced to people and had opportunities to meet with people, however, I was still someone new to the watershed. I also lived in Prince George, although much closer than Victoria, BC where I moved from, I was not in Vanderhoof, Burns Lake or the Southside. Trust and relationships were slow to develop but I acted with patience and respect and tried to show my intent was in good faith.

Time constraints and meeting limitations for both myself and Cheslatta proved to be challenging throughout the research process. I took time for relationships to develop while creating space to scope and learn about the watershed and the Cheslatta. I wanted the research questions to emerge through experience and not be rushed (with the key to find value in the research for all involved). During the research process, other priorities were also ongoing which led to many community members and staff having limited time while I worked part-time throughout the entire research phases. I respected their time and allowed the interview period to last roughly one year. Feedback on updates on the research, presentations and sitting down to go over my findings and discussion was also limited due to these constraints, however, I remained

flexible and patient. Using email for this process was valuable because I could still write updates and they could be viewed by the participant on their own schedule.

Due to the scale of any master's research project, many important aspects and topics are not included in the research. This includes greater detail of the literature on resilience theory and self-determination literature. Also due to the size and scope of this project, the number of interviews were limited as I recognize a larger the sample size could advance or affect the quality of the insights and perspectives that ultimately illustrate the community voices (Baker et al., 2012).

6.3.4 Recommendations and suggestions for further work

Informed by the literature and specific case study findings recommendations and suggestions for future work have arisen from this research:

For researchers *(across University, community-based, consultants, or government research)*

Further studies could be explored (and altered to match the unique situation of each community) to draw out local voices, insight and perspectives when researching natural resource planning, management, governance and stewardship. This research, although conducted in a small space in time, showed that building on what is working in a system or community, can draw out local strengths and paint the local perspectives picture versus finding out what's not working and trying to 'fix' something. The appreciative inquiry approach to research created space for values, intentions and aspiration and therefore was able to create results that have the potential to be beneficial to the participants' and their communities.

Future research of local level passion and tenacity (and ultimately drive and spirit to keep moving towards stewardship aspirations) was identified as an area of natural resource academia that warrants future attention – especially as a bottom-up feature of planning, management and governance. Although references to passion and tenacity are beginning to emerge in the natural

resource management literature, there is existing work in other disciplines (e.g. Anthropology) that could usefully inform future work and research in this area.

The timing and multiple phases of the research process (see Chapter 3, Table 4), and the courage to go slowly was, at times a weakness, but ultimately was a strength in enabling multiple aspects of the research to unfold in a way that reflected the circumstances of both the community and the researcher. The findings and insights arising from this research would not have been the same, if the research had not adopted such a flexible timeline.

A further area for future researchers to consider is to explore alternate thesis structures that could, potentially, better reflect the dynamic and iterative nature of a research approach. The experience of writing this thesis has underscored the potential value of highlighting the insight and voices of the research participants alongside literature in more innovative and interactive ways, although not fully reflected here.

For Organizations *(e.g. Provincial government ministries/agencies, local municipalities, First Nation bands, title holders, tribal councils and planning/stewardship groups such as the Fraser Basin Council, Nechako Watershed Roundtable)*

This research suggests there are multiple reasons to, and benefits for, working together to achieve common goals alongside others. As Figure 7 depicts, partnerships and relationships can grow with time, to create space for increased learning and leadership. Combining knowledge systems and local insight can increase capacity for all parties involved, both internally and externally while creating the foundation for collaborative approaches that have the potential to be more culturally appropriate.

The research has highlighted ways in which collaboration can appear to be near impossible or inappropriate at times, even when collaborative approaches are proposed as an amicable means to meet all parties' aims and aspirations. Insights from this research suggest that an ongoing inclusive partnership approach -- including industry, government, Provincial and

local governments, communities, neighbours and First Nations -- has the potential to create necessary spaces to develop plans, strategies and new ways of working together. It is recommended that this approach references applicable literature (along with relevant references provided in Chapter 3 and 4) and merges that information with different knowledge systems, including traditional knowledge, and local insight and perspectives.

For Indigenous governments, this thesis underscores the ways that Indigenous-led approaches, coupled with internal drive and effort, have considerable potential to reach some of the unique aims, objectives and aspirations of different Nations, according to their priorities. The experiences in Cheslatta suggest that valuing and building from passion and tenacity, can create a basis for communities to work towards healing and reconciliation in their watershed (or territory), including working with as many partners (industry, governments, other Nations) as possible and prioritising teaching, learning and leadership to strengthen capacity (internally and externally).

6.4 Conclusion

This research has potential to provide benefit to the Cheslatta Carrier Nation (Cheslatta), residents of the upper Nechako, and potentially, the entire watershed. Following the themes of Indigenous and local knowledge systems and traditional stewardship, the participants have shared insights and perspectives that would not otherwise be highlighted or surfaced without directly asking those who call this home. The benefit of this dialogue can add to continuing conversations surrounding land, water and community planning, collaboration and integrative ways to obtain desired outcomes in watersheds and traditional territories. Through the design of this research, participants in this research process have had an opportunity to express their stories, insights and experiences of natural resource (land and water) stewardship. The research design sought to create space for participants to share perspectives surrounding collaborative and

integrative methods for developing and advancing stewardship objectives while reaching individual goals of healing and reconciliation in relation to land and water governance.

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APPENDICES

Appendix A: Letter of Support from Chief Corrina Leween, Cheslatta Carrier Nation

CHESLATTA CARRIER NATION
P.O. Box 909 • Burns Lake, B.C. • V0J 1E0
Phone 250-694-3334 • Fax 250-694-3632

August 2, 2016

Kate Hewitt, B.A.
Under the Supervision of Dr. Margot Parkes, MBChB, MAS, PhD
University of Northern British Columbia
3333 University Way, Prince George, BC V2N 4Z9

RE: Letter of Support

To whom it may concern,

Please be advised the Cheslatta Carrier Nation approves and supports the proposed research project titled: "Stewardship and Collaboration in a Watershed Setting: Experiences from the Nechako Headwaters" to be undertaken by Kate Hewitt in conjunction as part of her degree in Masters in Natural Resource and Environmental Studies. We have met in person with Kate and members of her supervisory committee (Margot Parkes and Scott Emmons) and have had the opportunity to discuss the proposed research and relevance to our community. During these meetings and communications we were able to ask questions and clarify how this work may contribute to long-term Cheslatta Carrier Nation (CCN) objectives.

We see the proposed research as a timely contribution to understanding collaborative stewardship approaches for regaining presence and power over our traditional land and water. The results from this study may feed into the comprehensive community planning process that CCN is in the process of initiating, and other reconciliation processes that are underway. We look forward to supporting Kate to undertake her research in our territory, and with members of our community.

In sum, we are pleased to provide this letter of support for Kate Hewitt's research with the Cheslatta Carrier Nation. Please do not hesitate to contact me if you should require additional information.

Sincerely,

Corrina Leween
Chief, Cheslatta Carrier Nation

Appendix B: UNBC Research Ethics Board Approval Letter (E2016.1025.084.00)

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Kate Hewitt
CC: Margot Parkes

From: Henry Harder, Chair
Research Ethics Board

Date: November 18, 2016

Re: **E2016.1025.084.00**
Exploring Indigenous-led Collaborative Stewardship in a Watershed Context Perspective from the Nechako Headwaters.

Thank you for submitting revisions to the Research Ethics Board (REB) regarding the above-noted proposal. Your revisions have been approved.

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

Good luck with your research.

Sincerely,

Dr. Henry Harder
Chair, Research Ethics Board

Appendix C: Interview Questionnaire for Interview Participants

Exploring Indigenous-led Collaborative Stewardship in a Watershed Context:
Perspectives from the Nechako Headwaters

I will welcome the participant and make them as conformable as I can. I will confirm the participant has read the information sheet and consent form. This includes confirming their contact information for the transcript I will send afterwards. I will re-review the details of the research including, the purpose and the important role of the participant. I would like to orient with their background and experience and their role and understanding of the topics we will be discussing in the interview. I will also focus the interview participant to the watershed/region/traditional territory that my questions are referring to. I will provide a map sheet at each interview for the participant to mark, draw or just use from reference.

Prior to the formal interview beginning I will introduce the overall process, describing what an appreciative interview is and how it focuses on local strengths and achievements, rather than on deficits and problems. I explain how I am interested in their perceptions, stories and perspectives, as much as facts and details.

Questions:

A. Introduction, orientation and background – Discovery (the best of what is)

1. What is your connection to this landscape within the Cheslatta traditional territory? OR, What is your connection to the Nechako watershed? *This can be through employment, experience on the land or a combination.*

2. Words can mean different things to different people, I am interested in your definition of some key terms related to the themes of this study?
    - **a.** First I'm interested in how you understand the word **watershed.** What does this word mean to you?
    - b. Thank you for that...another idea I'm interested is word and practice of **collaboration**……can you tell me what collaboration means to you?
    - *c.* Ok great – Now how do you describe **collaboration in the context of these this watershed?** *We can spend time here discussing definitions and concepts here.*

3. When you think back on your life, can you think of a time when you felt inspired by the connections and/or collaborations happening in the community? Or when the community was thriving?
    - a. What was it that made this work? What were people doing together?

4. Cheslatta territory and the Nechako watershed includes areas of beautiful natural resources such as forests, lakes and rivers. When you think back on your life, what do you think are the most important values and benefits that the land and waters provide to you, your family and the community?

B. Perspectives – Moving from Discovery (the best of what is) to Dream (what might be?)

Thank you for sharing those ideas and stories with me. I'm now interested in building on that to get a sense of your hopes, and aspirations for the future.

5. If you were to explore your boldest hopes and aspirations for Cheslatta and the watershed, what would you ultimately want to see?
    a. What are the three most important hopes/aims/objectives you have for of the Cheslatta and others in the watershed?

C. Opinion – Moving from Dreams (what might be?) to Design (how can it be?)

Now I would like to move our discussion along from what might be in the future towards how these ideas can become a reality (or how could it be possible to achieve those dreams we just discussed):

6. Imagine that time OR a time in the future when people look at the CCN, Cheslatta people and Nechako in a way you described earlier? *(referring to the last set of questions/responses)*
    a. Who do you think is involved in achieving this?
    b. And how are they involved?

7. How would different types/ways of support make this *(dreams or visions)* come to reality?
    a. Are there any tools (mapping tools, just as an example) that could possibly assist you or your community? How would they help?

8. As you reflect on successful ways citizens are currently engaged in improving the community, what initiatives stand out as being especially promising in expanding local citizen leadership and why?

D. Closing question and comments – Moving from Design (how can it be?) to Delivery (what will be?)

For the last cycle of the interview I would like to focus on moving from how we can make what you we have discussed and building on imaging what will be. This is the stage where I'd like to talk about making specific, real time plans.

9. What small steps could be taken today to help your vision become a reality? What is the first thing needed to make this happen?
    a. How could these small steps be taken?

10. We have discussed many important things here. Thank you for sharing your stories, knowledge and time. I would like to ask if there anything we have not discussed that you would like to add?

Appendix D: Research Information Sheet for Interview Participants

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Participant Information Sheet

Title: Exploring Indigenous-led Collaborative Stewardship in a Watershed Context: Perspectives from the Nechako Headwaters

Researcher: Kate E. Hewitt

Natural Resources and Environmental Studies Graduate Program, University of Northern British Columbia

Phone: 250-857-5552 (cell) or email <khewitt@unbc.ca>

Supervisor: Dr. Margot Parkes, Associate Professor,

School of Health Sciences, University of Northern British Columbia

Phone 250-960-6813 (office) or email <margot.parkes@unbc.ca>

This research is being undertaken by a student researcher (Kate Hewitt) and is for the requirements of her graduate degree: Masters in Natural Resources and Environmental Studies.

Purpose of this research:

You are invited to participate in a master's research project that will focus on the Nechako headwaters and the traditional territory of the Cheslatta Carrier Nation (CCN). Working with the CCN, the study aims to:

- Examine and learn more about Indigenous approaches to collaboration in land and water stewardship;
- learn about the role of collaboration in culturally appropriate watershed stewardship;
- propose place-based, locally informed recommendations to enhance CCN commitments to headwater stewardship in the Nechako, community planning and healing.

Participant Requirements:
You have been invited to take part in this research because you have past or current involvement with land/water planning, management, stewardship or land-based activities. The latter could include awareness of the land base, hunting, or a community knowledge holder.

What is involved?
If you agree to voluntarily take part in the study, you will be asked to partake in an interview that will take approximately 1 hour in length. This interview will ask you about your insight and

perspectives regarding what the strengths and values you find in your community and watershed, what you envision is important for the future.

These questions will be digitally recorded so the researcher can analyze them after. You may ask the recording to stop or be turned off at any time. You can also request to terminate the interview in which the digital recording will be terminated.

Is there any benefit to you participating in this study?
Benefits to participating in this interview include:

- Sharing insights, stories and experiences may highlight areas of opportunity and concern about the watershed as it related to you.
- The interview will provide participants an opportunity to share issues within their region but also share areas of strength that can be built upon.

Is there any risk to participating in the study?
There are no direct risks from participating in this interview. There will be minimal potential for emotional risk; however, you may become upset when talking about historical and/or contemporary issues surrounding land/water issues and the stewardship of traditional territories. However, if at any point you are uncomfortable, upset or wish to not continue with the interview please let the researcher know. There is a small risk of being identified and therefore you will be asked to choose an alias to be identified by. You will be advised to choose an alias that will not increase any risk of being identified.

How will confidentiality be addressed?

- Your information will be kept confidential, as only the researcher and members of the research committee (Margot Parkes, Agnes Pawlowski-Mainville and Scott Emmons) will know the identity of the interview participants.
- The only way you will be referred to the thesis or any posters or presentations is by an alias of your choice.
- Consent forms and primary data will be stored separately. All information collected through this project will downloaded/removed from the digital recording device and stored on password protected hard drive, in locked filing cabinet in a locked room in the lab of my supervisor Dr. Margot Parkes, at the University of Northern British Columbia.
- All interview data, notes and consent forms will be destroyed after 5 years.

Will I be paid for participating?
Participants will not be paid for their time spent in interviews. You will be offered a $20 Overwaitea gift card as a token of appreciation for participating in this study.

How will I find out about the results of this research?
The results of this study will be reported in a graduate thesis that will be publicly accessible and may also be presented through presentations/posters. A knowledge translation/exchange package will be presented to participants, the CCN and all others interested. This presentation would likely take place on CCN territory when the research is nearing completion.

Participation in this study is voluntary
Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without

giving a reason and without any negative impact on your (for example, employment, class standing, access to further services from the community center, day care, etc.).

- If you withdraw from the study, the information you have provided up to that time will be destroyed and will not be used in any way **UNLESS** you provide written permission for the researcher to use information provided up to the point of withdraw.

Contact information
If you have any questions about what we are asking of you, please contact me or my supervisor. The contact information is listed at the top of the first page of this form.

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the UNBC Office of Research at 250-960-6735 or by e-mail at reb@unbc.ca.

Thank you for your interest in this study

Angela Seguin

From: Kate Hewitt
Sent: Monday, September 16, 2019 9:36 AM
To: Graduate Office
Cc: Margot Parkes
Subject: KHewitt_ Written permission to use map

Hello,

Please see below for written permission to use the Cheslatta Territory map in my thesis.

Please let me know if you have any questions.

Thank you!
Kate

From: Mike Robertson <mrobertson@cheslatta.com>
Sent: Thursday, September 12, 2019 10:20 AM
To: Hewitt, Kate <Kate.Hewitt@BCOGC.ca>
Subject: Re: Map
Kate Hewitt has permission to use and publish the map of the Cheslatta Traditional Territory and Area of Interest map that was provided to her by the Cheslatta Carrier Nation.
Sincerely,

Mike Robertson
Senior Policy Advisor
Cheslatta Carrier Nation
Box 909
Burns Lake, BC
V0J 1E0
phone 250 694-3334 fax 250 694-3632 cell 250 692-9214
On Thu, Sep 12, 2019 at 10:04 AM Hewitt, Kate <Kate.Hewitt@bcogc.ca> wrote:

> Mike – sorry to keep bugging you on this. I can use the map in the thesis if you can please provide written permission. A reply to this email will suffice.
> Thank you!

Kate Hewitt
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