12. BACKGROUND AND ABORIGINAL GROUPS SETTINGS

This section provides background information on each of the Aboriginal Groups specified in the section 11 Order and the Application Information Requirements/Environmental Impact Statement Guidelines (AIR/EIS Guidelines). This section also describes each of the identified First Nations and the Métis Nation British Columbia (MNBC), including historic and current land use and the economic setting potentially affected by the Ajax Project (Project). Additional socio-economic information on Aboriginal Groups can be found in the Application for an Environmental Assessment Certificate/Environmental Impact Statement for a Comprehensive Study (Application/EIS) (Section 7 Economic Effects and Section 8 Social Effects).

12.1 INTRODUCTION

This section introduces the Aboriginal Groups potentially affected by the Project, the information sources, and methods used and the associated limitations. The British Columbia Environmental Assessment Office (BC EAO) section 11 Order for the Project identified the following Aboriginal Groups who could potentially be affected by the Project:

- Tk'emlúps te Secwépemc (TteS) and Skeetchestn Indian Band (SIB), jointly known as the Stk'emlupsemc te Secwépemc Nation (SSN). The SSN represents the TteS and the SIB in all matters within the traditional territory. All matters on Indian Reserve lands are dealt with separately at the individual First Nation level. In 2007, the two groups formed the SSN to manage negotiations, conservation and resources for the New Afton open pit mine (BC Aboriginal Business and Investment Council, n.d.). However, historically the TteS and the SIB were considered by the Secwépemc to be one (SSN Affidavit, 2011). The SSN aims to strengthen the economic and social conditions for its Nation members and works to capitalize on business opportunities arising from the resource sector. Both groups are members of the Secwépemc Nation;
- Lower Nicola Indian Band (LNIB) located nearby Merritt and a part of the Nlaka'pamux Nation; and
- Ashcroft Indian Band (AIB) located close to the Town of Ashcroft and part of the Nlaka'pamux Nation.

The Whispering Pines/Clinton Indian Band (WP/CIB) is an additional Aboriginal Group with interests in the Project area. The Canadian Environmental Assessment Agency (CEA Agency) directed KGHM Ajax Mining Inc. (KAM; the Proponent) to engage with and collect information from the WP/CIB. The WP/CIB reserves are located near Clinton, British Columbia (BC) on Highway 97 and near Kamloops, BC. The WP/CIB is a member of the Secwépemc Nation (Shuswap Nation Tribal Council, 2014b).

The Project lies within the Secwépemc traditional territory (see Figure 12.1-1). The Project also lies in the Nlaka'pamux Nation (LNIB and AIB) traditional territory (see Figure 12.1-2). KAM also continues to engage MNBC, as directed by the CEA Agency.

12.1.1 Information Sources and Methods

This report is a compilation of desk-based research from a variety of secondary sources as well as information gathered during consultation. Background information was gathered using standard approaches of literature review, secondary data collection, and data analysis. The information used to develop this section is described briefly below in terms of data sources and limitations.

The main sources reviewed in detail for this report include:

- Aboriginal Groups' official websites;
- Indian and Northern Affairs Canada (INAC) First Nation Profiles;
- consultation conducted with Aboriginal Groups from 2011 to 2015;
- ethnographic studies and reports;
- environmental assessment or other permitting applications (e.g., National Energy Board) developed by other proponents (as available);
- reports provided by Aboriginal Groups, including:
  - Preliminary Mitigation Report drafted in 2014 by SSN to identify any Project related concerns and suggested mitigation;
  - SSN Cultural Heritage Study (CHS) drafted in 2014 by Marianne Ignace to demonstrate traditional use and occupancy of the area involving and surrounding the Project. The report focuses on historic land uses in the area;
  - LNIB Community Profile drafted in July 2014 and provides socio-economic information for LNIB; and
  - MNBC - KGHM/Ajax Mine Initial Project Report, drafted December 2014, which provides a summary of MNBC members' feedback on the proposed Project and land use information.

12.1.2 Limitations

A number of data limitations apply to this section, which include the following:

- When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations.
- The census data available may have limitations with respect to reporting on First Nation communities. The census has been found to undercount with respect to some groups, including Aboriginal communities (Saku, 1999). Census data on small populations can also overstate changes (Saku, 1999). For example, fluctuations in large populations are often negligible in the census data, but in small populations, these fluctuations can overestimate changes. In addition, the census focuses on the wage economy, and pays little attention to the land-based economy of Aboriginal peoples.

Figure 12.1-1
Secwépemc Traditional Territory

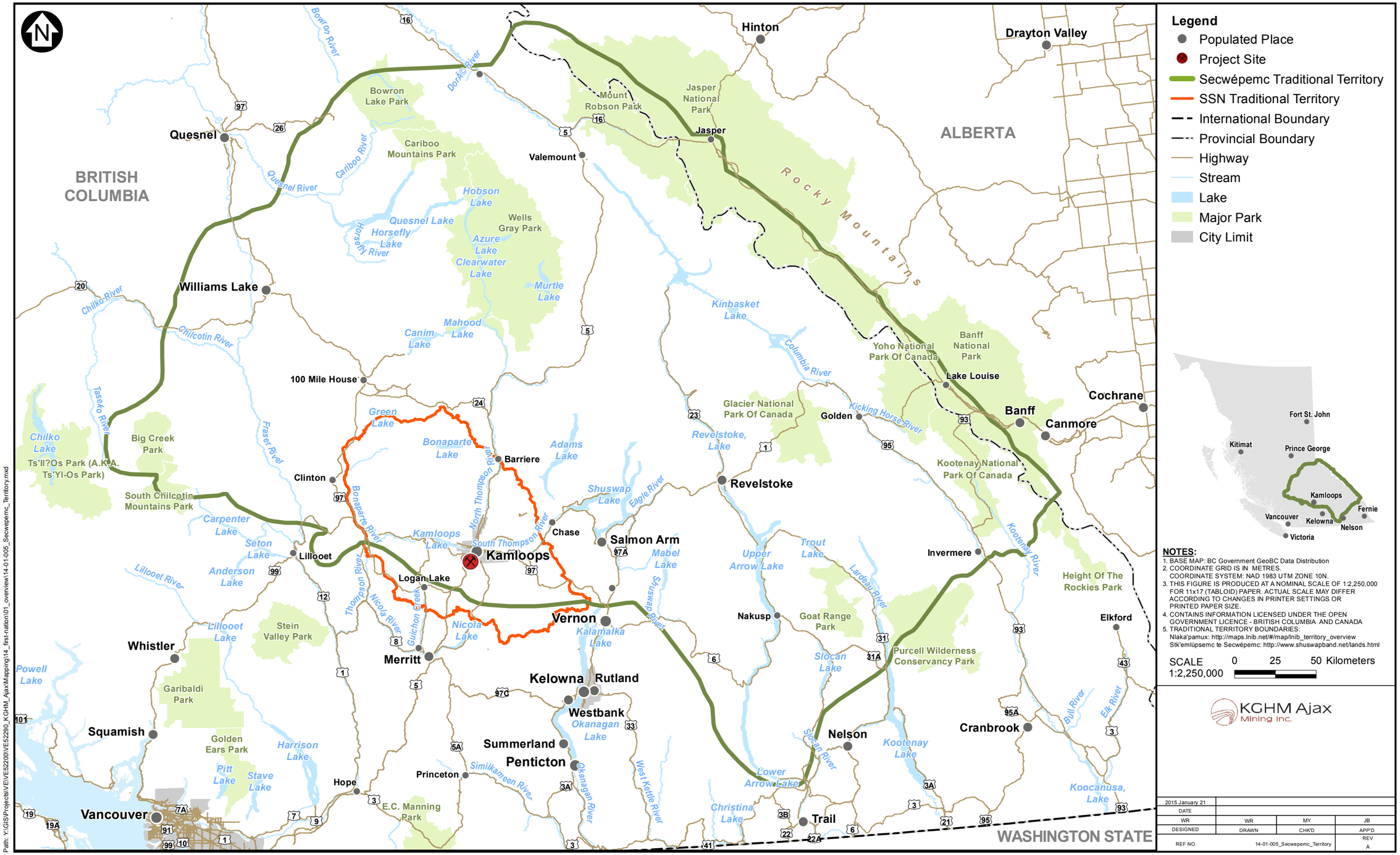
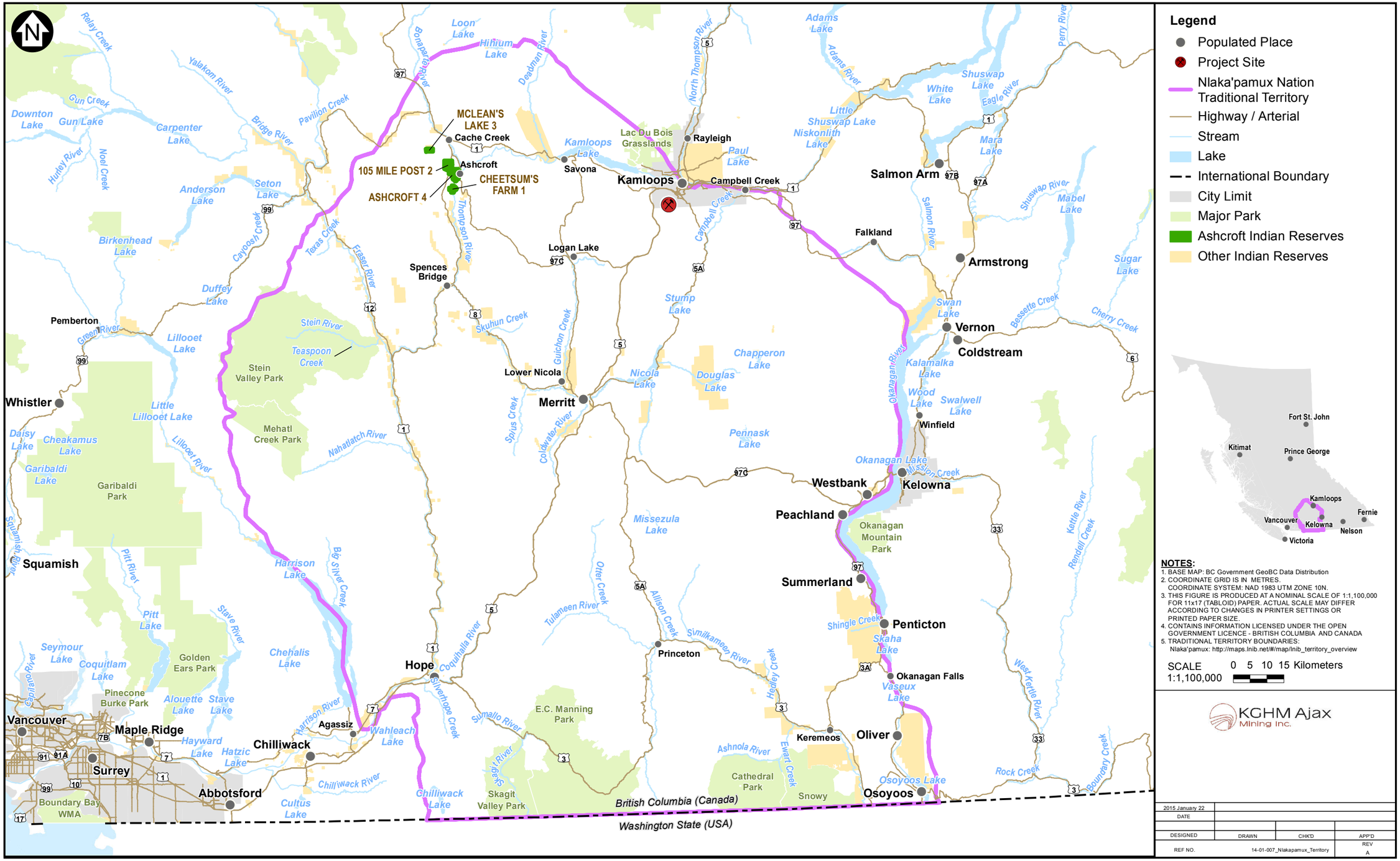


Figure 12.1-2
Nlaka'pamux Traditional Territory



NOTES:
1. BASE MAP: BC Government GeoBC Data Distribution
2. COORDINATE GRID IS IN METRES.
   COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N.
3. THIS FIGURE IS PRODUCED AT A NOMINAL SCALE OF 1:1,100,000 FOR 11x17 (TABLOID) PAPER. ACTUAL SCALE MAY DIFFER ACCORDING TO CHANGES IN PRINTER SETTINGS OR PRINTED PAPER SIZE.
4. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - BRITISH COLUMBIA AND CANADA
5. TRADITIONAL TERRITORY BOUNDARIES:
   Nlaka'pamux: http://maps.lnib.net/#/map/lnib_territory_overview

SCALE 1:1,100,000 — 0 5 10 15 Kilometers

KGHM Ajax Mining Inc.

2015 January 22			
DATE			
DESIGNED	DRAWN	CHK'D	APP'D
REF NO.	14-01-007_Nlakapamux_Territory		REV A

Path: Y:\GIS\Projects\VE\VE52200\VE52290_KGHM_Ajax\Mapping\14_first-nation\01_overview\14-01-007_Nlakapamux_Territory.mxd

- Statistics Canada suppresses data for geographic areas with populations below a specified size. As a result, data for Aboriginal communities with small populations are not available. Some sections of this document rely on internet sources and personal communications for information. In some cases, the accuracy of these sources cannot be verified.
- Information in these sections comes from publically available or non-confidential information provided by Aboriginal Groups. It does not constitute an exhaustive review of background information on the Aboriginal Groups.
- Information in these sections has, in many cases, been summarized. As a result, interpretation of the source data was necessary.
- The results of the research provide limited site-specific information about the locations, seasons, level, and type of current Aboriginal use related to the Project. Traditional knowledge/traditional land use (TK/TLU) information was incorporated for each Aboriginal Group to the extent that it was made available. KAM is committed to integrate TK/TLU information into mitigation, monitoring, and other Project-related activities, as appropriate, should additional information be made available by Aboriginal Groups.
- Some of the sources are written from the perspective of ethnographers or persons outside of the Aboriginal Group. Ethnographic accounts only provide a snapshot (i.e., a point in time) of Aboriginal activities of dynamic and changing Aboriginal culture.

12.2 SECWÉPEMC NATION

12.2.1 History

The TteS, SIB, and WP/CIB are Secwépemc and Interior Salish (Historica Foundation, 2015) people. This section provides a brief introduction to the history and culture of the Secwépemc.

The word 'Shuswap' is the anglacized form of 'Secwépemc' meaning 'to spread out' or, 'the spread out people'. Various ethnographers estimate their pre-contact (i.e., before the arrival of settlers and Europeans) population to be over 8,000 while others estimate the population at close to 40,000 (Ignace, 1995). The Secwépemc people speak Secwépemctsín. There are two major dialects: the Western dialect is used by those in Kamloops, North Thompson, Canim Lake, and Williams Lake areas, which includes the Pellt'iq't (WP/CIB) people (Secwépemc, 2014); the eastern dialect is spoken in the Adams Lake Indian Band territory (First Peoples' Heritage, Language and Culture Council, 2010). The Secwépemctsín language was given to the Secwépemc people by the Creator to allow them to communicate with each other as well as with nature (Tk'emlups te Secwépemc, 2013).

In the 20th century, the Secwépemc began using a writing system in order to communicate and record cultural information. The written alphabet system was devised by Aert Kuipers, a Dutch linguist (Secwépemc, 2014).

The Secwépemc believe that spirituality comes from a connectedness to and a respect for all living things. This respect for all living things, and subsequently the earth, led to the belief that one cannot 'own' land; rather it is considered communal and for the good of all (Ignace, 1995). Historically, there were seven sub-units within the Secwépemc determined by geography. These sub-units

consisted of approximately 32 Aboriginal bands (each with a primary village and a Chief, whose role was to coordinate tasks and be an advisor to his people). The groups would typically occupy and move throughout certain parts of the Secwépemc territory seasonally (Ignace, 1995), referred to as the 'seasonal round'.

Early Secwépemc lived off the land and would move from food source to food source, to fish, hunt, and gather. The Secwépemc territory provides plants for food, technological uses, and ceremonial uses, including root plants, berries, stems or shoots, seeds, nuts, mushrooms, and tree lichens. Lakes and rivers also provide food and waterways for travel (Siska, 1988).

The Secwépemc traditional territory is approximately 180,000 square kilometres (km^2). This territory includes the Columbia River valley to the Fraser River, and south to the Arrow Lakes (Tk'emlúps Website, 2014). As indicated in Figure 12.1-1, the SIB, the TteS, and the WP/CIB share the same Secwépemc territory.

In correspondence, the SSN noted that the Secwépemc Nation historically lived in, used, and supported their way of life in the areas surrounding the Project and Jacko Lake (SSN, pers. comm., 2014). However, the arrival of Europeans had a substantive effect on the ability of Secwépemc people to continue peaceful control over their lands.

The first recorded Europeans in the area (representatives of the fur trade) met with the Secwépemc to establish the Thompson's River Post, which would eventually become a Hudson's Bay Company post. Between the 1820s and the 1860s, the Secwépemc and the traders estabished a relationship based on trade for hides, fish, roots, nuts, and berries.

It has been suggested that during the beginning of the fur trade the Secwépemc people exercised more autonomy over the types of items they traded and ultimately their level of involvement. The fur traders became reliant on Secwépemc people to supply subsistence food sources such as salmon and wild game, all of which was necessary to maintain the Thompsons's River Post (LeBourdais S. , 2009). However, after the establishment of fur trade posts it became evident that the fur trade was having a negative impact on the Secwépemc people. Areas of territory became "trapped out" and the Shuswap people became more and more reliant on trade goods. The greater demand for salmon and wild game (from the traders) resulted in food shortages.

In the late 1850s (during the Gold Rush), a number of Europeans passed through the area bringing the small pox disease. The Secwépemc people, whose population had no immunity to the disease, were reduced by an estimated two-thirds during the 1862 epidemic. The Secwépemc also suffered from measle and influenza outbreaks, which greatly reduced their population (Ignace, 1995). .

After the small pox epidemic, the smaller surviving bands amalgamated from 32 to 17 (National Energy Board: Oral Presentation from Chief Ignace, 2014). Under the Joint Reserve Commission, these bands were identified as 'Indian Bands,' as per the *Indian Act* (Ignace, 1995). Although the bands were separated at the time, they were connected by a common language (Secwépemctsín) and belief system and together regulated the use of land and resources (First Nations Land Rights and Environmentalism in British Columbia, 2007). In 2014 during Chief Ronald Ignace's testimony for the Trans Mountain Pipeline National Energy Board hearing, he noted the Secwépemc traditional territory covers between

150,000 and 180,000 km^2. Within the traditional territory, developments such as road infrastructure, pipelines, and forestry have severely impacted the land and resources (SSN Affidavits, 2011).

Today, the TteS, SIB, and WP/CIB belong to the SNTC. SNTC supports their member bands on matters related to:

- Aboriginal rights;
- self-governance;
- Aboriginal land title;
- natural resource management; and
- economic development.

A Secwépemc Definition of Aboriginal Rights and Title

""*Secwépemc Rights*" means practices, customs, traditions and innovations that are integral to the distinctive culture of the Secwépemc, and which have their origins pre-contact.

"*Secwépemc Title*" means the right to exclusive use and occupation of the land held pursuant to that title for a variety of purposes, which need not be aspects of Aboriginal practices, customs and traditions integral to the distinctive Secwépemc culture. Secwépemc Title flows from the use and occupation by the Secwépemc Signatories of Secwépemcúl'ecw prior to the British Crown's assertion of sovereignty in 1846, as well as from Secwépemc law. It is a communally-held proprietary interest in the land with an "undeniable economic component." Secwépemc Title is based on the Secwépemc Signatories's connection to the land, and encompasses:

- the right to the land itself and to choose the uses to which it is put;
- a right to the resources of the land;
- the right to self-governance and to exercise Secwépemc customary law-making authority;
- the right to benefit economically from Secwépemcúl'ecw;
- an inherent conservation limit; lands held pursuant to Secwépemc Title cannot be used in a manner that is irreconcilable with the nature of the Secwépemc's attachment to those lands. Thus, Secwépemc Title does not encompass uses that would undermine;
- the ability of future generations of Secwépemc people to sustain themselves from the land;
- the right to protect and provide stewardship throughout Secwépemcúl'ecw;
- the right to pursue commercial opportunities within Secwépemcúl'ecw;
- the right to harvest the resources of the Secwépemcúl'ecw for domestic purposes and for trade, barter, and sale;
- an inescapable economic component such that fair compensation will ordinarily be required when Secwépemc Title is infringed"

(LeBourdais S. 2009)

SNTC also delivers technical services related to:

- health;
- child welfare;
- employment and training;

- research on traditional territories; and
- community development.

SNTC establishes agreements with the private sector and with the provincial and federal governments (Shuswap Nation Tribal Council, 2014a).

12.2.2 Secwépemc Governance

The Secwépemc traditional territory, known as Secwépemcul'ecw, was occupied by the Secwépemc peoples prior to contact and this occupation included a network of camps, village sites, and permanent winter villages. According to ethnographers and other authors, Secwépemc governance was comprised of three units:

- The family. Family was the basic unit in the complex system of Secwépemc governance. Families were the source of local TK/TLU knowledge which was passed to the next generation. Heads of the families were often given the responsibility of making decisions about resources (Williams Lake Band, 2015). Some property was inheritable.
- The bands. The term divisions or bands (a term developed by a well known ethnigrapher called James Teit) suggests the Secwépemc people were further divided into groupings that were tied to definite localities. Each division was composed of a group of families closely related among themselves (Ministry of Attorney General, 2007).
- The tribe. The tribal unit refers to the larger cultural grouping of the Secwépemc people. According to ethnnographic sources, land and hunting grounds were viewed as tribal property while each Aboriginal division 'owned' fishing, hunting and trapping grounds that could be accessed freely by other Secwépemc members (Ministry of Attorney General, 2007).

Families interacted within bands and bands interacted within the nation while nations interacted through regional trade and protocol agreements (Williams Lake Band, 2015).

According to Chief Ron Ignace, James Teit mistakenly characterized the Secwépemc governance into divisions. He noted there are groupings in the Shuswap Nation which correlate to geographic descriptions of where people lived. Each of the geographic areas are governed by caretakers, or yucwmintn, whom are responsible for being caretakers to the land and managing its resources while acting as guardians of their citizens for the larger Secwépemc Nation (National Energy Board: Oral Presentation from Chief Ignace, 2014).

On August 25, 1910, the Chiefs of the Interior wrote to Sir Wilfrid Laurier, describing the governance model prior to contact as:

> *They found the people of each tribe supreme in their own territory, and having tribal boundaries known and recognized by all. The country of each tribe was just the same as a very large farm or ranch (belonging to all the people of the tribe) from which they gathered their food and clothing, etc., fish which they got in plenty for food, grass and vegetation on which their horses grazed and the game lived, and much of which furnished materials for manufactures, etc., stone which furnished pipes, utensils, and tools, etc., trees which furnished firewood, materials for houses and utensils, plants,*

> *roots, seeds, nuts and berries which grew abundantly and were gathered in their season just the same as the crops on a ranch, and used for food; minerals, shells, etc., which were used for ornament and for plants, etc., water which was free to all. Thus, fire, water, food, clothing and all the necessaries of life were obtained in abundance from the lands of each tribe, and all the people had equal rights of access to everything they required. You will see the ranch of each tribe was the same as its life, and without it the people could not have lived.*

(The Chiefs of the Shuswap, Okanagan and Couteau Tribes of BC, 1910)

Ronald Ignace's thesis developed in 2008 and titled *Our Oral Histories are Our Iron Posts: Secwepemc Stories and Historical Consciousness* touched upon the Secwepemc notions of governance. It states

> *Long time ago, Secwépemc people looked after the land, and all the animals and plants, everything in it. That's why they always had plenty to fish. They had deer to hunt and plants to gather for food and medicine. But they had to practice for it, and learn about everything on the land first for a long time. Then they knew how to look after it. It was also important for the elders to share each others' knowledge. That was how they learned and built up their understanding. What knowledge they shared had to be exact. (Nellie Taylor 1994).*

> *The ancient history of Secwépemcúl'ecw gave us the laws, what we call "yirí7 re stsq'ey̓s-kucw," that defined us as Secwépemc, and that gave us what I call "equipment for living" as a people: What is traditionally marked on the land through our own history and existence on the land is mirrored in our ways of dealing with things by giving counsel to one another when issues arise that need to be dealt with and solved. "Yirí7 re stsq'ey̓s kucw," thus requires the tkw'enemíple7ten, the ongoing advisors, to implement the ways that were set forth by our ancestors. These were literally "written in stone" by way of the t'ult ("freeze into stone") activities these ancestors carried out. Save for the destruction wrought upon our land and its markings by the newcomers, many of these landmarks exist to this day. However, … the premises of these activities on the land are by no means "frozen," in that my own ancestors continually did the work to interpret them and re-interpret them. Their long ago activities and how they related past activities to new issues, provide us with good food for thought for the future (R. Ignace 2008:4-5).*

In summary, the Secwépemc people had a complex and varied governance system linked to land, people and resources over a vast area.

12.2.3 Secwépemc Rights and Title

Aboriginal rights and title existed prior to the arrival of Europeans, when the lands were inhabitated, managed and governed by Aboriginal peoples (LeBourdais S. , 2009). However, the SSN note that the British Crown (without a treaty with the Secwépemc people) asserted soveriegnty of the Secwépemc lands and began "throwing them open for settlement and development" (SSN, pers. comm., 2014).

In the early 1900's, the Chiefs of the Interior (including Chiefs of the Shuswap, Okanagan and Couteau or Thompson tribes) began efforts to address concerns about rights and title.

This resulted in various delegations travelling to Europe and Ottawa to discuss land title (LeBourdais S. , 2009). On August 25, 1910, the Chiefs of the Interior wrote to Sir Wilfrid Laurier, noting their concerns about what they percieved as an infringement on their land use agreement. The letter noted the promises made by the European settlers of the gold rush, including that they would only "use pieces of the land for a short time" (The Chiefs of the Shuswap, Okanagan and Couteau Tribes of BC, 1910). The letter describes the peaceful willingness of the Secwépemc people to trust the European settlers, whom gradually became more powerful and placed restrictions on them. Over time, this resulted in their disposession from the land and changes in traditional governance and harvesting (The Chiefs of the Shuswap, Okanagan and Couteau Tribes of BC, 1910). The letter also detailed the inadequate living conditions of the reservations (lack of suitable land, irrigation water, etc.) and the ways in which the Secwépemc people had been restricted from harvesting and other land uses within the traditional territory as a result of fencing and laws which punished First Nations this participation. In response, Laurier pledged to help the interior tribes; however, he lost the federal election the following year and the Nations were faced with the need to reiterate their complaints to a new government.

On May 10, 1911, 8 Okanagan, 18 Secwepemc, 14 Nlaka'pmx, 17 Stl'atl'imx, 7 Stalo, 2 Ts'iilqo'tin 1 Carrier and 1 Tahltan representatives assembled in the interior of British Columbia at Spences Bridge and wrote the Honourable Frank Oliver (member of the Federal Cabinet). They did not describe the various grievances ; instead the letter describes British Columbia's posession of First Nation land without treaty or payment.

> *You know how the B.C. government has laid claim to all our tribal territories, and has practically taken possession of same without treaty and without payment. You know how they also claim the reservations, nominally set apart for us. We want to know if we own any land at all in this country. As a last chance of settling our land question with the B.C. government, we visited them in Victoria on the third of March last, and presented them with a petition (a copy of which we believe has been sent your government), asking for a speedy settlement. Forty of us from the Interior waited on the government along with the Coast Indians.*

The letter also describes dissatisfaction with the current state of affairs on the IRs and the duty of the Government to provide a settlement.

> *If a person takes possession of something belonging to you, surely you know it, and he knows it, and land is a thing which cannot be taken away, and hidden. We see it constantly, and everything done with it must be more or less in view. If we had had nothing, or the British Columbia Government had taken nothing from us, then there would be nothing to settle, but we had lands, and the British Columbia Government has taken them and we want a settlement for them. Surely then, it is clear there is a question to be settled, and how is it to be settled except in the courts?*

The Memorial to Sir Wilfrid Laurier and the Honourable Frank Oliver illustrates the continued struggle of the Secwépemc people for recognition of their rights and title- the same issues that are at the forefront today.

The Secwépemc people contiue to assert rights and title and are currently striving for a Nation to Nation relationship with the the provincial and federal governments which would provide the same

rights, privileges and responsibilities given to nations. Land stewardship and addressing environmental issues such as water degradation, pollution of ecological habitats, endangered wildlife species, destruction of traditional harvesting areas, erosion of hunting and fishing also remain important to the Secwépemc people.

12.2.4 Stk'emlupsemc te Secwépemc Nation Traditional Knowledge and Traditional Land Use

Within the Secwépemc Nation, the TteS and SIB are the Aboriginal Groups in closest proximity to the Project and both assert Aboriginal rights and title in the Project area. In a cooperative effort, the TteS and SIB have formed the SSN, as a division of the greater Secwépemc Nation (National Energy Board: Oral Presentation from Chief Ignace, 2014). Figure 12.2-1 presents a map of the SSN traditional territory. While the SSN may have a shared traditional territory, the implementation of the *Indian Act* in 1876 assigned each First Nation separate reserves (Ignace, 2014; Aboriginal Business & Investment Council, 2015).

This section provides an overview of SSN TK/TLU surrounding the Project. A critical data source for this section is the SSN CHS. As available, other ethno-historical and ethnographic data are presented. The SSN CHS study is based on a variety of sources including archival ethnographic, ethnohistorical, and oral history sources, interviews with SSN elders, archaeological data in the area, ethnobotanical and ethnozoological information, and SSN oral histories. The CHS presents little to no site-specific harvesting locations within the Project area- instead it focuses on describing how the areas surrounding the Project were linked to the seasonal round of the SSN (Ignace, 2014). Important sources of information include interviews conducted with SSN members for the study. A total of 13 Skeetchestn band members and 27 Tk'emlupsemc members were interviewed for the CHS. Ignace (2014) notes that Skeetchestn interviews tended to be lengthier, focusing on providing general TK for the area. Tk'emlupsemc interviewees focused primarily on traditional use in the area, given the greater proximity of nearby TteS reserves.

Historically, Skeetchestn people often traveled to the Kamloops area to visit and trade items with the Tk'emlúps people. The route taken was called the Aboriginal trail which became the Highway 1/97 route above the Savona Lookout` then descending at Six Mile (see Figure 12.2-2). First Nations would camp along the way, particularly at Cherry Creek (Figure 12.2-2). A number of those interviewed for the CHS recalled stories about family camping in the areas between Kamloops and Skeetchestn. This also included Six Mile, Greenstone Mountain, and the area where the New Afton mine is located (Ignace, 2014). One elder noted the trip would take approximately three days, with stops along the way. She recalled a sweat house (sweat house ceremony aims to purify the body, mind, spirit, and heart) constructed by her father at Cherry Creek as well as residences for Tk'emlúps members that used to live at Cherry Creek (Ignace, 2014). Members noted the Cherry Creek area is now fenced off. Chief Ignace's testimony also noted the area was used extensively in the past, but is inaccessible now due to fencing and private property signs. Moreover, the habitat for the birds, animals, berries, plants and roots were destroyed as a result of invasive species (e.g., Knapweed). He stated the Secwépemc people can no longer use this land for harvesting (National Energy Board: Oral Presentation from Chief Ignace, 2014).

12.2.4.1 Seasonal Round and Associated Rights and Title

During various months, seasons or moons, Secwépemc people participated in a seasonal round which relied on an intimate connection to the land and its resources. This unique knowledge included an understanding of how plants and animals behaved and how that behaviour changed depending on the season and the location (National Energy Board: Oral Presentation from Chief Ignace, 2014). The CHS (2014) identifies five major seasons as part of the seasonal round: early spring (snow melting), mid-to-late spring (root gathering), summer (berry and high elevation root and medicinal plant gathering), late summer to early fall (salmon season) and mid to late fall (hunting season).

According to Chief Ignace, the October/November months are where people and animals entered into their winter homes/dens and this time was also associated with various activities. During the crossover moon in December, people lived on stored provisions from trapping and hunting and would tell stories (conduct stseptekwll). During this time, there would also be celebrations to signal the end of winter and the gradual shift to longer, warmer days (National Energy Board: Oral Presentation from Chief Ignace, 2014). January also marked a stay at home month (where SSN people would again rely on stored provisions) and in the cache pit months (February) the SSN participated in some ice fishing for steelhead on the Thompson River. The Chinook wind months were said to occur in March initiating fishing activity, spring fishing and some gathering of shoots and balsam roots (National Energy Board: Oral Presentation from Chief Ignace, 2014). In April, the SSN are said to gather plants (nodding onion, yellow bells, Mariposa lily), engage in spring hunting and in fishing at Jacko Lake and Paul Lake. May was considered root-digging month (avalanche lilies, spring sunflower, nodding onion, etc.) although spring salmon fishing also occurs at HiHium, Lac Le Jeune, Tunkwa Lake and Halfway Lake. The SSN note that the trout from Jacko Lake and the root plants from that area were available during a critical time in early to late spring when higher elevation plants were not in season yet and thus is said to have played a significant role in the food economy and seasonal round of Secwépemc people (SSN pers. comm., 2015).

The mid-summer months saw additional plant harvesting of berries (strawberries, Saskatoons, soapberries etc.), medicinal plants and roots in the hills surrounding Jacko Lake and other mid-elevation areas. Spring salmon fishing also occurs in the South, North and Main Thompson River. August, named the many salmon month, initiated sockeye salmon fishing in the South and Main Thompson River as well as plant harvesting at higher elevations. August may also commence the start of fall hunting. September is important for the hunting and drying of meat for consumption during the winter months. Deer and formally elk hunting is said to occur in areas such as Bonaparte, Deadman Creek Plateau, Greenstone Mountain, Lac Le Jeune, Lac Du Bois, Chris Creek, and Tranquille watersheds (National Energy Board: Oral Presentation from Chief Ignace, 2014).

The SSN identified seasons through environmental changes such as change in temperature, precipitation, plant growth, and animal patterns (migration, birthing, rutting) (Ignace, 2014). Chief Ignace notes that every four years, there is a great abundance of sqlelten7uwi, the sockeye. Similarly, the plants and berries return in abundance every four years.

Figure 12.2-1
Stk'emlupsemc te Secwépemc Nation Traditional Territory

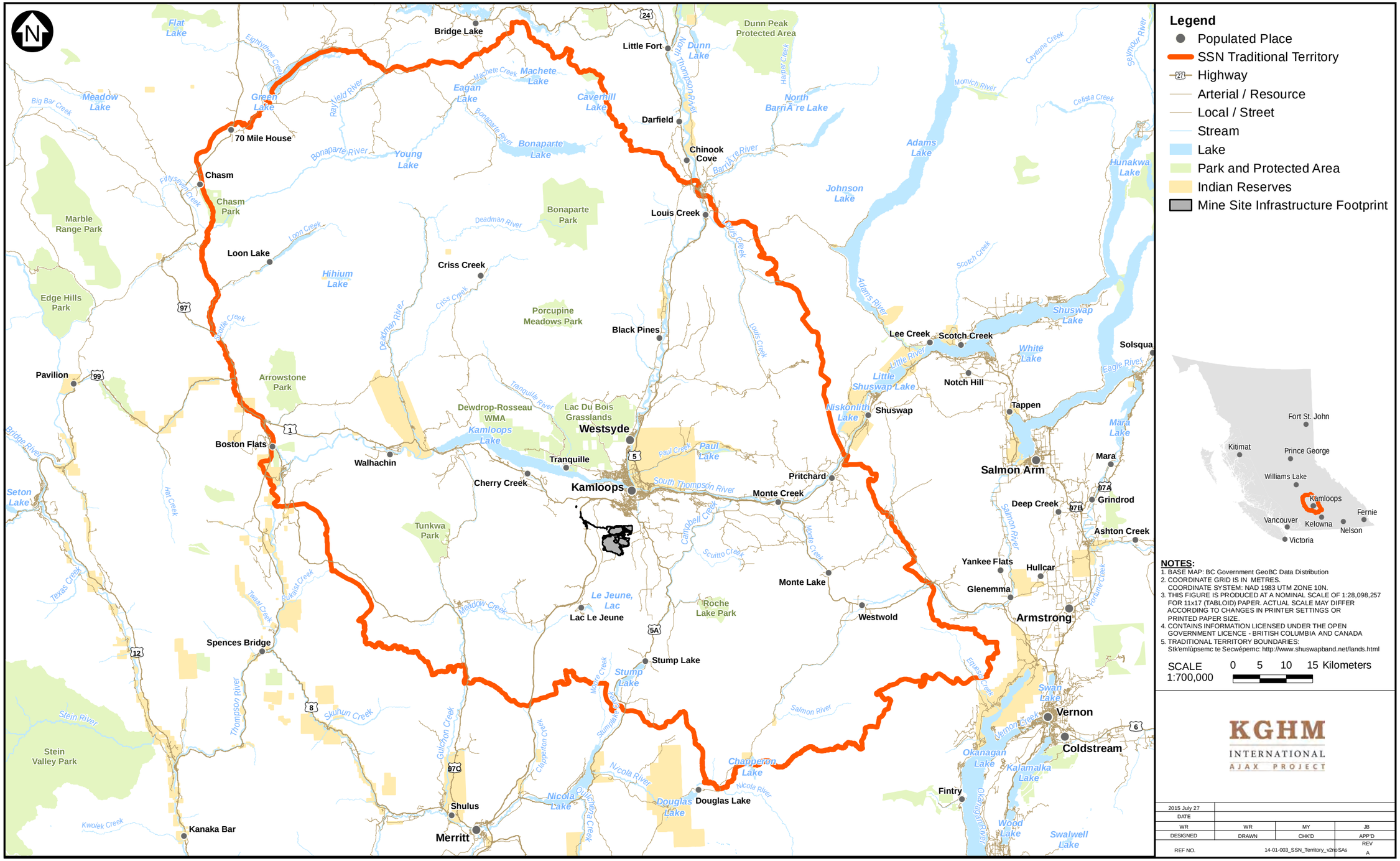
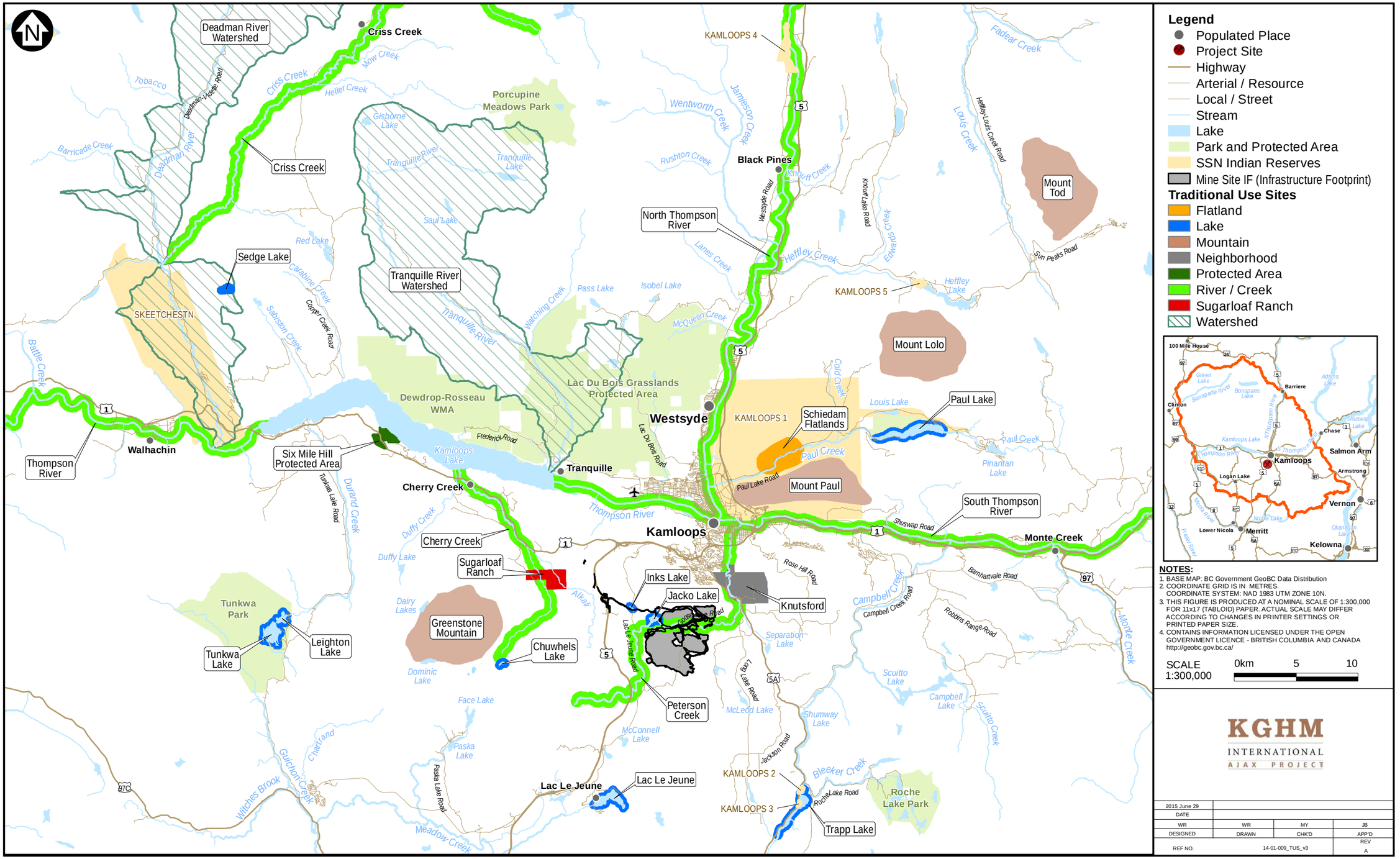


Figure 12.2-2
Identified Traditional Land Use



NOTES:

1. BASE MAP: BC Government GeoBC Data Distribution
2. COORDINATE GRID IS IN METRES.
   COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N.
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KGHM INTERNATIONAL AJAX PROJECT

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The resources found in the SSN traditional territory were to be used equally by all Secwépemc and provided necessary sustenance (National Energy Board: Oral Presentation from Chief Ignace, 2014). Chief Ignace notes the grasslands provide contain a high level of biodiversity for different plants, medicines, foods, and animal species. However, Chief Ignace argues that historic and current developments (road construction, ranching, mining, and pipelines) in the Jacko Lake area have had significant effects on the area.

The SSN assert Aboriginal rights and title in the areas surrounding the Project, noting that the Secwépemc people lived in, used and supported their way of life on the lands surrounding the Project (SSN, pers. comm., 2014). The SSN also assert rights and title to particular areas such as the Hunting Blind, Jacko Lake, Peterson Creek and Goose Lake.

During a community event hosted by KAM in 2015, an SSN community member described the effects from various developments including encroachment by the City of Kamloops, mining activity, ranching, development of road infrastructure (especially the Coquihalla Highway), and energy developments. The member noted this activity has had a significant effect on the ability of SSN members to continue participation in traditional activities. The member also noted: "everything comes from the land, we lose the land and we lose our identity….without the land, we do not have a heartbeat" (SSN Community Meeting, 2015).

The following subsections present specific SSN harvesting practices within the Project area. In doing so, they focus on hunting/trapping, fishing, plant harvesting and other uses.

12.2.4.2 Hunting

For the SSN people, the hunting process was (and still is) accompanied by a series of rituals. Before a hunt, rituals might have included a sweat house ceremony, dabbing the body with cedar, pine or fir, and smudging (i.e., burning sacred herbs and brushing the smoke over the eyes, mouth, ears, hands, and heart). These activities provided an advantage to hunters since it masks the human smell to animals (Ignace, 2014). Prayers and tobacco offerings were often made. The first time a child killed an animal is also important, marked by the rituals of eating the animal's heart and giving the meat away. Not doing so was thought to be disrespectful and to affect future success in hunting (Ignace, 2014).

The SSN people utilized the entire animal. For example, the bones were used to make soup, antlers were used to tan hides and for cooking utensils. Intestines were used for sinew, hide was used for drums and clothing, while the brains were used for softening the hides (Ignace, 2014). Historical records (Teit) suggest that preferred animals for harvesting were comprised in this order: deer, elk, caribou, marmot, sheep, hare, beaver, grouse, bear, moose, duck, goose, crane, squirrel, and porcupine (Ignace, 2014). Although hunting could occur as needed throughout the year, the main hunting season was from August to October. SSN people had an intimate knowledge of the habits and seasonal migration patterns of the animals they depended on for survival. When animals were harvested the SSN would target specific age categories or species to ensure the sustenance of the animals (National Energy Board: Oral Presentation from Chief Ignace, 2014).

With respect to trapping, species targeted included bear, beaver, fisher, muskrat, marten, otter, lynx, and coyote. The establishment of the Thompson's River Post at Kamloops in the early 1800s also provided opportunities to trade for western goods. In the 1920s, SSN people registered their traplines, typically in areas where their families had trapped and camped. SSN elder descriptions and trapline maps indicate that SSN members held traplines they occupied and stewarded (Ignace, 2014). The fur trade was noted to be an important component of the Secwépemc economy (National Energy Board: Oral Presentation from Chief Ignace, 2014). In the present day, there is one registered trapline overlapping with Project components but it is not held by an SSN member.

Archaeology in the area demonstrates a reliance on hunting for ungulates (particularly in higher elevation areas) that could date back to 6,000 years ago (Morin, 2012; Ignace, 2014). The Project area is within what Ignace (2014) refers to as an upland mid-elevation region. Ignace (2014) notes that higher elevations offer more open rangeland areas for harvesting large game such as elk, moose, and deer. Ignace (2014) adds that there were prolific hunting areas for deer and moose in the mid and higher elevations surrounding the Project area but also in lower elevation areas with southern exposure such as Six Mile, Tranquille River, Jacko Lake to Lac Le Jeune, and Greenstone Mountain. The SIB noted the use of grasslands and nearby mountains for harvesting including Goose Lake, Lac Le Jeune, Tunkwa Lake, and Greenstone Mountain (National Energy Board: Oral Presentation from Chief Ignace, 2014).

The area supported large elk herds until the mid-1800s; by the mid-1800s elk forage ranges in this area were affected by large herds of horses (and subsequently cattle) for grazing. This likely caused the decline of elk in the area (Ignace, 2014). The SSN harvested elk for its meat, hides, antlers, bones, and teeth (used to develop tools). Historically, SSN hunters would drive elk into gullies and strategically place marksmen in hidden areas above the gullies. This allowed hunters to selectively harvest a large number of elk. The hidden areas used by hunters are known as hunting blinds, which is consistent with a structure located at the Project site (Ignace, 2014). SIB and TteS elders noted that the petroforms in the Project area are also consistent with locations and hunting blinds for ungulate hunting, specifically elk. The hunting blind structures are called cyegmíñten ne cpixmeñten ("piled up stones in a semi-circle at a human-made hunting ground"). Elk were a primary protein source until the latter half of the 19th century and were likely the predominant species harvested in the hunting blind complex northeast of Jacko Lake (Ignace, 2014).

During interviews with SSN knowledge holders and elders, Sugarloaf Ranch was noted to be an important hunting area for over seven SSN members (Ignace, 2014). The general locations of harvesting areas (identified in the CHS) are presented above in Figure 12.2-2. Moose, deer, ducks, and geese were harvested in the Sugarloaf Ranch area. Interviewees noted the hunting trips would yield four to five deer and large portions of dried meat. Interviewees also noted current deer hunting in the Schiedam Flats area- located approximately 23 km north-east of the Project site, near Paul Lake (see Figure 12.2-2).

Other popular hunting areas noted by interviewees include Jacko Lake, Cherry Creek, Chuwels Lake, Chuwels Mountain, Lac Le Jeune, Inks Lake and the Knutsford area. Greenstone Mountain is an area used for hunting too, particularly in the winter. These areas were used to hunt in the last 40 years (Ignace, 2014). The extent of recent hunting practices in the areas surrounding the Project site

is likely limited because the landscape has been altered from ranching, urbanization, and mining activity. Interviewees noted frustrations with accessing the Jacko Lake area due to fencing and private property (Ignace, 2014). A ranch owner within the area noted that there have been some requests by Aboriginal Groups to use the ranch lands for hunting (Landowners, pers. comm., 2015)

SSN members noted that hunting still occurs in areas. For example, some animal harvesting still occurs around Jacko Lake, Peterson Creek and Goose Lake, particularly for moose and deer. The Sugarloaf Ranch area (see Figure 12.2-2) is also used for deer and moose hunting; one member noted they obtain permission from the land owner to hunt there. Hunting also continues in Lac Le Jeune, Greenstone Mountain, Chuwels Mountain, and Knutsford. One member holds a trapline on Greenstone Mountain which is used to harvest moose, deer, cougars, bobcats, and lynx.

In summary, the SSN harvest wildlife for food, trade, ceremonial, medicinal, technological and societal reasons. In a report titled *Biological Effects from the Trans Mountain Expansion Project in SSN Territory*, the SSN identify species of concern in the areas surrounding the Project. Species identified in the report include moose, mule deer and grouse (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015).

With respect to trapping, Ignace (2014) identifies late July to mid-August as being important times to harvest marmots in the subalpine and alpine areas of the high mountains, which for the SSN include the areas around Mt. Lolo, Mt. Paul and Tod Mountain (Skwel°welt), and Duck's Range to the east. Table 12.2-1 and summarizes species, harvesting areas, uses, and extent of current use for the SSN. It is based on the information presented in the CHS and Preliminary Mitigation Report.

12.2.4.3 Fishing

Table 12.2-2 summarizes fishing activity for the SSN. Fishing is an important part of the SSN's seasonal round. The SSN use songs "to call the fish back" and honour the fish. Similar to hunting rituals, the first fish caught must be thrown back into the water or given away (Ignace, 2014). The SSN also engage in rituals prior to fishing including preparing the fishing location (cleaning paths and the area being used) and preparing the equipment being used (making and cleaning the fishing tools). Ceremonial activities may include drumming and prayer songs. The SSN believe it is critical to have respect for the river, fish, and rocks (Skeetchestn Website, n.d.). The overall Secwépemc trout fishing methods differ from "recreational' angling or sport fishing. The goal is instead to feed the entire community (still practiced today at some lakes and rivers within SSN's traditional territory).

Historically, SSN peoples modified and maintained streams to maximize the fish yield (Ignace, 2014). This was accomplished by ensuring the streams and lake openings were clear of debris for fish to travel. They would also plant green willow trees on either side of streams, as tree roots would clean the water.

Table 12.2-1. Summary of Hunting and Trapping Activity

Species	Harvesting Areas	Uses*	Extent of Current Use
Elk	Jacko Lake (north east) and area Tunkwa Lake Sedge Lake	Food, cere, trade, tech and story	Elk have been extirpated from the areas surrounding the Project (Ignace, 2014; National Energy Board: Oral Presentation from Chief Ignace, 2014).
Caribou	Mainly north of the Thompson river in the Deadman and Tranquille Creek watersheds	Used for food, cere, tech	There has been a substantial decline in caribou population due to cattle ranching (Ignace, 2014).
Deer Moose	Jacko Lake area Peterson Creek Goose Lake Cherry Creek Sugarloaf Mountain and area (used for large harvests of deer) Knutsford Greenstone Mountain (wintering ground) Schiedam Flatlands (Kum-gen-nat-kwa) Lac le Jeune Chuwels Lake Six Mile Tranquille Watersheds Deadman's Creek Criss Creek	Mule deer used for food, cere, trade, tech and story Moose noted to be a species of concern to SSN and used for food, tech and cere	Jacko Lake: game hunting occurs (moose, deer) (Ignace, 2014). Peterson Creek: Consultation indicates moose hunting in this location (SIB, pers. comm., 2014; SSN, pers. comm., 2014) Goose Lake: Indicated during consultation that game hunting occurs (SIB, pers. comm., 2014; SSN, pers. comm., 2014) Cherry Creek: limited hunting in Cherry Creek due to access restrictions including private property signs, ranching, and fencing (Ignace, 2014). Sugarloaf Mountain: Harvesting still occurs (Ignace, 2014). Knutsford: Some hunting still occurs. Greenstone Mountain: Hunting and trapping still occur (Ignace, 2014). Schiedam Flats, Lac Le June, Chuwels Lake: Some hunting and trapping still occur (Ignace, 2014). Tod Mountain: Hunting and trapping occur (Ignace, 2014). Tranquille and Deadman's Creek and Criss Creek: Hunting occurs (Ignace, 2014).
Rocky Mountain Bighorn	On-site, currently or historically	Food, tech, story	Likely extirpated from the Project area (Ignace, 2014).
Grizzly bear	Jacko Lake and Project area	Noted to be a species of concern to SSN and used for story, trade, med, tech and cere	Preliminary Mitigation Report and CHS. Ignace (2014) notes Grizzly bear has been extirpated from the areas surrounding the Project.
Black bear	On-site, currently or historically	Story, trade, med, food, tech and cere	N/A

Species	Harvesting Areas	Uses*	Extent of Current Use
Cougars	Sugarloaf Ranch area, Greenstone Mountain	Story	Sugarloaf Ranch: Some harvesting may occur although due to the extent of ranching and cattle grazing, harvesting may have been affected (Ignace, 2014). Greenstone Mountain- Some level of trapping continues today (Ignace, 2014).
Marmot	Mt. Lolo, Mt. Paul and Tod Mountain (Skwel°welt), and to the east Duck's Range	Story, trade, food, tech and cere	Harvesting areas (other than Mt. Paul) are likely outside most study areas, however a conservative assumption would be that some level of marmot harvesting exists today.
Muskrat	On-site, currently or historically	Story, trade, food,	N/A
Lynx	Sugarloaf ranch area Greenstone Mountain	Story, trade, food, tech	Sugarloaf Ranch: Some harvesting may occur although ranching and cattle grazing may affect harvesting activities (Ignace, 2014). Greenstone Mountain- A SSN member holds a trapline in the Greenstone Mountain area (Ignace, 2014).
Badger	On-site, currently or historically, areas near Jacko Lake	Noted to be a species of concern to SSN and used for story, trade, food	American Badger Red/Blue-listed, endangered (therefore, likely no hunting or trapping of this species). During consultation with SIB, the importance of the American badger was noted. They indicated the species may be present in Mine Site area.
Red squirrel	On-site, currently or historically	Story, trade, food	No evidence of SSN trapping in the Project area, however there may be trapping in other areas.
Bobcats	Sugarloaf ranch area Greenstone Mountain On-site, currently or historically	Trade	Sugarloaf Ranch: Some harvesting may occur (Ignace, 2014). Greenstone Mountain- Hunting and trapping continue today (Ignace, 2014).
Snowshoe hare	On-site, currently or historically	Story, food, tech, cere, eco	No evidence of SSN trapping in the Project area, however there may be trapping in other areas.
Muskrat	On-site, currently or historically	Story, trade, food	
Long tailed weasel	On-site, currently or historically	Used for trade, cere, tech and noted to be a valued ecological indicator	
Yellow-bellied marmot	On-site, currently or historically	Story, trade, food, tech and cere	
Coyote	On-site, currently or historically	Story, trade, and cere	
Grey wolf	On-site, currently or historically	Story, trade, and cere	
Otter	No evidence	N/A	

Species	Harvesting Areas	Uses*	Extent of Current Use
Fisher	On-site, currently or historically	Fisher are noted to be of concern to SSN and used for story, trade and tech	
Marten	On-site, currently or historically	Story, trade	
Wolverine	On-site, currently or historically	Story, trade	
Porcupine	On-site, currently or historically	Story, trade, food, tech	
Beaver	Sugarloaf ranch area On-site, currently or historically	Story, trade, food, tech, cere	
Bald eagle	On-site, currently or historically	Used for trade and cere	Extent of harvesting within the Project area, unknown at the time of writing.
Golden eagle	On-site, currently or historically	Used for trade, and story	
Northern goshawk	Jacko Lake area On-site, currently or historically	Identified as a concern for SSN, used for trade, tech and story	
Grouse (sharp-tailed and other species)	Jacko Lake area On-site, currently or historically Sugarloaf ranch area	Identified as a concern for SSN, used for food and story	
Duck	Sugarloaf Ranch area	N/A	
Canada goose	On-site, currently or historically	Story, trade, food	
Sandhill Crane	On-site, currently or historically	Identified as a concern for SSN, used for food and story, ecological value	
Great blue heron	On-site, currently or historically	Identified as a concern for SSN, used for cere	
Swans	On-site, currently or historically	Used for story, trade, cere	

Note:
**Types of Uses (as defined in the CHS) include:*
Concern: Species of concern either provincially or for the SSN
Story: Figured prominently in traditional stories/laws
Trade: is or was a trade item
Food: utilized as a food sources
Med: has medicinal value
Tech: used as clothing or other technological purposes
Cere: used for ceremonial or spiritual purposes
Eco- has value as an ecological indicator

Table 12.2-2. Summary of Fishing Activity

Harvesting Areas	Species*	Extent of Use
Jacko Lake, Jacko Creek, and its outflow, Peterson Creek (inlet, inflow creek, fly fishing, fishing from boats)	Rainbow Trout	SSN continues to practice fishing rights within Jacko Lake (SSN, 2014; Ignace, 2014). (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015)
North Thompson River South Thompson River Main stem of the Thompson River	Salmon (in particular coho, steelhead) Trout Dolly Varden	SSN continues to practice fish harvesting in the Thompson River and an Aboriginal fishery is present
Kamloops Lake	Trout Dolly Varden Steelhead Bull trout Salmon Burbot	Sources indicate SSN practice fish harvesting in Kamloops Lake (Tk'emlúps Website, 2014).
Lac Le Jeune	Rainbow trout	SSN continues to practice fish harvesting in Lac Le Jeune (Ignace, 2014).
Goose Lake	Not Applicable (confirmed via FIDQ)	Based on evidence collected to date, it appears there is no fish harvesting in Goose Lake.
Inks Lake	Not Applicable (confirmed via FIDQ)	Based on evidence collected to date, it appears there is limited to no harvesting in Inks Lake.
Tunkwa Lake Leighton Lake	Trout	SSN continues to practice fish harvesting in these locations (Tk'emlúps Website, 2014); (Skeetchestn Website, n.d.).
Paul Lake Trapp Lake	Trout Kokanee (Paul Lake) Brook trout (Trapp Lake)	SSN continues to practice fish harvesting in these locations.

** presence of fish species confirmed via FIDQ (Government of BC, 2015). Professional judgement and information from CHS and other sources was also considered.*

According to Ronald Ignace, a variety of waterbodies in the traditional territory were important for fishing. This includes:

- The clear and somewhat shallow waters of the main Thompson and tributaries of the North Thompson were used to support Secwepemc fishing by use of three-pronged spears (wewtsk) supported by long poles (R. Ignace 2008).
- The still waters of the South Thompson and Main Thompson Rivers, Secwepemc people developed the method of lighting pitch-wood fires on canoes in order to attract salmon, and then spearing the salmon from canoes (R. Ignace 2008).
- Finally, in different locations, like the mouth of Deadman's Creek, the mouth of the Barriere River, the Secwepemc people set up fish dams (ts'elmíñ) made of a lattice of sticks to contain and then selectively harvest salmon as they migrated up the creek (R. Ignace, 2008)

The area surrounding the Project provided and continues to provide ample opportunities for fishing various species. These are described below.

Jacko Lake

Jacko Lake (Plate 12.2-1) is noted to be of significant spiritual and cultural value to the SSN and this includes the use of the lake for fishing (SSN, pers. comm., 2014). Ignace (2014) indicates that Jacko Lake was an important rainbow trout fishery before the arrival of Europeans and after in the 20th century. Trout were caught by scoop-netting as they prepared to spawn at Jacko Creek at the inlet of the lake. Jacko Lake is typically ice-free in mid-April, and provided an early trout run and the first fish protein of the year (Ignace, 2014). Fishing on Jacko Lake also occurred in the spring and fall.

Plate 12.2-1. Jacko Lake (view from access road looking southwest)

It is possible that some SSN members felt restricted from fishing on Jacko Lake historically, as one interviewee noted that "Jacko Lake it seemed to me that way of fishing, the traditional methods was not, not allowed for us there, like back then 30-40 years ago seemed like we were always sneaking around to get our spring fish" (Ignace, 2014). Another interviewee noted that access to the Jacko Lake area is limited due to private property and fences. Provincial fishing regulations currently apply to Jacko Lake, and ice fishing is not permitted.

SSN members interviewed by Ignace (2014) described fishing in Jacko Lake for large size rainbow trout (over 30 centimetres [cm]), typically fishing along the inflow creek in the spring. Members that were interviewed mentioned ongoing fishing and fly fishing activities today in Jacko Lake using boats. SSN members also fished Jacko Lake using a fishing rod as recently as 2008. The interviewee noted traditional fishing methods are not allowed at Jacko Lake.

A recent report identifies the use of Jacko Lake as a valued SSN trout fishery (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015).

Peterson Creek and Jacko Creek

Peterson Creek and the Peterson Creek headwaters (locally known as Jacko Creek) begins in the Chuwhels Mountains and flows north entering Jacko Lake on the southwest side (Plate 12.2-2). The creek then flows just south of the City of Kamloops and then heads through City, entering the South Thompson River (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015). Jacko Creek and Peterson Creek are noted to be a valued trout fishery for the SSN. A recent report prepared on behalf of SSN indicates that coho salmon are also found at the mouth of Peterson Creek, where Peterson Creek converges with the South Thompson River although it is unclear if members are fishing there (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015).

Plate 12.2-2. Peterson Creek (view from discharge of Jacko Lake looking east)

Thompson River

The SSN had many fishing locations in the North, South, and Main Thompson River where salmon fishing was carried out in canoes, with fishing weirs and with nets and spears. In late fall, coho salmon were fished in the tributaries of the Thompson Rivers system (Ignace, Cultural Heritage Study- Final Report, 2014). Fishing yielded fresh protein between March and October, and significant portions of the catch were dried for the winter.

In spring, the Secwépemc people would fish for trout using drag nets and spears in the streams and lakes. In the fall, they would fish for salmon using three-pronged spears (Ignace, 2013; Siska, 1988; Prince, 2003; Dawson, 1891). They would fish for salmon in the South Thompson River (Murphy, Nicholas, & Ignace, 1999), Fraser River, and Lac la Hache (Ignace, 2013).

SSN continue to fish in the Thompson River. For example, in 2004, SSN and Bonaparte First Nation deployed a fishwheel in the Thompson River mainstem near the outflow of the Deadman River (Tk'emlúps Website, 2014). A fishwheel is a device used to catch fish and operates similar to a water-powered mill wheel.

Goose Lake

At the time of writing, no evidence of a historic or current Secwépemc fishery on Goose Lake (Plate 12.2-3) was found. This may be because there is no fresh water source for the lake other than runoff. The Province of BC's Fisheries Inventory Data Queries database does not include data showing fish presence in Goose Lake (Government of BC, 2015)

Plate 12.2-3. Goose Lake (view from Goose Lake Road looking east)

In summary, the CHS notes that only a few SSN members fish in the Jacko Lake area, and what fishing that does occur is primarily angling as opposed to traditional fishing methods from lake in- and outflows after spring ice break-up. The major reason is the land at the in- and outflow of Jacko Lake has been private property for roughly 140 years, and has effectively fenced First Nations people out of areas where traditional resource harvesting did occur.

12.2.4.4 Plant Harvesting

Plant harvesting that included seeds, nuts, and berries was a critical source of vitamins and nutrients for the Secwépemc peoples. Traditional plant foods ranged from seeds, nuts and berries to roots, green shoots and leaves, inner bark or cambium of some trees, mushrooms, lichens, and various types of casual foods, flavourings, and beverage plants (Ignace, 2014). Plant products were also used for medicines, technology, and for ceremonial purposes.

The Project site and surrounding areas historically provided a variety of plant foods and medicines and given it is within close proximity to the confluence of the North and South Thompson rivers and Kamloops Lake, it was a desirable harvesting location. According to Ignace (2014), the area surrounding the Project provided opportunities for early spring plant gathering because of its low elevation and it is usually snow free by February or March. Grassland areas provided some of the first fresh protein and vitamins in the Secwépemc diet after a winter diet of dried meat, fish, and plant products.

Jacko Lake was "preferred picking grounds" for a number of traditional medicinal plants and may be due in part to the mineral content of the soil (Ignace, 2014). Other elders interviewed for the CHS noted that root plants and soapberries were also harvested near Jacko Lake (Ignace, 2014). Soapberries, or sxusem, was mentioned numerous times as a plant species that is and was harvested in the general Project area, including the areas near Jacko Lake. Soapberries are tart and create a lather when mixed. The fresh berries can be used to make "Indian Ice Cream" or fresh juice both of which provide critical vitamins and purify the blood. The leaves can also be used to make medicinal tea (SSN Affidavits, 2011). Interviewees also recalled gathering sweet sage, squirrel tails, Indian potatoes, and other berries in the Jacko Lake area, near to the Project.

Plant harvesting occurs at different times of the year. In mid to late May and June, the cambium of Ponderosa Pine and Lodgepole Pine is harvested (Ignace, 2014; Turner, 1997). In early to midsummer, different root plants may be harvested (balsamroot, nodding onion, biscuit-root, bitterroot, mariposa lily, glacier lily, chocolate lily, spring beauty) at higher elevations as the snow melted in these altitudes. Early to late summer, berries (soapberries, Saskatoon berries, strawberries, huckleberries, blueberries, cranberries) are picked at higher areas on plateaus. Important gathering areas included the slopes east of Mount Peter, Pencentén (Pinantan), the Tranquille area, Mount Lolo and Mount Tod, the Jacko Lake (Pípsell) area, and the meadows above the north shore of Kamloops Lake (Ignace, 2014). When roots were dug out, the corms were placed back in the ground so they could be harvested the following year (National Energy Board: Oral Presentation from Chief Ignace, 2014).

Other important plant species harvested include:

- Black tree lichen (wile – *Bryoria fremontii*), was processed and stored for winter use as food;
- Tsets'elq or Balsamroot (*Balsamorhiza sagittata*), once abundant in the area but now restricted to a small disturbed plant community;
- Qweoewile or biscuit-root (*Lomatium macrocarpum*);
- Qwléwe or nodding onion (*Allium cernuum*);
- Li¬ts'e or sagebrush mariposa lily (*Calochortus macrocarpus*);
- Sxusem (*Shepherdia Canadensis* – soapberries);
- Ts'weΣye or Yellowbell (*Fritillaria pudica*);
- Texts'iñ or tigerlily (*Lilium columbianum*); and
- Cilcel or silverweed.

Throughout mid spring to early fall, SSN people also harvested medicinal plants, along with plants used in technology (e.g., various trees, Indian hemp and nettle, birchbark, cattails, etc.), and silverweed (a root plant). During summer, the SSN would dig for roots, such as Columbia lily, chocolate lily, balsam root, wild onion, camass, and cinquefoil. In fall, the Tk'emlúpsemc would harvest kinnikinnick berries and cottonwood mushrooms (Ignace, 2013).

Technological uses of plants were also widespread. For example, a variety of homes were constructed and used as the people moved from one area to another, collecting food. Temporary homes were made from tule, rushes, and grass that were woven into mats and placed onto a framework. The shape of the framework would vary from square to oblong. The framework would be covered with the bark of black pine, spruce, balsam, or cedar. The temporary homes would have a smoke hole centred above the fire that would be used for cooking and heating the home. Additional types of dwellings used by the Secwépemc included hunting lodges, trapping lodges, girls' lodges, women's lodges, sweat houses, and more permanent winter homes or pithouses (Ignace, 2013). Cklutetatu7s (a pre-contact village near Little Dog Creek) was one of the areas where Tk'emlúpsemc ancestors built their pithouses (Ignace, 2013; Palmer, 2005).

Secwépemc peoples may have gathered, processed, and used copper. While most of the pre-1846 copper artefacts found in the BC interior plateau are from burials, some have been found in village sites (Ignace, 2013). There have been reports of copper 'diggings' on the north shore of Kamloops Lake (Ignace, 2013). Although these locations are not in the Project vicinity, Dawson (1891) states that Copper Creek (on the north shore of Kamloops Lake) derives its name from the First Nations historical reference to the minerals located there (Ignace, 2013). Approximately half of the SSN members interviewed for the CHS recalled historic use of copper and gold including the native use of copper for trade, jewelry, or the copper breastplates found in human remains (Ignace, 2014) Copper and dentalium shells were gathered and used for ornaments and other purposes (National Energy Board: Oral Presentation from Chief Ignace, 2014).

Grasslands are valued by SSN because the grasslands played a critical role, supplying plants for medicines, technology, and spiritual and ceremonial purposes. Grasslands comprise a very small percentage of the BC land base but provided a primary SSN food source in spring, and were viewed as an "indigenous garden". SSN would manage grasslands using fire and landscape burning to promote lusher growth, enhance plant production, repel diseases, and facilitate plant gathering along the rivers (Ignace, 2014; National Energy Board: Oral Presentation from Chief Ignace, 2014).

Based on an ethnobotanical inventory by the SSN research team, Ignace (2014) states that 127 culturally important species are still present in the Project area. Historically, 90 of these species had medicinal uses, 45 were used as food, 47 were used technologically, six had spiritual significance, and seven were used in ceremonies (Ignace, 2014). This area has seen a large amount of introduced plants, including noxious weed species. Ignace (2014) notes that the areas near roadways, the mining pits and waste deposit areas, and the boat launch site at Jacko Lake, have been overtaken by introduced plant species, including noxious weeds.

Interviewees noted that the Jacko Lake area is a desirable plant gathering location, however access is restricted due to locked gates, private property, and fences. Ignace (2014) notes that current plant harvesting is limited because SSN people have been largely excluded from this area. The Secwépemc

are estimated to use over 100 grassland plants for food, medicine, and technological purposes, however a number of the species in grasslands are considered endangered or threatened as a result of development (city infrastructure, mining, road construction, pipelines) and other activity (ranching, cattle, horse grazing) (National Energy Board: Oral Presentation from Chief Ignace, 2014). A landowner noted that Aboriginal people have been observed gathering mushrooms and Saskatoon berries along public roads in the area (Landowners, pers. comm., 2015). The grasslands surrounding Jacko Lake are noted to be important migration resting places for songbirds and sandhill cranes, breeding grounds for golden and bald eagles, great grey and pygmy owls, and redtailed and Swainson's hawks as well as important habitat for sharp-tailed grouse (Pottinger Gaherty Environmental Consultants, on behalf of SSN, 2015).

Table 12.2-3 summarizes some of the key plants harvested (note that this does not represent an exhaustive list).

Table 12.2-3. Summary of Plants Harvested

Harvesting Areas	Species	Extent of Use
Jacko Lake to Lac le Jeune Cherry Creek Knutsford Greenstone Mountain	Berries • Saskatoons • Wild strawberries • Soapberries • Raspberries • Kinnikinnick • Choke cherries • Rose hips • Gooseberries • Squaw current • Hybrid Oregon grape • Rocky Mountain Juniper • Red Osier Dogwood	Jacko Lack area- some difficulties noted in gaining access to the 'area' due to private property and fencing which may affect extent of berry-picking (Ignace, 2014). Cherry Creek: Limited to no plant harvesting in Cherry Creek due to access restrictions including private property signs, ranching, and fencing (Ignace, 2014). Knutsford: Berry picking still occurs. Greenstone Mountain: Identified as particularly important for berry picking, especially soapberries.
Jacko Lake and Project area Mount Peter Pencentén (Pinantan), the Tranquille area, Mount Lolo and Mount Tod	Wild Root Vegetables • Wild onion • Yellow bells • Arrow leaved balsam root • Sagebrush mariposa lily • Burdock • Fireweed • Edible thistle • Cow parsnip • Tiger Lily • Large fruited/ Fern leaved/Narrow Leaved desert-parsley • Mountain sweet cicely • Shrubby penstemon • Water parsnip • Cattail • Qweoewile	Jacko Lack area: Some difficulties with respect to access which may limit digging root plants. Some plants are still harvested today (Ignace, 2014). For example, Sagebrush mariposa lily is noted to be "still on site" (Ignace, 2014) but in other cases abundance may be reduced. Existing disturbance and activities have dramatically reduced the quantity and quality of many of the important root crops SSN relied upon for sustenance, medicines and technology (Ignace, 2014). Other areas: Plant harvesting may still occur in other identified areas.

Harvesting Areas	Species	Extent of Use
Project site and Jacko Lake area	Other Plant foods • Jack Pine cambium • Stinging nettles • Brittle prickly pear cactus • Field mint • Lambs quarters • Asparagus • Black tree lichen • Orange and green • Coloured wolf lichen	Some degree of plant harvesting still occurs in the area.
	Medicinal Plant Harvesting • Yarrow • Baneberry • Short Beaked Agoseris • Saskatoon • Cut-leaved anemone • Low pussytoes • Rosy pussytoes • Wild sarsaparilla • Heart leaved arnica • Northern wormwood • Tarragon • Big sagebrush • Showy milkweed • Lady fern • Water birch • Sagebrush mariposa lily • Thompson's paintbrush • Hoary false yarrow • Fireweed • Douglas's water hemlock • Blue clematis • Narrow leaved collomia • Pale comandra • Red osier dogwood • Slender hawksbeard • Few flowered shooting star • Common horsetail • Smooth horsetail • Cut leaf daisy • Thread leaf fleabane • Linear leaved fleabane • Douglas fir • Pink wintergreen • Squaw current • Black gooseberry • Red raspberry • Willows • Lance-leaved stonecrop	Harvesting likely still occurs in Jacko Lack area although some difficulties were noted in gaining access to areas due to private property and fencing which may limits medicinal plant harvesting (Ignace, 2014). There are 90 medicinal plants in the Project area (Ignace, 2014).

Harvesting Areas	Species	Extent of Use
	Medicinal Plant Harvesting (*cont'd*) • Hooshum, soapberry • Menzies's campion • Birch leaved spirea • Common snowberry • Western meadowrue • Meadow death camas • Cattail • Stinging nettle • Kinnickinnick	
	Grasslands	Very limited to no use due to substantial reduction in grasslands (Ignace, 2014).

12.2.4.5 Other Uses

The CHS and Chief Ronald Ignace's testimony at the Trans Mountain Pipeline National Energy Board Hearing identify a number of sacred, ceremonial and other uses in the areas surrounding the Project. They include:

- **The Aboriginal Trail**. The historic Aboriginal trail led from Kamloops towards Trout Lake. The trail crossed Peterson's Creek and over time became the old Highway 1.
- **Cherry Creek**. Cherry Creek is cited as a historic campground and meeting place for Tk'emlúps and Skeetchestn peoples. The area was used for sweat house ceremonies, trade, and camping. Access to this area has been hampered for decades as a result of access restrictions, private property, fencing and other activities. Historically, portions of Cherry Creek were set aside as reserve lands for the Skeetchestn people but over time the area was pre-empted by white settlers in the late 1860s (Ministry of Attorney General, 2007).
- **Jacko Lake**. *Pípsell* or the Jacko Lake area is considered an important cultural landscape and place with spiritual and cultural value (SSN, pers. comm., 2014). The SSN assert that Jacko Lake is a storied site chronicling the many traditional activities that occurred there: root gathering, fishing and hunting in and around the lake (SSN, pers. comm., 2014). For example, Jacko Lake and its surroundings, form the basis for a foundational story for the Stkemlupsemc people illustrating the connection between Secwépemc spiritual beliefs and practices in the current world, the world below (water), and the world above (atmosphere) (SSN, pers. comm., 2014). According to the story, "water people" or *xqelmucwetke* are said to reside in Jacko Lake. The water people are believed to travel via underground rivers and connectors to other places like Kamloops Lake. It is believed that offerings should be made to the *xqelmucwetke* when travelling on waterways; this would offer protection when travelling via canoe, boat, or fishing. The "water people" are said to be the protectors of the water. Jacko Lake was also used to perform *Etsxem* or ritual fasting and vision quests. A second and close offering site titled kecuse7 ("tears welling up") is also said to be connected to past events at Jacko Lake. The area was identified as a place to ask for pity from the powers resident in the area prior to entering to ensure safety and success (SSN, pers. comm.,

2014). Without doing so, the SSN believed the land could 'turn on you' (National Energy Board: Oral Presentation from Chief Ignace, 2014).

Ignace (2014) notes the presence of culturally modified trees in the Jacko Lake area support the stories claiming the area had special significance to SSN people. Jacko Lake is the setting for many stories, including a story and Secwépemc song called "The Chickadee." According to Chief Ignace there are three to six sharp-tailed grouse "dance houses" in the vicinity of Jacko Lake (National Energy Board: Oral Presentation from Chief Ignace, 2014). Another story, "The Trout Children and Their Grandmother," illustrates the interrelationship between water, land, and sky and is part of the Secwépemc stsptekwll, or sacred oral tradition. The story depicts social and environmental relationships as it connects the human world with other realms, including the underwater and sky realms. It also shows the connections between humans and various animals, such as trout and grizzly bear (Ignace, 2014).

In summary, the SSN believe that Jacko Lake connects the livelihood of Secwépemc people to the caretaker above (atmosphere which also supports the notion of protecting air quality). As part of this, the SSN notes that the Secwépemc people continue to carry out various cultural and spiritual ceremonies and communicate with the water people at Jacko Lake to prevent any future disturbances from the water people (SSN, pers. comm., 2014).

- **Goose Lake.** Goose Lake is noted to be an area of cultural importance to the SSN, although additional detail was unavailable at the time of writing (AIR Comments from SSN, 2014).
- **Hunting Blind.** A hunting blind (cyegmíñten ne cpixmeñten) is translated in the Secwépemc language as "piled up stones in a semi-circle at a human-made hunting ground". A hunting blind was identified in the vicinity of Jacko Lake and it features rocks piled in a circle above and below a gulley. SSN elders and knowledge holders suggested that the hunting blind was a place where hunters would lay in wait for large game such as deer, elk, and caribou. According to the SSN, other hunters would spread out in a line across the mouth of the valley below the location of the blind and would walk together up the gulley towards the blind. The game would move up the ever narrowing valley ahead of the hunters. The hunters in the blind would use spears or arrows to kill the game as it approached. This method facilitated sustainable and efficient harvesting large numbers of animals, particularly elk (SSN, pers. comm., 2014). During the Project's Archaeological Impact Assessment (AIA) a number of petroform features were identified, which is consistent with a hunting blind. There are other pertoform features and trees in the area that SSN believe to be markers. The hunting blind includes stones that could have been used for seats, which the SSN noted may have been used during ceremonies. While the hunting blind historically facilitated efficient game harvesting, it also provided opportunities to teach about the SSN culture, including the important roles the seasonal round, ceremonies, and prayers play.

  For the SSN, culture is inextricably connected to the environment, including the activities ancestors carried out on the land. Therefore, the hunting blind represents an area of spiritual value and connectedness for the SSN. It also poses an important area for future use, to teach the youth about the traditional hunting methods of SSN ancestors. The hunting blind is also located near key waterbodies (Jacko Lake and Peterson Creek) and valuable grasslands and game trails. During a meeting with the SSN in fall 2014, the Hunting Blind and the area around it was described as an important site with cultural, historical, and spiritual value.

Ignace (2014) notes that if the Hunting Blind is removed, a highly significant, unique, and irreplaceable cultural resource, ideal as an aid to demonstrate and teach Stk'emlups people about their culture and practices, and their long-term, intimate connection to the land and natural world will be lost forever.

- **Kwlalstetkwe.** The area of Kwlalstetkwe is characterized by the SSN as a "spiritual complex" where SSN members traditionally interact with the spirit world and engage in prayer. It is believed this area connects the water people (found in Jacko Lake and Kamloops Lake) to transformation sites within the complex and may also include prayer trees, alters, the seasonal round and hunting blinds (SSN, pers. comm., 2014)At the time of writing, no additional information was available.

12.2.4.6 Future Land Use

Consultation is ongoing between KAM and the SSN, and may yield additional information on the reasonably anticipated future use of lands and resources that may potentially be affected by the Project. Should SSN provide additional information to KAM, it will be considered and incorporated in the effects assessment during the Application/EIS review phase.

12.2.5 Tk'emlúps te Secwépemc

12.2.5.1 History

The Kamloops Indian Band, who now refer to themselves as the TteS, are Secwépemc peoples and were one of the 17 Secwépemc bands created under the *Indian Act*. Governor James Douglas allocated the Kamloops Reserve land base to the TteS in 1862. The reserve land base is adjacent to the City of Kamloops. It is east of the North Thompson River and north of the South Thompson River. Figure 12.2-3 presents the Indian Reserves (IR) in the vicinity of the Project.

The name Tk'emlúps means 'where the rivers meet' and, when loosely translated, it became the name of the City of *Kamloops* (Tk'emlups te Secwépemc, 2013). Chief Louis (a TteS Chief from 1855 to 1915) was an important figure in the development of the Kamloops region. He played a key role in improving the conditions of the TteS people by lobbying both in Ottawa and in England to plead the case for the TteS people regarding land ownership (Tk'emlúps Website, 2014).

12.2.5.2 Language

The language of the Secwépemc, including the Tk'emlúps peoples, is Secwépemctsín. According to the TteS, the Secwépemctsín language was given to the Secwépemc people by the Creator to allow them to communicate with each other as well as with nature (Tk'emlups te Secwépemc, 2013).

The Secwépemctsín language is believed to hold the values, beliefs, rituals, songs, stories, social and political structures, and spirituality of the people. A 2014/2015 language assessment indicated that three members speak and understand the language fluently, while 197 members speak and understand the language to some degree. An additional 178 members are actively learning the language while the majority (858) of members do not speak the language (First Peoples Language Map of BC, n.d.).

12.2.5.3 Traditional Territory

The TteS ('people of the confluence') are Secwépemc people. As described in Figure 12.1-1, the Secwépemc occupy a large territory (estimated at 180,000 km²). Figure 12.2-1 presents the SSN traditional territory, which includes the TteS.

12.2.5.4 Reserves

Kamloops IR #1 is the main populated reserve with over 700 members residing on the reserve (Table 12.2-4). The majority of the land in Kamloops IR #1 has substantial forest cover and range grazing areas (Tk'emlúps Website, 2014). Figure 12.2-3 presents the IRs within the Project vicinity, including the TteS reserves. Data on other populated TteS IRs was unavailable at the time of writing.

Table 12.2-4. Indian Reserves Occupied by the TteS

Name	Location	Hectares
Kamloops 1	Located at the confluence of the South and North Thompson Rivers, in the northern Kamloops area	13, 227.20
Kamloops 2	Located at the north end of Trapp Lake, south of Kamloops	6
Kamloops 3	Located along the west shore of Trapp Lake, south of Kamloops Reserve #2	3
Kamloops 4	Located on the right bank of the North Thompson River, about 24 miles north of Kamloops	72.80
Kamloops 5	Located on the north shore of Heffley Lake, northeast of Kamloops	18.60
TOTAL		**13,327.60**

Source: Tk'emlúps Website (2014)

According to the Province of BC's iMapBC database and website, Hihium Lake 6 IR is shared by the TteS, the Bonaparte Indian Band, and the Lower and Upper Nicola Indian Bands (Province of BC iMapBC, 2013).

12.2.5.5 Governance

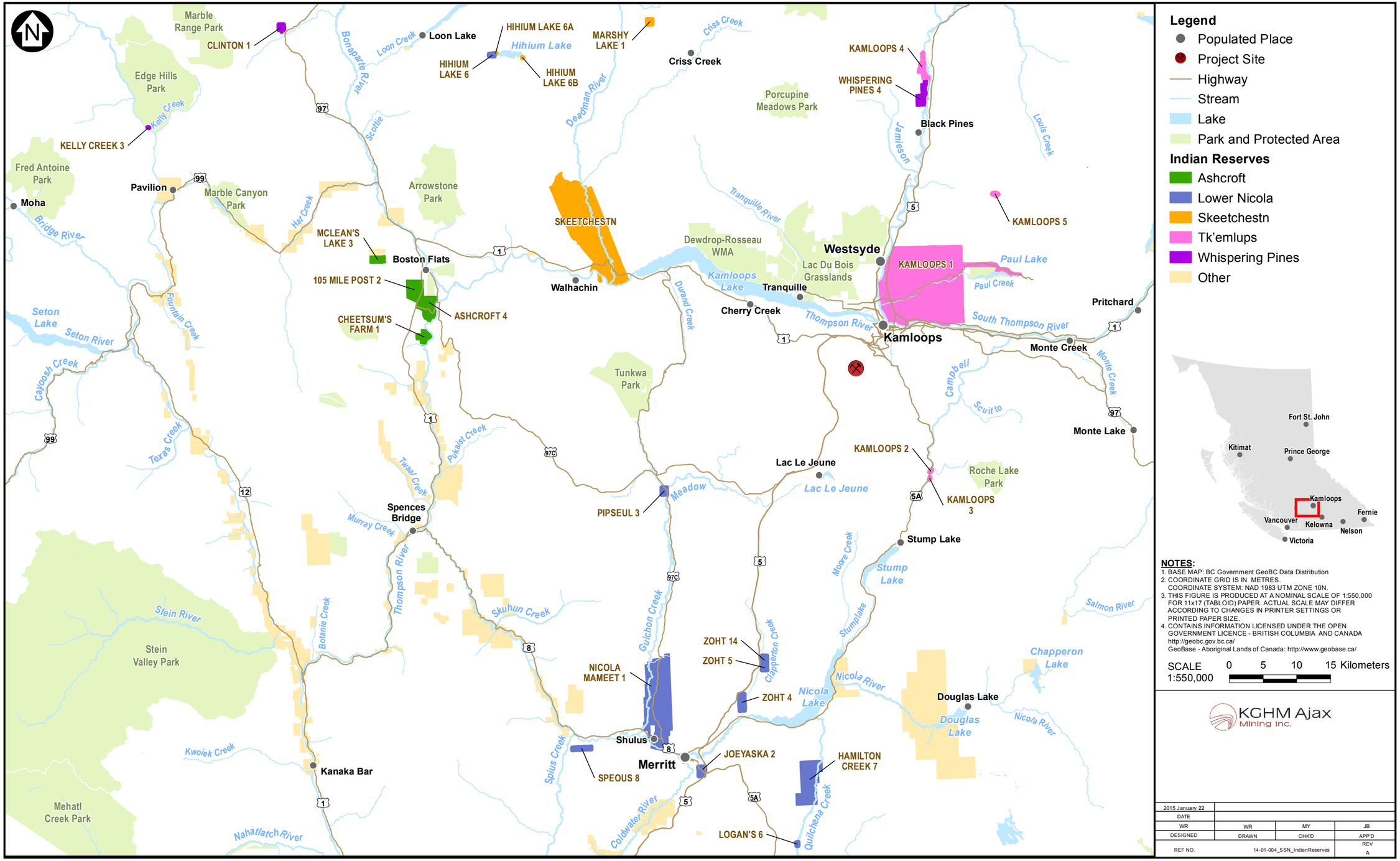
The TteS are governed by a Chief and seven Councillors. The list of officials is presented in Table 12.2-5.

Table 12.2-5. Tk'emlúps te Secwépemc Indian Band Officials

Title	Surname	Given Name	Role
Chief	Gottfriedson	Shane	Chief
Councillor	Casmir	Rosanne	Housing, Planning and Engineering
Councillor	Gottfriedson	Katy	N/A
Councillor	Jensen	Ed	Education and Natural Resources
Councillor	Jules	Jeanette	Natural Resources/Legal
Councillor	Jules	Richard	Lands, Leasing and Taxation
Councillor	Mosterd-McLean	Colleen	Social Development
Councillor	Seymour	Fred	Planning and Engineering

Source: Tk'emlúps Website (2014)

Figure 12.2-3
Indian Reserves



The TteS administration department is comprised of six officer managers and administrative assistants who support Chief and Council. Band services and support are provided by 14 departments. The departments are described in Table 12.2-6.

Table 12.2-6. TteS Administration Department

Division	Description
Corporate	The corporate division of the band
Education	This department manages funds designated for students both k-12 and post-secondary. The band also oversees a nursery
Housing	The Housing Authority oversees the construction and maintenance of band housing and coordinates tenancies
Lands, Lease, Taxation	The property taxation division on the Kamloops IR. The band developed the first of its kind Indian property taxation authority
Planning and Engineering	This department manages the development and operation of infrastructure in the community
Human Resources	Provides support and organizational infrastructure to those employed by the TteS
Legal	The legal team that ensure that TteS rights and title are protected
Membership	This division oversees membership services
Social Development	This department offers a range of services to members including but not limited to youth and parenting programs, health and income assistance
Business Development	This division is responsible for the operation of band-owned businesses
Natural Resources	This division, otherwise known as the Tk'emlúpsemc Forestry Corporation, oversees and coordinates a variety of programs including but not limited to silviculture programs, forestry licences, and commercial fishery
PR Department	The Public Relations Department is responsible for band communications, event coordination and marketing
Finance	This division is responsible for managing the finances of the band and the band-owned businesses
Tk'emlúps Day Scholars	An initiative focused on seeking restitution for those excluded from the residential settlement of 2005

Source: Tk'emlúps Website (2014)

The TteS is a member band of the SNTC (Shuswap Nation Tribal Council, 2013). Chief Shane Gottfriedson is the elected Tribal Chief of the SNTC (Tk'emlups te Secwépemc, 2013).

12.2.5.6 Social Setting

At the time of writing, demographic data for the TteS was only available through the National Household Survey (NHS). The available data includes people (including non-members) residing in the Kamloops IR #1 Census Subdivision (Statistics Canada, 2011). The Sun Rivers subdivision resulted in an increase of non-Aboriginal people moving onto Kamloops IR #1 (Aird, 2015).

Population

The population for the Kamloops IR #1 Census Subdivision is presented in Table 12.2-7. As indicated, approximately 16% of the population is under the age of 18, while 85 of the people residing on-reserve are not Canadian citizens. Of those surveyed, 780 were identified as First Nations and 30 as Métis. Chief Ignace estimated the TteS population at approximately 1,300 (National Energy Board: Oral Presentation from Chief Ignace, 2014).

Table 12.2-7. Kamloops IR #1 Population

Population	# of People	Males	Females
Residency			
Canadian citizens	2,450	1,170	1,285
Canadian citizens aged under 18	395	160	230
Canadian citizens aged 18 and over	2,065	1,010	1,055
Not Canadian citizens	85	25	60
Total	2,540	1,195	1,345
Aboriginal Origins			
North American Aboriginal origins	805	405	400
First Nations (North American Indian)	780	385	395
Inuit	0	0	0
Métis	30	25	0

Source: Statistics Canada (2011)

Marital Status

As indicated in Table 12.2-8, close to half of the TteS members residing on-reserve are married, while 230 members were never married.

Table 12.2-8. TteS Members Marital Status

	2011		
Marital Status	Total	Male	Female
Total Aboriginal identity population aged 15 years and over in private households by marital status	570	305	260
Married (incl common-law)	265	140	125
Separated	20	10	15
Divorced	35	20	10
Widowed	20	0	10
Never married	230	135	100

Source: AANDC (2014)

Mobility Characteristics

The mobility characteristics for the Aboriginal identity population on the Kamloops IR #1 are presented in Table 12.2-9. As indicated, the mobility in 2011 was relatively low, with most people (670 or 90%) residing at the same address one year prior and five years prior (685 or 92%).

Table 12.2-9. Kamloops IR #1 Mobility Characteristics

Mobility Characteristics	2011		
	Total	Male	Female
Mobility Status			
Total population (Aboriginal identity population in private households)	745	385	355
Non-movers: Lived at the same address 1 year ago	670	340	330
Movers			
Lived within the same prov.1 year ago but changed address within the same census division	30	25	15
Lived within the same prov. 1 year ago but changed address from another census division	40	25	15
Lived in a different prov./terr./country 1 year ago	0	0	0
Mobility Status - Place of residence 5 years ago	685	365	320
Non-movers: Lived at the same address 5 years ago	475	230	240
Movers			
Lived within the same prov. 5 years ago but changed address within the same census division	150	90	65
Lived within the same prov. 5 years ago but changed address from another census division	60	40	15
Lived in a different prov./terr./country 5 years ago	10	0	0

Source: Statistics Canada (2011)

Household and Dwelling Characteristics

Table 12.2-10 presents household and dwelling characteristics for those Aboriginal households on Kamloops IR #1. As indicated, there are 340 recorded dwellings and 255 of which require regular maintenance or minor repairs.

12.2.5.7 Health Services

A range of health and social services are offered to TteS members. The Q'wemtsín Health Society provides services to the TteS, SIB and WP/CIB communities but is located at the Kamloops IR#1. The organization has been delivering primary care services since 2007, in partnership with the Interior Health Authority. Programs and services delivered include the following:

- Circle of Life. Provides programs to expectant mothers or those with children under the age of six such as the Canadian Pre-natal Nutrition Program, Maternal Child Health Program, and the Fetal Alcohol Syndrome Disorder home visiting strategy.

Table 12.2-10. Kamloops IR #1 Household and Dwelling Characteristics

Household and Dwelling Characteristics	2011
Total number of occupied private dwellings occupied by an Aboriginal household by condition of dwelling	340
Only regular maintenance or minor repairs needed	255
Major repairs needed	80
Total number of occupied private dwellings occupied by an Aboriginal household by period of construction	340
1960 or before	10
1961 to 1980	70
1981 to 1990	75
1991 to 2000	100
2001 to 2005	30
2006 to 2011	50

Source: Statistics Canada (2011)

- Home and Community Care. Programs includes in-home nursing services, care needs assessment, and personal care programs.
- Communicable Disease Control. Program include immunizations, information sharing, interventions and counselling, screening, disease monitoring and follow-up.
- Dental Care. Programs include a Children's Oral Health Initiative, basic dental services, and provision of advice.
- Diabetes. Program provides registered and practical nurses, a dietician, and a naturopathic doctor's services, as well as a foot care program and clinics and workshops.
- Mental Wellness. Provides counselling to support children, adolescents, adults, and families.
- Naturopathic and Nurse support.
- Injury Surveillance and Prevention. Provides injury monitoring, and recommendations to prevent injuries. (Q'wemtsín Health Society, 2013-14)

The Q'wemtsín Health Society is the only health facility available on the Kamloops IR #1. The centre is staffed with one nurse practitioner (two days per week), a naturopathic practitioner, community health nurses, a dental hygienist and personal care aides. During a telephone interview in March 2015, a representative noted there is a long list of TteS members which require the services of a general practitioner. Accessing these services off-reserve can be complicated by transportation barriers (Q'wemtsín Health Society, pers. comm., 2015).

In 2014, the Q'wemtsín Health Society served a total of 126 TteS clients.

12.2.5.8 Protective Services

In March 2015, a telephone interview was conducted with the Royal Canadian Mounted Police (RCMP) at the Tk'emlups rural detachment. The representative noted the rural office provides

protective services to the TteS Indian Reserves, however services also extend to Savona, Logan Lake and the Sun Peaks area (Kamloops RCMP pers. communication, 2015). This is part of a larger Community Tripartite Agreement with TteS, SIB and WP/CIB, where the RCMP provides police services to First Nation communities that are over and above the current core policing, are community centred, and engage in collaborative crime prevention and educational initiatives.

The RCMP representative noted that crime trends have stayed relatively stable over the last five years and that police resourcing is sufficient to meet current demand. However, it is expected that additional police resources will be required in the future.

Recently, a First Nations Court was established in Kamloops to provide sentencing to First Nations. The court also provides restitutions services and restorative justice to facilitate healing between victims and offenders.

12.2.5.9 Land Use Setting and Planning

The land use designations on the TteS reserve lands include residential, industrial, commercial, and natural resource areas. Designated residential areas include:

- Paul Lake;
- Sun River;
- G & M Trailer Court;
- Silver Sage Trailer Court;
- George Campbell Way (subdivision); and
- Sage Meadows.

Industrial designated lands include:

- leased land on Kamloops IR #1 (Mount Paul Industrial Subdivision);
- Seven Mile;
- Chief Louis Way; and
- sewage treatment plant.

Commercially designated lands include:

- Mt. Paul Industrial subdivision;
- Halston;
- Chief Louis Way;
- Chief Louis Centre; and
- Seven Mile. (Tk'emlups te Secwépemc, 2013)

TteS have recently constructed two additional trailer parks on Kamloops IR #1 (Aird, 2015).

The TteS have natural resource areas throughout the reserves where fishing, forestry, and cattle ranging activities occur (Tk'emlups te Secwépemc, 2013).

The TteS have a Planning and Engineering department that provides band-specific regulatory enforcement and support to members. Services from this department include business licences, permits, and by-law enforcement. The department works in conjunction with the Public Works Department (Tk'emlups te Secwépemc, 2013).

While representatives of the TteS did not participate in the development of the Kamloops Land and Resource Management Plan (KLRMP), SNTC representatives participated as guests or observers. SNTC representatives participated in the planning process as a government and in a consultative role with the Interagency Planning Team but did not participate in negotiations. SNTC representatives also attended most Kamloops Interagency Management Committee meetings to discuss specific topics. A First Nations Advisory Committee was established, and SNTC representatives on this Committee met, government to government, with the Interagency Management Committee (Government of BC, 1995).

The KLRMP includes a Secwépemc statement of interest that includes the Secwépemc Nation Statement of Intent map, a statement of position on the land use plan, and specific Secwépemc interest statements, including: self-government, environmental protection, economic development, and a wide range of specific interests within those categories (Government of BC, 1995). During the planning process, the Government of BC affirmed that the decisions made by the Committees were without prejudice to Aboriginal rights and that the KLRMP would form the basis of the provincial government's position during treaty negotiations (Ibid).

In March and April 2012, the TteS and the Province of BC endorsed a Forestry Consultation and Revenue Sharing Agreement (FCRSA). The FCRSA term is three years. The objectives of the agreement are to:

- facilitate consultation obligations through TteS participation. This is achieved by establishing an agreed upon consultation process; and
- provide an opportunity for TteS to identify and pursue activities to enhance the social, cultural, and economic well-being of TteS members and help TteS close the socio-economic gap between TteS and BC non-Aboriginal people.

Under the FCRSA TteS was to receive $339,385 on March 31, 2012. Revenue-sharing is based on revenues from the Cascades, Kamloops, 100 Mile, and Okanagan-Shuswap Forest Districts. When the revenue sharing amount exceeds $35,000 the TteS receive revenue based on a percentage of revenues from traditional territory forest revenues and direct award revenues. (Government of BC, 2014a).

On April 10, 2013, five SNTC members, including the TteS (TteS and SIB are referred to in the agreement as the SSN) and the Province of BC endorsed a Reconciliation Framework Agreement (RFA). The RFA term is three years. On February 27, 2014 the RFA was amended to include the SIB. Through the RFA, the agreement intends to:

- increase consultation effectiveness;

- support Secwépemc economic participation in the natural resource sector;
- increase process certainty with respect to sustainable land and resource management;
- encourage a positive and respectful government to government relationship;
- support dialogue and increase the signatories' understanding of Secwépemc cultural heritage resources;
- identify and explore ways to mitigate adverse effects of sensitive Secwépemc sites; and
- provide a forum to discuss strategic topics such as mining, forestry, lands and other key topics.

The RFA provides, over the course of the agreement, up to $2,150,000 to support First Nation signatories to implement and participate in the processes described in the RFA (Government of BC, 2014a).

12.2.5.10 Treaty Status

The TteS are not participating in the BC Treaty process, nor is the SNTC (BC Treaty Commission, 2013).

12.2.5.11 Historic Land Use

As described (Section 12.2.4), the Secwépemc people, including TteS, relied extensively on the natural environment for sustenance. The TteS website notes there were three main sectors of the pre-contact economy: fishing; gathering roots and berries, and hunting (Tk'emlúps Website, 2014). The TteS website describes a traditional diet (pre-contact) that would have consisted of roughly one-third fish, one-third roots and berries, and one-third hunted meat.

Several TteS elders interviewed by Ignance (2014) noted historic use of the Jacko Lake area for hunting (including deer and moose). Tk'emlúps members also described the use of the Jacko Lake area for gathering medicines. Medicinal plants were gathered to treat arthritis and joint pain. Tk'emlúps members also gathered root plants, and plants for dyes, fibres and wood near Jacko Lake. Members did note difficulties in gaining access to the area as a result of fencing and historic mining activity in the 1980s (National Energy Board: Oral Presentation from Chief Ignace, 2014; Ignace, 2014). Mount Lolo (Etchum) was a traditional fasting area and sun dance grounds (SSN Affidavits, 2011).

In the 1950s, the development of city and energy infrastructure alienated TteS members from accessing key locations to harvest and participate in the traditional economy. For example, the rerouting of the TransCanada Highway through the south end of the Skeetchestn Reserve and the southern edge of the TteS reserve lands, the Westcoast transmission line, the BC Hydro transmission line from the Mica Dam, and the sale of lease lots on Tunkwa and Leighton Lakes. Moreover, the development of Logan Lake (a mining town) in 1972 in an undeveloped grassland meadow in the south-western corner of the SSN territory affected harvesting activity. The town now holds a population of approximately 2,000 people. These activities have reduced hunting and fishing opportunities within the SSN traditional territory.

Additional information on traditional land use for the Secwépemc can be found in Section 12.2.4.

12.2.5.12 Current Use of Lands and Resources for Traditional Purposes

Today, the TteS participate in both traditional and current activities in their territory. TteS members noted that a large portion of their diet consists of traditional foods. Hunting also remains important to the communities. Goose Lake and Peterson Creek were noted to be areas in which some members hunt moose annually (SIB, pers. comm., 2014; SSN, pers. comm., 2014). Other TteS members described hunting in the Project area and fishing in Jacko Lake dating back to the 1950s (Ignace, 2014). Within the larger TteS traditional territory, members also hunt and trap at the Tranquille watershed and Criss Creek area. Historically, hunting was practiced at Paul Lake, Andy Lake, Bonaparte Lake, Monte Lake, and Hihume Lake; however, some TteS members noted hunting is no longer feasible in these areas due to forestry and other activities (SSN Affidavits , 2011).

TteS members harvest fish. TteS stated during a meeting that members fish in Jacko Lake (TteS pers. comm., 2011). Recently, a fishwheel (a device that operates like a water-powered mill wheel to capture fish travelling upstream) was deployed to the main-stem of the Thompson River as a result of efforts from TteS and others. The SSN noted that the Thompson River steelhead and coho salmon are in serious jeopardy due to various factors (SSN Affidavits, 2011). The fishwheel is located across the river from the outflow of the Deadman River and operates five days per week (Tk'emlúps Website, 2014). The Tranquille watershed forms an important component of the fishing grounds for TteS members (SSN Affidavits, 2011). However, the Tranquille watershed is experiencing some habitat deterioration evident in the lower reaches. Some fishing also occurs in the Bonaparte areas.

Plant gathering also remain important for some members. Broken Top Mountain and the Heller Creek watershed are used to gather tea, blueberries, raspberries, soap berries, and small bush huckleberries (SSN Affidavit, 2011). A TteS elder noted the Heller Creek watershed is one of the last areas to access tea beds (which are very important to the culture and cannot be easily replaced). Clear cutting is believed to have negatively affected the availability of plant harvesting locations. Sage, cedar, juniper, and red willow are gathered around the Andy Lake area.

For the past 35 years, the TteS continues to host one of the largest Powwows in Western Canada each August. The Powwow celebrates Secwépemc culture and heritage, featuring storytelling, song, and dance in traditional regalia (Tk'emlúps Website, 2014). Approximately 20,000 people are expected to attend in 2015. Detailed information on current SSN land uses (including TteS) is provided in Section 12.2.4.

Changes in the environment caused by the Project have the potential to affect the TteS current use of lands and resources for traditional purposes. This includes potential changes in the ability to hunt, fish and gather in those locations surrounding Jacko Lake, Goose Lake, Peterson Creek, and the hunting blind. The effect on the environment would likely occur as a result of land disturbance from Project components (i.e. the Project footprint) or other changes in water quantity and water quality for areas downstream of the Project. Moreover, changes to air quality, visual aesthetics or noise also have the potential to produce changes in the environment surrounding harvesting locations. A detailed assessment of these changes is presented in Section 13 (Aboriginal Interests) and Section 14 (Other Potential Effects on Aboriginal Interests).

12.2.5.13 Economy

The TteS is a progressive community with an established record of economic successes. In 2008, the TteS was the recipient of the Community Economic Developer of the Year Award as a result of its continued development of facilities and infrastructure. By 2008, these ventures, along with other businesses, had generated 200 direct jobs and over $200 million in regional economic activity. As of 2014, the TteS were involved in a number of areas of enterprise, including:

- **Mining.** There is a range of mining activity within the TteS area. This includes New Gold Incorporated's (New Gold) New Afton Project for which the SSN signed a joint participation agreement. This includes an Economic and Community Development Agreement (ECDA) that is administered through the BC Ministry of Aboriginal Relations and Resources (BC MARR). The revenue from this agreement is focused on initiatives to enhance the social, cultural, and economic well-being of members. As of 2013, the last annual payment received was $323,000 (Tk'emlups te Secwépemc, 2013). New Gold and its New Afton mine have provided training and contracting opportunities for TteS and its members.
- **Agriculture**. The Spiyu7ullucw Ranch, (previously the Harper Ranch) is a 500-acre historical agricultural site with freehold land pastures. The ranch has irrigated alfalfa hay and a calf/cow operation. TteS purchased the Spiyu7ullucw Ranch (Spiyu7ullucw Ranch Corporation) in 1999. The purchase added 20,000 acres of fee simple land and Crown leases to the TteS land holdings. TteS intends to use the lands for resource development and for other economic opportunities (Tk'emlúps Website, 2014).
- **Tourism**. The location of TteS allows the First Nation to capitalize on a range of tourism opportunities. This includes the Secwépemc Museum, Heritage Park (cultural display, trails, archeological remains, and reconstructed pit houses), and the Kamloops Powwow.
- **Waste Management**. The TteS Water Treatment Plant provides potable water to the TteS Kamloops IR #1 (including Sun Rivers community) and the Mt. Paul Industrial Park.
- **Leasing.** As one of the largest industrial parks in Canada, the TteS has successfully developed and operated the Mt. Paul Industrial Park for the past 40 years. It currently provides commercial and industrial leases on 497 acres of designated lands. As of 2013, there were over 300 businesses located in the Mt. Paul Industrial Park. Future activity includes further developing the Park to maximize the space available for leasing (Tk'emlups te Secwépemc, 2013).
- **Real Estate.** The Sun Rivers Golf Resort Community is a real estate development providing an 18-hole championship golf course, walking trails, and 2,000 residential homes. It was the first geothermal community in Canada and was recognized as a finalist for the international award for Best Development. Future development opportunities include a 200-room resort hotel, a village centre, additional land parcels for townhomes, single family lots or for the adult community, and development of tourist accommodations.
- **Retail.** The TteS operates the Tk'emlúps Petro Canada gas station which has become one of the more successful businesses due to its contributions in revenue and employment. The Tk'emlúps Car Wash has seen significant increases to revenues in 2013/2014 due to rebranding and management strategies. It also employs community members.

- **Forestry**. The TteS owns and operates its own Forestry Development Corporation to generate better value added returns from TteS timber resources. Recent projects include management of a woodlot in the Kamloops forest district, management of a fire salvage license, and jointly managed small wood licenses (Tk'emlúps Website, 2014). The TteS also has a Forestry Contribution Revenue Sharing Agreement with the Province which in 2013 earned annual revenue of $606,000. It is used to enhance the social, cultural, and economic well-being of the community (Tk'emlups te Secwépemc, 2013).

The BC Hydro Aboriginal Business Directory identifies one business that has an affiliation with TteS. This directory does not provide an exhaustive list since business owners voluntarily add their business information to the BC Hydro Aboriginal Business Directory (BC Hydro, 2013).

12.2.5.14 Educational Characteristics

On-reserve educational characteristics for those identifying as Aboriginal and residing on the Kamloops IR #1 are presented in Table 12.2-11. As indicated, approximately 13% of those aged 15 years and over (75 Aboriginal residents) have a trades/apprenticeship or other non-university certificate while 30 people hold a university degree.

Table 12.2-11. Kamloops IR #1 Educational Characteristics

	2011		
Education Characteristics	Total	Male	Female
Highest Degree or Certificate			
Total Aboriginal identity population aged 15 years and over in private households by highest certificate, diploma or degree	565	305	260
No degree, certificate or diploma	175	115	55
High school diploma or equivalent only	160	65	95
Trades/apprenticeship or other non-university certificate	75	55	20
University certificate below bachelor level	45	20	30
University degree (bachelor level or higher)	30	10	20

Source: Statistics Canada (2011)

TteS operates the Sk'elep School of Excellence, which opened in 2003, on Kamloops IR #1. It is one of the largest First Nations schools in BC and provides services from kindergarten to grade seven. TteS has a vision of combining tradition with modern education. The school follows the BC Curriculum while including Secwépemc teachings (Kamloops Indian Band Department of Education, 2015).

12.2.5.15 Workforce and Income Characteristics

On-reserve workforce characteristics for the Aboriginal identity population (aged 15 years and over) residing on Kamloops IR #1 are presented in Table 12.2-12. As indicated, in 2011 the labour force participation rate (refers to the number of people who are either employed or are actively looking for work) was 63.2%, with an unemployment rate of 23.6%. The unemployment rate for females was lower

than the rate for males. Based on the data presented, construction, public administration and health care are key industries while trades, transport, and equipment operators are indicated as key occupations.

Table 12.2-12. Kamloops IR #1 Workforce Characteristics

Workforce Characteristics*	2011		
	Total	Male	Female
Labour Force Indicators			
Participation rate	63.2%	63.9%	63.5%
Employment rate	48.2%	45.9%	51.9%
Unemployment rate	23.6%	28.2%	18.2%
Industry			
Total labour force population aged 15 years and over having an Aboriginal identity in private households by industry	365	195	165
Agriculture, forestry, fishing and hunting	10	10	0
Mining, quarrying, and oil and gas extraction	10	0	0
Utilities	0	0	0
Construction	45	40	0
Manufacturing	0	0	0
Wholesale trade	0	0	0
Retail trade	30	10	20
Transportation and warehousing	15	10	0
Information and cultural industries	0	0	0
Finance and insurance	0	0	10
Real estate and rental and leasing	10	0	0
Professional, scientific and technical services	0	0	0
Management of companies and enterprises	0	0	0
Administrative and support, waste management and remediation services	25	20	0
Educational services	20	0	15
Health care and social assistance	30	10	20
Arts, entertainment and recreation	15	0	0
Accommodation and food services	20	15	10
Other services (except public administration)	20	10	0
Public administration	100	40	55
Occupation			
Total labour force population aged 15 years and over having an Aboriginal identity in private households by occupation	360	195	165
Management occupations	35	20	15
Business, finance and administration occupations	60	10	55
Natural and applied sciences and related occupations	10	10	0

Workforce Characteristics*	2011		
	Total	Male	Female
Health occupations	0	0	0
Occupations in education, law and social, community and government services	45	15	30
Occupations in art, culture, recreation and sport	10	0	0
Sales and service occupations	75	30	45
Trades, transport and equipment operators and related occupations	80	80	0
Natural resources, agriculture and related production occupations	25	20	0
Occupations in manufacturing and utilities	0	0	0

Source: Statistics Canada (2011)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations.*

Table 12.2-13 presents income characteristics for the Aboriginal identity population aged 15 years and over residing on Kamloops IR #1. As indicated, the average household income in 2011 for those residing on-reserve is $25,210.

Table 12.2-13. Kamloops IR#1 Income Characteristics

Income Characteristics*	2011		
	Total	Male	Female
Avg. total income (all persons with income ($))	$25,210	$26,895	$23,222
All persons with earnings (counts)	535	290	245

Source: Statistics Canada (2011)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.2.6 Skeetchestn Indian Band

12.2.6.1 History

The SIB is located approximately 50 km west of Kamloops in the Deadman's Creek valley. Prior to contact, the Skeetchestn people wintered in pit house villages on either side of Kamloops Lake and below the outlet of the lake. During the spring, summer, and fall Skeetchestn people would travel throughout the territory to gather resources at particular times and places (Skeetchestn Website, n.d.). Today, the primary Skeetchestn settlements are located in the Thompson River area, in the vicinity of Deadman's Creek.

12.2.6.2 Language

The SIB members speak Secwépemctsín (First People's Language Map of BC, 2013). The SIB are working to revive the knowledge and use of Secwépemctsín. Classes are offered weekly and were developed with the support of the Elders in the community (Skeetchestn Indian Band, 2013).

A 2014/2015 language assessment indicated that 12 members speak and understand the language fluently, while 42 members speak and understand the language to some degree. Twenty-seven members are currently learning the language. The majority of members (468) do not speak or understand the language (First Peoples Language Map of BC, n.d.).

12.2.6.3 Traditional Territory

The SIB and the TteS share the same territory as the Secwépemc Nation presented in Figure 12.1-1. Figure 12.2-1 presents the SSN traditional territory.

According to the SIB, their own traditional territory is over 709,000 hectares (ha) or 16,780 km^2. Within their territory, there are 18,221 ha of lakes and wetlands and 9,560 km of flowing water (Skeetchestn Indian Band, n.d.).

12.2.6.4 Reserves

The SIB has four IRs. The Skeetchestn reserve is both the largest and most populated reserve. The extent to which the other SIB IRs are populated was unknown at the time of writing (Table 12.2-14).

Table 12.2-14. Skeetchestn Indian Reserves Occupied by CIB

Name	Location	Size (hectares)
Hihium Lake 6a	Kamloops District on the north shore of Hihium Lake near the northeast corner of Indian Reserve #6	2.10
Hihium Lake 6b	Kamloops District on south shore of Hihium Lake, near the east end	2
Marshy Lake 1	N/A	62.70
Skeetchestn	Kamloops District, along Deadman Creek and the north bank of the Thompson River	7975.70
Total		**8,042.50**

Source: AANDC (2014)

12.2.6.5 Governance

The SIB are governed by a Chief and five Councillors and follow an *Indian Act* electoral system (every two years). The list of officials is presented in Table 12.2-15.

Table 12.2-15. Skeetchestn Indian Band Officials

Title	Surname	Given Name	Appointment Date	Expiry Date
Chief	Ignace	Ronald	01/07/2015	01/06/2018
Councillor	Deneault	Terry	01/07/2015	01/06/2018
Councillor	Draney	Darrell	01/07/2015	01/06/2018
Councillor	Gonzales	Marshall	01/07/2015	01/06/2018
Councillor	Jules	Gabriel	01/07/2015	01/06/2018

Source: AANDC (2014)

SIB staff include a Director of Operations, Assistant Director of Operations/Human Resources, Senior Construction Manager, Finance Manager, Natural Resources, School Principal, Education Manager, and a Social Development Manager (Skeetchestn Indian Band, 2013). The SIB is a member band of the SNTC (Shuswap Nation Tribal Council, 2013).

12.2.6.6 Social Setting

Population

There are 221 SIB members living on its most populated reserve, Skeetchestn. The population of the SIB is presented in Table 12.2-16. However, Chief Ignace estimated the SIB population at approximately 550 (National Energy Board: Oral Presentation from Chief Ignace, 2014). Figure 12.2-3 presents the IRs located within the Project vicinity, including SIB reserves.

Table 12.2-16. SIB Population

Residency	# of People
Registered males on own reserve	117
Registered females on own reserve	104
Registered males on other reserves	15
Registered females on other reserves	14
Registered males off reserve	135
Registered females off reserve	147
Total registered population	**532**

Source: AANDC (2014)

Marital Status

As indicated in Table 12.2-17, nearly half of the SIB members residing on-reserve are married, while 85 members were never married.

Mobility Characteristics

The mobility characteristics for those residing on-reserve are presented in Table 12.2-18. As indicated, the mobility in 2011 was relatively low, with most people residing at the same address one year and five years prior.

Table 12.2-17. SIB Members Marital Status

Marital Status*	2011		
	Total	Male	Female
Total Population 15 years and over	205	110	100
Married (incl common-law)	90	45	45
Separated	0	10	0
Divorced	15	10	10
Widowed	10	0	10
Never married	85	50	35

Source: AANDC (2014)

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

Table 12.2-18. SIB Members Mobility Characteristics

Mobility Characteristics*	2011		
	Total	Male	Female
Mobility Status - Place of residence 1 year ago			
Total population 1 year and over	245	125	120
Non-movers: Lived at the same address 1 year ago	230	115	115
Movers:			
Lived within the same prov./terr. 1 year ago but changed address within the same census division	15	10	10
Lived within the same prov./terr. 1 year ago but changed address from another census division	0	0	0
Lived in a different prov./terr./country 1 year ago	0	0	0
Mobility Status - Place of residence 5 years ago			
Total population 5 years and over	235	120	120
Non-movers: Lived at the same address 5 years ago	180	90	90
Movers:			
Lived within the same prov./terr. 5 years ago but changed address within the same census division	30	15	15
Lived within the same prov./terr. 5 years ago but changed address from another census division	25	15	15
Lived in a different prov./terr./country 5 years ago	0	0	0

Source: AANDC (2014)

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

Household and Dwelling Characteristics

Table 12.2-19 presents household and dwelling characteristics for those residing on-reserve. As indicated, the majority of members reside in one-family or couple family households. With respect to housing, there are 105 recorded dwellings on-reserve with 95 constructed over 10 years ago and 10 new dwellings constructed within the past 10 years.

Table 12.2-19. SIB Members Household and Dwelling Characteristics

Household and Dwelling Characteristics	2011
Household Type	
Total - All private households	105
One family households	55
Couple family households	40
Female lone parent households	10
Male lone parent households	0
Multi-family households	10
Non-family households	40
Median household income ($)	$38,008
Selected Occupied Private Dwelling Characteristics	
Total number of dwellings	105
Dwellings constructed more than 10 years ago	95
Dwellings constructed within the past 10 years	10
Dwellings requiring minor repairs only	30
Dwellings requiring major repairs	30

Source: AANDC (2014)

12.2.6.7 Health Services

As with the TteS, the Q'wemtsín Health Society provides similar services to the SIB (see Section 12.2.3.8). However, a Skeetchestn Health Clinic was established on-reserve in January 2014. It operates Tuesdays to Thursdays and is located on the Skeetchestn Indian Reserve. It operates in conjunction with the Q'wemtsín Health Society. In 2014, a total of 53 SIB members were served through the Q'wemtsín Health Society (Q'wemtsín Health Society, pers. comm., 2015).

12.2.6.8 Protective Services

Protective services are provided by the RCMP located in the Tk'emlúps rural detachment. See Section 12.2.3.9 for additional details.

12.2.6.9 Land Use Setting and Planning

Within their traditional territory, the SIB has established Cultural Resource Management Zones (CRMZ) within 100 metres (m) of all riparian features and water sources, ensuring water sources are protected for fish, animals, and the traditional plants that grow along embankments. The CRMZ

mandates that silviculture activity take place no closer than 50 m to a stream and road building maintains a minimum of 20 m setback from any fish-bearing streams. The mountain pine beetle typically requires a clear cut of the affected area, but the CRMZ dictates that only the diseased pine is to be harvested, leaving all other species (Skeetchestn Indian Band, 2013). The SIB are seeking a balanced approach to managing social, economic, and ecological factors in the Deadman's Creek watershed. The SIB recognizes that ecosystem stewardship of the Deadman River Valley should be based on a combination of both scientific knowledge and TK in order to protect and promote biodiversity in the watershed (Skeetchestn Indian Band, 2013).

Based on the federal *Species at Risk Act* the SIB has identified species at risk both within the Secwépemc territory and the Skeetchestn boundary (roughly reflecting the boundaries of the Skeetchestn Indian Reserve). Species at risk identified on the Skeetchestn reserve land include the flammulated owl, Lewis' woodpecker, long-billed curlew, and scarlet globe-mallow (Skeetchestn Indian Band, 2013).

While representatives of the SIB did not participate in the development of the KLRMP, SNTC representatives participated as guests or observers (Government of BC, 1995). Additional information about Secwépemc participation are found in Section 12.2.5.7 Land Use Setting and Planning.

There are over 280 km of BC Hydro power lines in Skeetchestn territory and 30 substations (Skeetchestn Indian Band, n.d.). There are over 290 km of pipelines and 140 storage tanks in Skeetchestn territory belonging to organizations such as Duke Energy and FortisBC. There is over 133 km of rail lines operated by Canadian Northern Railways and Canadian Pacific Railway. With respect to forestry activities, there are over 10,000 km of roads and over 7,800 km of logging and back roads within Skeetchestn territory.

12.2.6.10 Treaty Status

The SIB is not participating in the BC Treaty process, nor is the SNTC (BC Treaty Commission, 2013).

12.2.6.11 Historic Land Use

Detailed information on TLU for the SSN is provided in Section 12.2.5.7. This subsection provides a brief overview of TLU for the SIB.

Historic gathering activities provided important opportunities to harvest plants for technological purposes. This included basket making which were typically made of white pine roots and dyed with extract from fern root and alder bark. Plants were also used to make various teas such as trappers tea or for food purposes such as berry picking. Historically, berry picking would not start until an "overseer" (often the Chief) announces the berries are ready to be harvested.

Fishing was an important cultural activity, particularly in Tunkwa Lake (located north of Logan Lake), which was used for centuries by the Skeetchestn people. A variety of fishing tools were used including the wewtsk (a three prong spear), the Meni'p which is a harpoon, and the Up'ske7 which is a gaff hook (Skeetchestn Website, n.d.). Historically, salmon fishing would occur in the summer with large congregations at certain salmon fishing locations along the Thompson River. The men

were tasked with catching the fish while women were responsible for cleaning and preparing the fish. These fish resources were then dried and consumed in the winter (Skeetchestn Website, n.d.).

12.2.6.12 Current Use of Lands and Resources for Traditional Purposes

The Skeetchestn people remain involved in traditional activities in their territory, which include:

- **Fishing**. The Skeetchestn people recently asserted their fishing rights for Tunkwa Lake, which was used by the Skeetchestn people for centuries. Restrictions were placed on the SIB's use of this area due to over-fishing from area residents. In the spring, fishing typically occurs in Tunkwa and Leighton Lakes as well as the outflow of trout lakes during the spawning period. Salmon fishing usually occurs in the summer. Preparation for fishing is important to Skeetchestn people, with ceremonial activities such as drumming and prayer song completed first. This is a way to show respect for the river, fish, and rocks (Skeetchestn Website, n.d.). The Deadman Creek watershed is of critical importance to the SIB, given its proximity to the community (SSN Affidavits, 2011).
- **Hunting and trapping.** Game harvests make up a critical portion of the Skeetchestn diet. Estimates suggest that 25-100% of household meat supply may come from hunted game (Skeetchestn Indian Band, n.d.). Animals that are harvested (identified by Skeetchestn) include deer, moose, grouse, bear, rabbit, squirrels, muskrats, and beavers. A hunting camp is in place at Marshy Lake Camp for Skeetchestn people. In correspondence with SIB, it was noted that there is a badger den within the Project area; the American badger is of cultural importance to SIB (SIB pers. comm., 2013). Goose Lake and Peterson Creek were noted to be areas in which some members hunt moose annually (SIB, pers. comm., 2014; SSN, pers. comm., 2014). The Criss Creek and Heller Creek areas were noted to be of importance for hunting, although these areas are not within the vicinity of the Project.
- **Plant harvesting.** According to SIB, there are 14 berries harvested by members today. These include soapberries, Saskatoon berries, chokecherries, strawberries, raspberries, blueberries, huckleberries, gooseberries, blackberries, red currents, elderberry, black currents, high bush cranberries, and high/low bush blueberries. Vegetables harvested include wild onion, potato, wild asparagus, cactus, celery, wild rhubarb, mushrooms (white and pine), cows parsnip, wild pea and carrots. Tea and root plants gathered include Labrador tea, Hudson Bay tea, rose hip tea, mint tea, tiger lily bulbs, balsam bulbs, and bear roots. There are at least 32 types of medicinal plants gathered by SIB members including kinnickinnick, snowberries, cactus, spruce, juniper berries, pineapple weed, bitterroot, yarrow, prince's pine, showy aster, Oregon grape, and grouse berry. The SIB estimated that approximately 60-70 different species of plants including a number of root crops are collected and utilized extensively by the community. These activities were noted to occur within the traditional territory. The Criss Creek and Heller Creek areas were also noted to be of importance for gathering as is the Wood Creek, Heller Creek and Burns Lake areas (SSN Affidavits, 2011).

Some SIB members noted that forestry activity has severely affected their ability to participate in the traditional economy as a result of clearcutting, habitat fragmentation, changes in biodiversity, and increased access from forestry roads (SSN Affidavits, 2011). It was noted that forestry activity has caused a substantial decline in the moose population within the SIB traditional territory (SSN

Affidavits, 2011). In addition to traditional activities, the Skeetchestn people engage in annual rodeos, powwows, and other social and sporting events. The SIB also deliver healing gatherings and living skills workshops which promotes social and spiritual well-being (Shuswap Nation , 2014).

Changes in the environment caused by the Project have the potential to affect the SIB current use of lands and resources for traditional purposes. This includes potential changes in the ability to hunt, fish and gather in those locations surrounding Jacko Lake, Goose Lake, Peterson Creek, and the hunting blind. The effect on the environment would likely occur as a result of land disturbance from Project components (i.e. the Project footprint) or other changes in water quantity and water quality for areas downstream of the Project. Moreover, changes to air quality, visual aesthetics or noise also have the potential to produce changes in the environment surrounding harvesting locations. A detailed assessment of these changes is presented in Section 13 (Aboriginal Interests) and Section 14 (Other Potential Effects on Aboriginal Interests).

12.2.6.13 Economy

The SIB own and operate the Big Sky Station, a Husky Gas station that includes a full gas bar (gasoline, diesel, and propane), convenience store, a gravel pit, gift shop, restaurant, catering, mobile home park, and tourist information. In addition, the SIB has established a Wildhorse Town movie set (Skeetchestn Indian Band, 2013).

There is a range of mining activity within the Skeetchestn area and the Skeetchestn have partnerships and agreements as a result (Skeetchestn Website, n.d.). This includes the ECDA in relation to the New Afton mine administered through the BC MARR. The revenue from this agreement is focused on initiatives to enhance the social, cultural, and economic well-being of members. In addition, the Skeetchestn, as part of the SSN, signed a joint participation agreement for the New Afton mine (Tk'emlúps Website, 2014). New Gold and the New Afton mine have provided training and contracting opportunities for Skeetchestn and its members.

In March and April 2012, the SIB and the Province of BC endorsed a FCRSA. The purpose of the agreement is to provide First Nations communities with economic benefits from the timber harvesting activities in their traditional territory. Under the FCRSA SIB received $169,951 following March 31, 2012. Revenue-sharing was to be based on revenues from the Cascades, Kamloops, 100 Mile, and Okanagan-Shuswap Forest Districts.

On April 10, 2013, five SNTC members, including the SIB (TteS and SIB are referred to in the agreement as the SSN) and the Province of BC endorsed an RFA. The RFA term is three years. See Section 12.2.5.7 Land Use Setting and Planning for more information.

12.2.6.14 Educational Characteristics

On-reserve educational characteristics for the SIB are presented in Table 12.2-20. As indicated, approximately one-third of those aged 15 years and over (60 members) have a trades/apprenticeship or other non-university certificate while 10 members hold a university certificate.

Table 12.2-20. SIB On-reserve Educational Characteristics

Education Characteristics*	2011		
	Total	Male	Female
Highest Degree or Certificate			
Population 15 years and over	205	105	100
No degree, certificate or diploma	80	45	35
High school diploma or equivalent only	35	20	20
Trades/apprenticeship or other non-university certificate	60	40	30
University certificate below bachelor level	10	0	10
University degree (bachelor level or higher)	0	0	10

Source: (AANDC, 2014)
** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

The Skeetchestn Community School is located on the Skeetchestn reserve and teaches kindergarten to grade 12 (Skeetchestn Indian Band, 2013).

12.2.6.15 Workforce and Income Characteristics

On-reserve workforce characteristics for the SIB are presented in Table 12.2-21. As indicated, in 2011 the labour force participation rate (refers to the number of people who are either employed or are actively looking for work) is 61.0% for those living on-reserve, with an unemployment rate of 16.0%. Based on the data presented, management and trades are key occupations for members living on-reserve.

Table 12.2-21. SIB On-reserve Workforce Characteristics

Workforce Characteristics*	2011		
	Total	Male	Female
Labour Force Indicators			
Participation rate	61.0%	66.7%	55.0%
Employment rate	51.2%	52.4%	50.0%
Unemployment rate	16.0%	21.4%	18.2%
Industry			
Total-Industry	205	105	100
Agriculture, resource based	25	20	0
Manufacturing, construction	10	10	0
Wholesale, retail	10	0	0
Finance, real estate	0	0	0
Health, education	15	0	10
Business services	10	0	0
Transportation, warehousing	10	0	0
Other services	70	40	30

Workforce Characteristics*	2011		
	Total	Male	Female
Occupation			
Population 15 years and over	205	105	100
Management	30	10	25
Natural sciences, health	15	15	0
Social sciences, gov't	15	0	15
Sales and service	20	10	10
Trades and related	30	30	0
Primary industry	20	20	0
Other Occupations	0	0	0

Source: AANDC (2014)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations.*

Table 12.2-22 presents income characteristics for those members residing on-reserve. As indicated, the average household income in 2011 for those residing on-reserve is $23,857. The majority of this income was typically through earnings income (82%).

Table 12.2-22. SIB On-reserve Income Characteristics

Income Characteristics*	2011		
	Total	Male	Female
Persons 15 years of age and over with income	190	95	90
Avg. total income (all persons with income ($))	$23,857	$25,615	$21,988
All persons with earnings (counts)	135	75	60
Avg. earnings (all persons with earnings ($))	$26,848	$28,786	$24,440
Composition of total income (100%)	97	105	100
Earnings - % of income	82	84	74
Government transfer - % of income	17	11	25
Other money - % of income	3	2	3

Source: AANDC (2014)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.2.7 Whispering Pines / Clinton Indian Band

12.2.7.1 History

The WP/CIB, formerly known as the Clinton Indian Band, is part of the Secwépemc Nation (Shuswap Nation Tribal Council, 2014b). Originally, the WP/CIB was situated near Clinton, BC. The population, once at approximately 10,000 members, was reduced significantly due to the small pox

epidemic in the late 1850s (during the Gold Rush). The Whispering Pines is known as Pellt'iq't People, meaning "people of the white earth" (Shuswap Nation Tribal Council, 2014b). It is believed that the Pellt'iq't people have animal powers inherited from the Creator (Whispering Pines Indian Band Website, 2014). The main animal powers (commemorated in the logo of the Whispering Pines people) include: the bear (strength and family), the wolf (alertness and great instinct), the eagle (strength and freedom), and the fish (power to heal, alertness, family and memory).

12.2.7.2 Language

The Pellt'iq't people speak Secwépemctsín. According to a language needs assessment conducted with the WP/CIB in 2014, there are six members that currently speak and understand the language fluently, while 14 can understand or speak the language to some degree; the majority of members (130) do not speak or understand the language.

12.2.7.3 Traditional Territory

As described, the WP/CIB are Secwépemc peoples, sharing a traditional territory that ranges from the Chilcotin and Cariboo Plateaus through to Kamloops (see Figure 12.1-1 for more information).

12.2.7.4 Reserves

There are three IRs under the WP/CIB (Table 12.2-23). Figure 12.2-3 presents the First Nation IRs located within the Project vicinity, including the WP/CIB reserves. Kelly Creek IR #3 is located on the left bank of the Fraser River near Clinton, BC while the Whispering Pines IR #4 is located on the west side of the North Thompson River. The Whispering Pines IR #4 is the main reserve and is most populated. It is accessible by road and air (Whispering Pines Indian Band Website, 2014). The infrastructure includes a piped-in water supply, two community wells, and five private wells. There is a septic tank for sewage disposal. In addition, there is a band administration building and a sports and recreation centre. The extent to which other WP/CIB IRs are populated was unknown at the time of writing.

Table 12.2-23. WP/CIB Indian Reserves

Name	Location	Size (hectares)
Clinton #1	Located northwest of the town of Clinton	68.90
Kelly Creek #3	Lillooet District, on left bank of the Fraser River 1 mile north of mouth of Kelly Creek.	1.40
Whispering Pines #4	West side of the North Thompson River, North of Heffley Creek,	494.90
Total		**565.20**

Source: AANDC (2014)

12.2.7.5 Governance

The WP/CIB is governed by an *Indian Act* Electoral System. At the time of writing, there was an appointed Chief and two councillors, as indicated in Table 12.2-24.

Table 12.2-24. Whispering Pines/ Clinton Indian Band Officials

Title	Surname	Given Name	Appointment Date	Expiry Date
Chief	LeBourdais	Michael	02/05/2014	02/05/2016
Councillor	Bones	Jack Alexander	02/05/2014	02/05/2016
Councillor	LeBourdais	Edward	02/05/2014	02/05/2016

Source: AANDC (2014)

Chief Michael LeBourdais manages operations, finance, and facilitation with the goal of achieving self-sufficiency through entrepreneurship and economic development. Chief LeBourdais is a member of various committees, including:

- The Secwépemc Child and Family Services Society;
- The Secwépemc Cultural Education Society;
- The First Nations Chiefs Health Committee;
- The Q'wemtsín Health Society;
- Shuswap Training and Employment Program;
- Commanding Officers Aboriginal Advisory Committee; and
- The Secwépemc Community Justice Program. (Shuswap Nation Tribal Council, 2014b)

12.2.7.6 Social Setting

Population

According to AANDC, WP/CIB has a registered population of 153 members, as shown in Table 12.2-25. As of October 2014, approximately 35% of members reside on-reserve.

Table 12.2-25. WP/CIB Population

Residency	# of People
Registered males on own reserve	32
Registered females on own reserve	21
Registered males on other reserves	1
Registered females on other reserves	5
Registered males off reserve	52
Registered females off reserve	42
Total Registered Population	**153**

Source: AANDC (2014)

Marital Status

According to AANDC, the marital status characteristics for those living on-reserve include 20 members in 2011 (Table 12.2-26).

Table 12.2-26. WP/CIB Marital Status Characteristics

	2011			2006		
Marital Status*	Total	Male	Female	Total	Male	Female
Total Population 15 years and over	**45**	25	20	**45**	20	25
Married (incl common-law)	**20**	0	10	**15**	10	10
Separated	**0**	0	0	**0**	0	0
Divorced	**0**	0	10	**10**	0	0
Widowed	**0**	0	0	**0**	0	0
Never married	**20**	15	0	**20**	15	10

Source: AANDC (2014)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

Mobility Characteristics

The mobility status characteristics for those living on-reserve are relatively low as of 2011, with the majority of residents not moving addresses (Table 12.2-27).

Table 12.2-27. WP/CIB Mobility Status

	2011			2006		
Mobility Status - Place of Residence 1 year ago	Total	Male	Female	Total	Male	Female
Total population 1 year and over	60	35	25	60	35	30
Non-movers: Lived at the same address 1 year ago	55	30	25	60	35	25
Movers:						
Lived within the same prov./terr. 1 year ago but changed address within the same census division	0	0	0	0	0	0
Lived within the same prov./terr. 1 year ago but changed address from another census division	0	0	0	0	0	0
Lived in a different prov./terr./country 1 year ago	0	0	0	0	0	0
Mobility Status - Place of residence 5 years ago						
Total population 5 years and over	55	35	20	55	30	25
Non-movers: Lived at the same address 5 years ago	40	25	15	50	25	25
Movers:						
Lived within the same prov./terr. 5 years ago but changed address within the same census division	10	10	0	0	0	0
Lived within the same prov./terr. 5 years ago but changed address from another census division	0	0	0	0	0	0
Lived in a different prov./terr./country 5 years ago	0	0	0	0	0	0

Source: AANDC (2014)

Household and Dwelling Characteristics

According to AANDC (2014), the household and dwelling characteristics for those living on-reserve indicate that the existing housing infrastructure was generally constructed over 10 years ago and may require repairs (Table 12.2-28).

Table 12.2-28. WP/CIB Household and Dwelling Characteristics

Household Type	2011	2006
Total - All private households	20	20
One family households	10	10
Couple family households	10	0
Female lone parent households	0	10
Male lone parent households	0	0
Multi-family households	0	0
Non-family households	0	10
Selected Occupied Private Dwelling Characteristics		
Total number of Dwellings	20	20
Dwellings constructed more than 10 years ago	20	20
Dwellings constructed within the past 10 years	0	0
Dwellings requiring minor repairs only	10	15
Dwellings requiring major repairs	10	10

Source: AANDC (2014)

12.2.7.7 Health Services

The Q'wemtsín Health Society, located on Kamloops IR#1, also provides services to the WP/CIB. Health care staff also visit the WP/CIB Indian Reserves every month. In 2014, a total of 10 WP/CIB members were served by the Q'wemtsín Health Society. For additional detail on the Q'wemtsín Health Society, see Section 12.2.5.7.

12.2.7.8 Protective Services

Protective services are provided by the RCMP located in the Tk'emlúps rural detachment. See Section 12.2.3.9 for additional details.

12.2.7.9 Land Use Setting and Planning

The land use designations on the WP/CIB include residential, industrial, commercial, and natural resource areas. The WP/CIB operates a Sports and Recreation Center on 80 ha of land to host and promote events such as rodeos, moto-cross (a type of off-road motorcycle racing held on enclosed circuits), private events, and conventions.

While representatives of the WP/CIB did not participate in the development of the KLRMP, SNTC representatives participated as guests or observers (Government of BC, 1995). Additional

information about Secwépemc participation is found in Section 12.2.5.7 Land Use Setting and Planning.

While WP/CIB had an economic development agreement with the Province of BC, none of the publically available agreements are currently valid.

12.2.7.10 Treaty Status

WP/CIB is not participating in the treaty process, nor is the SNTC (BC Treaty Commission, 2013).

12.2.7.11 Historic Land Use

At the time of writing, no information on historic land use for the WP/CIB was available; however, it is expected that WP/CIB would have similar historic land use to that of the overall Secwépemc people presented in Section 12.2.4.

12.2.7.12 Current Use of Lands and Resources for Traditional Purposes

A Traditional Land and Resource Use Technical Report prepared for the Trans Mountain Expansion Project by Terra Environmental Consultants identifies some current land uses for the WP/CIB (Tera Environmental Consultants, 2013). Although the TK data provided is specific to sites surrounding the proposed multi-use pipeline, it can be used to infer some land uses that may also occur in areas surrounding the Project.

Plant gathering appears to be an important activity for members who harvest chokecherries, Saskatoon berries, rosehips, hawthorn berries, soapberries, raspberries, wild strawberries, thimbleberries, 'black caps' (blackberries), bunchberries, skunk berries, and blueberries. Often the women gather berries and preserve them, particularly the more popular food plants such as blueberries, raspberries, and strawberries. In the spring, members harvest balsam bark and devil's club.

Members continue to participate in hunting and trapping activities and harvest deer (in particular mule deer), moose, and elk. The areas surrounding Whispering Pines IR #4 support a range of wildlife including cougar bear, coyote, lynx, bobcat, fox and badger, as well as birds including the bald and golden eagle, turkey vulture, hawk, and blue heron (Tera Environmental Consultants, 2013).

The extent to which harvesting around the Project vicinity occurs was unknown at the time of writing. Fishing continues today for the WP/CIB. The Thompson River (particularly the North Thompson River) is an important area for boating activity and also a location to catch rainbow trout, Dolly Varden, steelhead, bullhead, and sturgeon (Tera Environmental Consultants, 2013). Table 12.2-29 summarizes species, harvesting locations, and the extent of use for the WP/CIB.

Consultation is ongoing between KAM and WP/CIB, and may yield additional information on the anticipated future use of lands and resources that may potentially be affected by the Project. Should WP/CIB provide additional information to KAM, it will be considered and incorporated in the effects assessment during the Application/EIS review phase.

Table 12.2-29. Summary of Species, Harvesting Locations, and the Extent of use for the WP/CIB

Species	Harvesting Locations	Extent of Use
All Salmon (in particular coho, steelhead) Rainbow trout Bullhead (secondary sources) Sturgeon (secondary sources) Dolly Varden (secondary sources)	North Thompson River	Fish harvesting likely occurs in the Thompson River (although the river was noted to be dangerous for some types of salmon fishing).
Elk Deer (especially mule deer) Moose	Whispering Pines Indian Reserve #4 (WP/CIB website) Areas west of the Thompson River (Tera Environmental Consultants, 2013)	Elk, deer and moose harvesting likely occur near IR#4. Some deer/moose harvesting may occur in North Thompson/ Deadman Creek and Tranquille watershed areas although the extent is unknown at the time of writing.
Bear Cougar Coyote Lynx Bobcats Fox Badger Bald and golden eagle Turkey vulture Hawk Blue heron	Area surrounding Whispering Pines Indian Reserve #4 Areas west of the Thompson River (Tera Environmental Consultants, 2013)	Animal harvesting likely still occurs near IR#4 and the area west of Thompson River. Vulture, eagles, hawks, heron may be harvested for ceremonial purposes.
Berries • Chokecherries • Saskatoon berries • Rosehips • Hawthorn berries • Soapberries • Raspberries • Wild strawberries • Thimbleberries • 'Black caps' (blackberries) Bunchberries • Skunk berries • Blueberries	Area surrounding Whispering Pines Indian Reserve #4 (only identified site to date) Areas west of the Thompson River	Likely that plant harvesting still occurs near IR#4 and the area west of Thompson River.
Other Plant foods • Balsam Bark • Devils Club	Area surrounding Whispering Pines Indian Reserve #4 (only identified site to date) Areas west of the Thompson River	Likely that plant harvesting still occurs near IR#4 and the area west of Thompson River.

See Section 12.2.5.7 for more traditional use information.

Based on the data available at the time of writing, it is unlikely that changes in the environment caused by the Project will affect the WP/CIB current use of lands and resources for traditional purposes for those harvesting areas identified (Whispering Pines Indian Reserve #4 and areas west of the Thompson River). However, a detailed assessment of the changes that could occur is presented in Section 13 (Aboriginal Interests) and Section 14 (Other Potential Effects on Aboriginal Interests).

12.2.7.13 Economy

The economy for the WP/CIB includes tourism, logging, and energy as well as other ventures. These are described below:

- **Tourism.** Tourism is a growing industry for the WP/CIB. Eco-tourism is strongly supported by the community to promote knowledge about First Nations culture (TLU, etc.) and the region. As part of the tourism initiative, the WP/CIB owns and operates the Sports and Recreation Center, which includes approximately 80 ha of land. Located approximately 33 km north of Kamloops, the Sports and Recreation Center primarily functions as an entertainment facility with different events such as:
  - rodeos: rodeo arena (120 m x160 m) with full concession facilities and a playground for children;
  - moto-cross: full track in partnership with Kamloops Off Road Racing BC;
  - campground: includes full washroom/shower facilities; and
  - other private activities: such as private parties. (Whispering Pines Indian Band Website, 2014).
- The Band is planning on further developing the Sports and Recreation Center to include a concession area, a larger playground for children, a multi-purpose area, and Tipi Village (Whispering Pines Indian Band Website, 2014).
- **Agriculture.** Some economic activities for those living on-reserve include cattle and hay ranching (Whispering Pines Indian Band Website, 2014). In a letter to KAM in May, 2014, the Chief of the WP/CIB also noted that cattle and hay ranching are important activities for the First Nation (WP/CIB, pers. comm., 2014).
- **Wildfire Protection.** WP/CIB is involved in the operation of Wildland Protection Services, a company which utilizes fire hazard management skills, professional forestry practices, training and safety procedures, to provide clients with wildfire services including hazard assessments, hazard abatement services, wildfire protection training and education services (Whispering Pines Indian Band Website, 2014).

The BC Hydro Aboriginal Business Directory identifies one business that has an affiliation with WP/CIB. There are a number of proposed energy and mining projects near the WP/CIB, for which the WP/CIB have signed various agreements including an Advanced Consultation and Capacity Agreement (signed in 2014) with Constantia Resources (Maggie Exploration Project) and the Trans-Mountain Pipeline, (proposed pipeline to transport petroleum products from the Edmonton area to a terminal in Burnaby).

12.2.7.14 Education Characteristics

On-reserve educational characteristics for the WP/CIB are presented in Table 12.2-30. As indicated, roughly half of those aged 15 years and over (20 members) have a trades/apprenticeship or other non-university certificate.

Table 12.2-30. WP/CIB On-reserve Education Characteristics

	2011			2006		
Highest Degree or Certificate*	Total	Male	Female	Total	Male	Female
Population 15 years and over	45	25	15	45	20	20
No degree, certificate or diploma	10	10	0	10	10	0
High school diploma or equivalent only	10	0	0	10	10	10
Trades/apprenticeship or other non-university certificate	20	10	15	20	10	10
University certificate below bachelor level	0	0	0	0	0	10
University degree (bachelor level or higher)	0	0	0	10	0	0

Source: AANDC (2014)
**When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.2.7.15 Workforce Characteristics

On-reserve workforce characteristics for the WP/CIB are presented in Table 12.2-31. As indicated, in 2011 the labour force participation rate (refers to the number of people who are either employed or are actively looking for work) was 77.8% for those living on-reserve, with an unemployment rate of 28.6%. Based on the data presented, trades, management, and primary industry are key occupations for members living on-reserve. Income characteristics for the WP/CIB were unavailable at the time of writing.

Table 12.2-31. WP/CIB On-reserve Workforce Characteristics

	2011			2006		
Labour Force Indicators	Total	Male	Female	Total	Male	Female
Participation rate	77.8%	80.0	75.0	50.0%	75.0	60.0
Employment rate	66.7%	60.0	75.0	50.0%	50.0	40.0
Unemployment rate	28.6%	50.0	0.0	40.0%	0.0	0.0
Industry						
Total-Industry	45	25	20	45	25	25
Agriculture, resource based	0	0	0	0	0	0
Manufacturing, construction	0	0	0	10	10	0
Wholesale, retail	0	0	0	0	0	0
Finance, real estate	0	0	0	0	0	0
Health, education	0	0	0	0	0	0

Labour Force Indicators	2011			2006		
	Total	Male	Female	Total	Male	Female
Business services	10	0	10	10	0	10
Transportation, warehousing	0	0	0	0	0	0
Other services	15	15	0	15	0	0
Occupation						
Population 15 years and over	45	25	20	45	25	25
Management	10	0	10	N/A	N/A	N/A
Natural sciences, health	0	0	0	N/A	N/A	N/A
Social sciences, gov't	0	0	0	N/A	N/A	N/A
Sales and service	0	0	0	N/A	N/A	N/A
Trades and related	10	0	0	N/A	N/A	N/A
Primary industry	10	0	0	N/A	N/A	N/A
Other Occupations	0	0	0	N/A	N/A	N/A

Source: AANDC (2014)

12.3 THE NLAKA'PAMUX NATION

12.3.1 History

The term 'Nlaka'pamux' means "People of the Canyon," which describes the narrow chasms where the Fraser and Thompson Rivers meet. The Nlaka'pamux peoples reside in south-central BC and lived in communities along the Thompson and Fraser Rivers. The Nlaka'pamux peoples spoke a common language, Nlaka'pamuxtsn (Wickwire, 1994). The traditional territory of the Nlaka'pamux extends into the United States of America. Fourteen pictographs have been found in grottos in the Stein Valley indicating the Nlaka'pamux peoples occupied this area while other evidence supports occupation of the area surrounding Teaspoon Creek and the Skagit Valley (Stein Valley Nlaka'pamux Provincial Park, 2013).

Nlaka'pamux people were known by other names including Thompson, Couteau, or Knife Indians (Prince, 2001) (Figure 12.1-2). The Nlaka'pamux people are divided into Upper and Lower groups; currently there are seventeen Nlaka'pamux bands (Government of BC, 2014c). Nlaka'pamux territory can also be divided into two areas; the upper area has dry grasslands along river valleys with higher elevations covered in fir and aspen and the lower area has a more coastal climate with forests of cedar and fir (Wyatt 1998). Nlaka'pamux villages were located along the Fraser, Nicola, and Thompson rivers. One of the most important fishing sites and trading areas was near Spences Bridge at the confluence of the Nicola and Thompson rivers (Prince, 2001).

The Nlaka'pamux Nation has a history of farming. They constructed small irrigation ditches to bring water from the creeks that fed the Fraser River to their bean and potato crops. The ditches were found in small portions of the grasslands and had a baked clay surface that was impenetrable to water (Blackstock & McAllister, 2004). This suggests grasslands were used for more than herb and medicinal plant gathering, and in fact supported some degree of agricultural activity.

The Nlaka'pamux likely met European traders in the early 1800s. With the arrival of ranchers in the area, the Nlaka'pamux way of life changed dramatically; the once plentiful grasslands became over-grazed by rancher's cattle and horses and water sources were destroyed. First Nations were required to apply for water licences and competition with local ranchers restricted Nlaka'pamux access to important grasslands. The deer and elk that the Nlaka'pamux would hunt in the grasslands were replaced by privately owned cattle (Blackstock & McAllister, 2004). Given that the Nlaka'pamux could no longer use the grasslands as a food source, they began to work for the area's newest residents, participating in industrial agriculture and in the fur trade economy, using salmon as currency (Prince, 2003). The following subsections present secondary information on traditional resource use by the Nlaka'pamux, including fishing, hunting, and plant harvesting.

12.3.2 Nlaka'Pamux Nation Traditional Knowledge and Traditional Land Use

The following section describes traditional knowledge and traditional land use for the Nlaka'Pamux Nation. It is largely based on secondary data sources.

12.3.2.1 Fishing

Fishing has been key to the Nlaka'pamux economic, cultural, and social lifestyles; the Nlaka'pamux have a rich history with respect to fish harvesting, particularly salmon. The fisherman would stand up on a platform with a pole poised, ready to be thrown at salmon below the water's surface. Upon clubbing the fish on the head, the fisherman would then throw the salmon to family members waiting on the bank. The fish would then be gutted and prepared for storage (Prince, 2003).

The Nlaka'pamux people also used poles and nets (such as a bag or dip net) to catch fish. This type of net is attached to a hoop at the end of a pole and the fisherman dips it into the water to catch fish (Teit, 1898). Other ethnographers noted the Nlaka'pamux used a "variety of hooks, gorges, nets and traps" (Wyatt, 1998). Fishing was conducted both during the day and by torchlight.

Salmon was noted to be an important source of protein during winter; the principle salmon harvested included Chinook, coho, and sockeye (Teit, 1898). Nlaka'pamux had numerous fishing sites along the Fraser River as well as other waterbodies such as the Stein River and Stein Lake area, which contain Dolly Varden, char, Rocky Mountain whitefish, rainbow trout, as well as steelhead trout, coho, Chinook, and pink salmon. The *Indian Act*, first passed in 1876, marked the beginning of legislated control over traditional practices including fishing and other activities.

Fishing activity on the Plateau was severely hampered with the arrival of the 25,000 to 30,000 miners in the late 1850s (Gold Rush). This activity disrupted delicate spawning habitat. Commercial fishing operations also eventually began on the Fraser River which further hampered Aboriginal fishing activity. Laws were implemented to inhibit the traditional fishing practices of the Nlaka'pamux and First Nations were required to have permits and licences to engage in fishing.

12.3.2.2 Hunting

The grasslands were important to the Nlaka'pamux because they were abundant with hunted food sources such as elk and sharp-tailed grouse. The Nlaka'pamux managed the grasslands using fire to

limit sagebrush and encourage the growth of herbs. Grasses attracted ungulates to the area looking for food (Blackstock & McAllister, 2004). Nlaka'pamux peoples harvested many animals, including deer, elk, beaver, bear, duck, goose and squirrel. These animals were used for their meat, skin and bones (Highland Valley Copper, 2007).

Deer antler was used for digging-sticks (Turner, 1947). Scrapers made of caribou antler, deer ulna, or black bear shoulder blade were also used to harvest plant parts, particularly tree cambium (Turner, 1947).

12.3.2.3 Plant Harvesting

Nlaka'pamux peoples harvested a variety of roots and plants. These are described in Table 12.3-1.

Table 12.3-1. Nlaka'pamux Plant Harvesting

Name of Plant	Season	Use
Nodding onions (*Allium cernuum*)	Harvested in Spring-often dug in April and early May	Popular food, could be eaten raw or bundled together and steam cooked in underground pits overnight.
arrow-leaved balsamroot (*Balsamorhiza sagittata*)	March to April	Peeled, steamed and eaten cooked or dried, often regarded as a desert.
Sprouts of chocolate-tips (*Lomatium dissectum*)	Early spring, especially April	Young shoots and roots consumed from the young plants (often as a starvation food).
Greens such as water parsnip stems (*Sium siave*) and "Indian celery" Cow Parsnip (*Heracleum lanatum*), also known as "Indian rhubarb" and "wild rhubarb	Spring, especially April and May	Peeled and eaten raw, or boiled/steamed/roasted.
Yellowbell bulbs (*Fritillaria pudica*)	Early spring	Eaten raw, boiled or steamed.
Tiger lily bulbs (*Lilium columbianum*) and	Late May and June	Boiled or steamed, often likened to a condiment or flavouring such as pepper or garlic.
Varieties of Saskatoon berries (*Amelanchier alnifolia*)	Early June to August	Very important and extensively used, typically dried. Dried Saskatoon berries were a common trade item.
Mariposa lily (*Calochortus macrocarpus*) is also known as desert lily, lavender lily, sego lily, sagebrush mariposa, "wild gladiola," "sweet onion."	Dug in April to early June before the plants flowered	Eaten raw or cooked with other foods as a flavouring.
Wild rose hips (*Rosa* spp.)	Fall to mid-winter	High in vitamin C, used to make teas, sometimes the leaves were smoked as tobacco.
Kinnickinick berries (*Arctostaphylos uva-ursi*)	Late summer to winter	Berries are eaten raw or cooked (sometimes fried in salmon oil or bear lard), leaves were used for smoking as a tobacco). The leaves were also used to make a tea for medicinal purposes.

Name of Plant	Season	Use
Wild Carrot" (*Lomatium macrocarpum*) also known as “Indian carrot", "Indian sweet potato", and desert parsley were harvested for their long taproots Only the non-flowering or female plants were dug. The male plants with flowers or fruits were said to be too bitter.	Spring	Cooked and consumed as a food source.
Cat-tail (*Typha latifolia*), also known as bulrush were harvested for their starchy rhizomes, leaf blades, and young flower spikes.	Dug in early spring	Said to be one of the most delicious springtime foods.
Cambium of several other trees, including lodgepole pine, black pine, ponderosa pine (Pinus ponderosa), trembling aspen (Populus tremuloides), and cottonwood (P. trichocarpa),	Late May or June about the time when the new needles are growing and the pollen cones are ripe	Provided Nlaka’pamux peoples vitamins and minerals.
Cattail (Typha spp.), tule (Scirpus spp.)	Early spring	They were used by the Nlaka’pamux peoples to make baskets, mats, sandals, rope, and building construction. Cattail also consumed as a food sources.
Black tree lichen (A. fremontii),	Any time of the year, although June was preferable for some groups	As an emergency food, had to be soaked and steam-cooked before it was fit to eat. It was commonly layered with wild onions in the steaming pit to add flavouring. Could be dried for later consumption.
Trees such as paper birch (Betula papyrifera) found in the wetter areas of the grasslands	Spring	Provided materials for the construction of baskets.
Rocky Mountain Juniper and common Juniper (Juniperus scopulorum sarg and Juniperus communis)	N/A	Used as fumigants, deodorizers, and cleaners, especially in connection with sickness Used to make tea for medicine (for colds, tuberculosis, or heart trouble).
Douglas-fir seeds, although small and pitchy, were	N/A	Occasionally eaten. The young twigs and needles were used to make a tea, which has tonic properties for the treatment of colds.
Soapberry (*Shepherdia cnadensis*) (Turner, Food Plants of Interior First Peoples, 1997)		Consumed as a dessert or sweet. Often made into ‘Indian-ice-cream’ by adding water and whipping the bitter-tasting berries into a frothy mixture resembling beaten egg-white. These were sweetened with Saskatoon (*Amelanchier alnifolia*) and other berries.

Source: Blackstock & McAllister (2004); Turner (1947)

12.3.3 Lower Nicola Indian Band

12.3.3.1 History

The LNIB is one of 17 Nlaka’pamux Nation bands.

LNIB are Scw'exmx, which means 'the people of the creeks'. They speak a different dialect of the Nlaka'pamux language. Other Scw'exmx communities in the Nicola valley include Coldwater, Shackan, and Nooaitch. The language and customs are those of the Interior Salish Nation that have been in practice for thousands of years.

The Scw'exmx were a nomadic people, moving throughout the land to hunt, fish, and gather. Pre-colonialism, the Scw'exmx managed villages autonomously and actively pursued peaceful issue negotiation.

In 1969, the Scw'exmx joined the Allied Tribes of BC to actively fight for indigenous rights. LNIB was also involved in establishing the Union of BC Indian Chiefs. In 1974, when the Nicola Valley Indian Administration was formed, the Scw'exmx began to self-manage (Lower Nicola Indian Band, 2013).

12.3.3.2 Language

Historically, LNIB members spoke the Nlaka'pamuxtsn language. The LNIB community is actively working to revive knowledge and use of the Nlaka'pamux language (Lower Nicola Indian Band, 2013).

12.3.3.3 Traditional Territory

LNIB identifies the Nlaka'pamux Nation territory as a reflection of their territory which is presented in Figure 12.1-2 (LNIB, pers. comm., 2013b). The First Peoples' Language Maps of BC website describes the LNIB traditional territory as being centred on the town of Merritt and Nicola Lake. The Scw'exmx shared the Nicola Valley with the Spaxomin Okanagan and the Stuwix, though the Stuwix left the Nicola Valley in the mid-1800s. Collectively, the three distinct communities lived harmoniously (Lower Nicola Indian Band, 2013).

During a meeting with KAM, LNIB reported they met with TteS in April 2013 to share information on the extent of the two Nations' traditional territories in relation to the Project. LNIB noted that elders in attendance believed both traditional territories overlapped the Project area. At the time, elders noted that according to tradition, Secwépemc people could walk to the Red Bridge in Kamloops but needed Nlaka'pamux permission to cross over to the south side of the Thompson River (LNIB, pers. comm., 2013b).

12.3.3.4 Reserves

LNIB has 10 reserves and more than 7,000 ha or 17,000 acres of land (Lower Nicola Indian Band, 2013). The reserves are presented in Table 12.3-2.

The majority of on-reserve members (approximately 700) are located on-reserve at Nicola-Mameet IR #1; major LNIB community facilities (e.g., Band administration offices, arena, health centre etc.) are located there as well. The east half of Nicola-Mameet IR #1 is primarily composed of mountainous terrain and largely undeveloped. The southern portion includes agricultural land and two residential sub-divisions, Shulus and Rocky Pines (Lower Nicola Indian Band, 2013).

Table 12.3-2. LNIB Reserves

Name of Reserve	Size (hectares)
Nicola-Mameet IR #1	4,593.18
Joyeaska IR #2	129.50
Pipseul IR #3	89.03
Zoth 4 IR #4	202.34
Zoth 5 IR #5	64.75
Logans IR #6	18.21
Hamilton IR #7	1780.62
Spious IR #8	113.31
Zoth IR #14	64.75
Hihium Lake IR #6	31.57*
Total	**7,087.66**

12.3.3.5 Governance

LNIB is governed by a Chief and six Councillors. The LNIB adopted a Custom Election Policy in the 1980s (Lower Nicola Indian Band, 2013). Under the election policy, members elect a Chief and one Councillor for every 100 members (no less than two councillors and no more than seven councillors). The term of office for elected representatives is three years. The list of officials is presented in Table 12.3-3.

Table 12.3-3. LNIB Officials

Title	Surname	Given Name	Appointment Date	Expiry Date
Chief	Sam	Aaron	10/05/2013	10/04/2016
Councillor	Basils	Clarence	10/05/2013	10/04/2016
Councillor	Dick	Arthur	10/05/2013	10/04/2016
Councillor	Joe	Harold	10/05/2013	10/04/2016
Councillor	Peterson	Nicholas	10/05/2013	10/04/2016
Councillor	Sam	Clyde	10/05/2013	10/04/2016
Councillor	Sterling	Robert Jr.	10/05/2013	10/04/2016

Source: AANDC (2014)

12.3.3.6 Social Setting

Population

The current on-reserve population (all reserves) of LNIB is estimated at approximately 700 residents as of July 2014, and the membership of the First Nation is estimated at over 1,200 members (LNIB, pers. comm., 2015).

Nicola Mameet IR #1 (approximately 7 km west of Merritt) contains residential subdivisions such as Shulus Subdivision, Springs Subdivision, and Rocky Pines. Table 12.3-4 shows the population estimates for each neighbourhood according to the LNIB Community Profile.

Table 12.3-4. LNIB Reserve Population Estimates

Neighbourhood	Resident Population
Shulus Subdivision (IR#1)	126
Springs Subdivision (IR#1)	182
Rocky Pines (IR#1)	273
Joyeaska (IR#2)	42
Zoht (IR#4)	35
Hamilton (IR#7)	42
Total	**700**

According to LNIB's socio-economic profile (based on the National Aboriginal Household Survey of 2010) 28% of the on-reserve population is 15 years or younger (175 persons), 62.2% is between 15 and 64 (390 persons), and 9.8% is 65 or older (60 persons) (Lower Nicola Indian Band, 2013).

Of the members residing off-reserve (approximately 500), the LNIB profile notes the majority of members reside in Merritt, Kamloops and Vancouver, with smaller numbers spread throughout BC and beyond. During a meeting with LNIB representatives in April 2015, it was noted that off-reserve members are typically located in Vancouver, Calgary, Voght and Merritt, while only a small number reside in Kamloops (LNIB, pers. comm., 2015).

Marital Status

The LNIB profile notes that 210 people (of those 700 living on-reserve) are married or in a common-law relationship, while 195 are single and 40 are separated, divorced, or widowed (Table 12.3-5). According to Statistics Canada, the marital status characteristics for those living on-reserve include 215 members in 2011 who were married (31%) and 195 members (28%) who were never married.

Table 12.3-5. LNIB Marital Status Characteristics

	2011		
Marital Status*	Total	Male	Female
Total Population 15 years and over	450	240	210
Married (incl common-law)	215	105	105
Separated	15	10	10
Divorced	10	0	10
Widowed	10	0	0
Never married	195	115	80

Source: Statistics Canada (2011b)

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

Mobility

With respect to mobility (change of residence to/from another community), 40% of members residing on-reserve had lived in one of LNIB's neighbourhoods for over five years; however, approximately one-sixth of the residents had moved within the last year (Table 12.3-6).

Table 12.3-6. Mobility Characteristics

Mobility Characteristics	2011		
	Total	Male	Female
Mobility Status - Place of residence 1 year ago			
Total population 1 year and over	610	320	290
Non-movers: Lived at the same address 1 year ago	525	280	245
Movers:			
Lived within the same prov./terr. 1 year ago but changed address within the same census division	30	20	10
Lived within the same prov./terr. 1 year ago but changed address from another census division	25	15	15
Lived in a different prov./terr./country 1 year ago	0	0	0
Mobility Status - Place of residence 5 years ago			
Total population 5 years and over	555	295	265
Non-movers: Lived at the same address 5 years ago	345	195	155
Movers:			
Lived within the same prov./terr. 5 years ago but changed address within the same census division	140	65	70
Lived within the same prov./terr. 5 years ago but changed address from another census division	70	35	35
Lived in a different prov./terr./country 5 years ago	0	0	0

Household and Dwelling Characteristics

The LNIB profile estimates 225 dwellings are on-reserve with a significant portion (160 dwellings) constructed between 1980 and 2011. Of the 225 dwellings, 25 were classified as inhabitable. 47% of the dwellings were over 30 years old, and 24% were in need of major repair. Most houses had one or two bedrooms (71%). Table 12.3-7 presents Statistics Canada data for the dwellings on the reserve.

Table 12.3-7. Household and Dwelling Characteristics

Household Type	2011
Selected Occupied Private Dwelling Characteristics	
Total number of Dwellings	225
Dwellings constructed more than 10 years ago	190
Dwellings constructed within the past 10 years	40
Dwellings requiring minor repairs only	175
Dwellings requiring major repairs	50

Source: Statistics Canada (2011b)

12.3.3.7 Health and Social Services

LNIB's Social Department provides services to three areas:

- **Education:** This department offers Headstart, a school start-up allowance, tutoring, advanced education funding, and career fairs.
- **Band School:** A school that follows the BC Curriculum but is taught with an appreciation and knowledge of First Nation cultures. The school teaches kindergarten to grade 7 and has a gym, playing field, and computer lab.
- **Health:** The Health and Community Services Department promotes health and wellness in the community. Services include wellness planning, addiction counselling, and social assistance.

12.3.3.8 Protective Services

Protective services are provided by the RCMP located in the Merritt detachment which services LNIB, Upper Nicola Indian Band, Coldwater Indian Band, Shackan Indian Band, and the Nooaitch Indian Band. The First Nation communities are served by a team of four officers whom are focused on delivering First Nation policing services. During a telephone interview with the RCMP representative for Merritt, it was noted that criminal activity has decreased since August and in general over the last seven years (Merritt RCMP, pers. comm., 2015). The representative attributed recent reductions in crime to strong LNIB leadership. The relationship between the RCMP and LNIB was noted to be communicative, proactive and focused on issue resolution.

A Fire Hall is also located on reserve. It provides important protective services and is equipped with two fire trucks as well as a crew cab. It is staffed by a Fire Chief, Deputy Chief, and 15 firefighters.

12.3.3.9 Land Use Setting and Planning

LNIB has a Land and Resources Department that oversees nine areas:

- **Public and Capital Works**: This department manages physical infrastructure (water, sewage, roads and member facilities) for the band.
- **Housing:** This department oversees housing for the band. Additional responsibilities include working with the Canadian Mortgage and Housing Corporation (CMHC) and other funding agencies.
- **Lands & Leasing:** This department manages 10 reserves (covering 17,000 acres) in the area of Merritt and supports members with land leasing and any land issues.
- **Economic Development:** This department is responsible for business developments, community planning, and community negotiations.
- **Natural Resources:** This department provides guidance to the Council and Administration regarding resource matters.
- **Shulus Forest Enterprises**: Established in 2001, Shulus provides cultural resource management, Silviculture work, and timber development.

- **Shulus Cattle Company:** In operation over 10 years, this department manages 2,500+ acres of agricultural land. A task force is intent on expanding services and opportunities that would include cattle management and crop selection. A manager oversees operations.

LNIB's primary objectives for land and resource management are to ensure development decisions reflect the needs, wants, and values of community members. LNIB members expressed their vision for land and resource management via the Comprehensive Community Planning (CCP) project, as well as at meetings and through a survey. The CCP considers the visions shared by LNIB members and suggests ways to make them reality. Many of the highest priority land and resource issues are the ones closest to home. Band members are concerned about the following issues:

- availability of quality housing;
- availability of clean water and air;
- cleaning up homes on the reserves;
- upgrading the roads; and
- making travel through the reserves safer.

Many facilities already existing on Nicola Mameet IR #1 are in good condition but, according to LNIB members, these facilities could be better utilized.

Broader lands and resource issues were identified through the CCP process. For example, Band members are concerned about sustainability of important wildlife and sensitive ecosystems in the Nlaka'pamux territory. Band members have asked LNIB leadership to designate some parts of reserve lands as "protected areas." Band members have also indicated that land management recognize and protect the social, cultural, and nutritional importance of traditional activities to ensure these activities can continue in the future. To assist in accomplishing the needs, wants, and values expressed by LNIB members, a number of land and resource management and planning initiatives have been recently developed and implemented, including:

- Sustainable Forest Management Strategy: proposes Nlaka'pamux territory level sustainable forest management strategies;
- Invasive Plant Management Strategy: proposes a reserve land treatment and monitoring plan;
- Mountain Pine Beetle Planning and Mitigation Strategies: projects that identify impacts, risks and mitigation strategies. The emphasis is on preparing for emergencies;
- Species at Risk Projects and Workshops: projects through which suitable habitat and management strategies for wildlife and plant species at risk are identified;
- Environmental Management Systems: LNIB intends to develop environmental management systems and monitoring policies;
- LNIB Web Map Server: has the ability to support land use planning on reserve lands; and
- Land TRUSTT: LNIB submitted a proposal to the Canadian Culture Online Gateway Fund to develop a website entitled "LNIB's Traditional Resource Use through the Seasons on the

Traditional Territory." The proposed website would preserve, enhance and promote traditional ecological knowledge with emphasis on engaging the youth of the LNIB.

In addition, LNIB members would like to see previous land use plans completed and updated. LNIB identified a desire to develop land codes and laws for reserve lands and the Nlaka'pamux territory. LNIB would be able to govern their lands and resources more effectively, and be able to plan for future socially, culturally, economically and ecologically sustainable land use through land codes and laws (Lower Nicola Indian Band, 2013).

LNIB has a variety of unused land that is designated for a number of uses including residential, pasture lands, commercial, and industrial. Land and resource use is guided by the views expressed by LNIB members. Some lands, for example Nicola Mameet IR #1, are primarily residential; however, the use of other lands or parts of other lands is still pasture. Others parcels, such as some of the fee simple land owned by the LNIB in Merritt, are used for commercial and industrial purposes. Other LNIB lands have been identified for uses such as wind farms and mining. LNIB has also considered buying additional lands in the region. In 2007, a study was conducted to identify potential lands to purchase. The study also looked at acquisition strategies (Lower Nicola Indian Band, 2013).

According to the KLRMP, LNIB was invited to participate in the development of the KLRMP but declined (Government of BC, 1995).

No LNIB forestry-related agreements with the Province of BC are publically available.

12.3.3.10 Treaty Status

LNIB is not participating in the BC Treaty process (BC Treaty Commission, 2013).

12.3.3.11 Historic Land Use

LNIB members fished for salmon, hunted game, and gathered roots and berries. In the past, hunting was done in accordance with the boundaries dictated by heredity hunting grounds, meaning each family had their own region to hunt (Dawson, 1891). LNIB members engaged in traditional activities in the Nlaka'pamux territory, including hunting, fishing, gathering, and camping (Lower Nicola Indian Band, 2013).

LNIB is currently undertaking a Preliminary Impact Assessment, but the study was not available at the time of writing.

12.3.3.12 Current Use of Lands and Resources for Traditional Purposes

Though many ceremonies and spiritual practices are not as common as they once were, LNIB members still participate in traditional practices such as gathering berries, picking mushrooms, hunting, and fishing (Lower Nicola Indian Band, 2013). In a letter from LNIB, it was also noted that LNIB continue to exercise Aboriginal rights including hunting, fishing, and gathering within the traditional territory. The area surrounding the Project was also noted as significant cultural importance although no other detail was provided at the time of writing (LNIB, pers. comm., 2012).

With respect to anticipated future land uses, consultation is ongoing between KAM and LNIB. This may yield additional information on the anticipated future use of lands and resources that may potentially be affected by the Project. Should LNIB provide additional information to KAM, it will be considered and incorporated in the effects assessment during the Application/EIS review phase.

At the time of writing, little to no land use information was available for those areas surrounding the Project. However, a detailed assessment of the changes to current use of lands that could occur as a result of the Project is presented in Section 13 (Aboriginal Interests) and Section 14 (Other Potential Effects on Aboriginal Interests).

Hunting

During meetings with LNIB, representatives noted that they and their relatives had hunted in the Project area in the past and they know it well (LNIB, pers. comm., 2013a). Species targeted include deer and moose.

Fishing

Personal communications with LNIB members over a number of years revealed that LNIB members consider Spences Bridge, where the Thompson and Nicola Rivers meet, as an important location for salmon fishing (LNIB, pers. comm., 2013a).

With respect to anticipated future land uses, consultation is ongoing between KAM and LNIB. This may yield additional information on the anticipated future use of lands and resources that may potentially be affected by the Project. Should LNIB provide additional information to KAM, it will be considered and incorporated in the effects assessment during the Application review phase.

12.3.3.13 Economy

LNIB owns six businesses, including:

- Shulus Cattle Company Ltd.;
- Shulus Forestry Enterprise Ltd.;
- Lower Nicola Indian Band Construction Ltd.,;
- Lower Nicola Indian Band Energy;
- Lower Nicola Indian Band Real Estate Developments; and
- Lower Nicola Enterprises.

LNIB is also part owner in a number of businesses in and around Merritt including:

- Stuwix Resources Ltd.;
- Spayum Developments;
- Equity investor in Spayum Developments Ltd.;
- Equity investor in Nicola Valley Indian Services Administration (NVISA) lands & building;

- Nicola Valley Institute of Technology; and
- Nicola Valley Indian Services Association.

A number of members also own and operate businesses on- and off-reserve (Lower Nicola Indian Band, 2013). The BC Hydro Aboriginal Business Directory identifies five businesses that have an affiliation with LNIB.

In 2013, LNIB partnered with Rokstad Power Corporation (LNIB, pers. comm., 2013a). Rokstad Power Corporation provides a full suite of power line construction and maintenance services (Rokstsad Power Corporation, 2013).

The LNIB Economic Development team has an initiative called Community Scoping Framework that supports the band and its members in achieving success. Action steps supported by the Economic Development team for band members include helping members find good jobs closer to home, encouraging establishment of businesses on reserve, supporting band- and member-owned business, providing business planning and financial management, assisting in providing business loans, and providing training (Lower Nicola Indian Band, 2013).

LNIB's socio-economic profile identifies forestry, mining, and ranching as key economic drivers for the area. Important economic activities for LNIB specifically include development of an irrigation system, cattle ranching, logging/forest products, and small business development (Lower Nicola Indian Band, 2013). LNIB has been partnering on forestry, mining, oil and gas, alternative energy, land development, tourism, agriculture, and training opportunities (Lower Nicola Indian Band, 2013).

The closest urban centre is the Town of Merritt (approximately 6 km away), which serves as the regional service hub and augments existing services that band offers its community. The City of Kamloops is approximately 70 km away and provides an additional service centre for LNIB (Lower Nicola Indian Band, 2013).

According to the LNIB (2013), future economic goals for LNIB include the following:

- eradicate poverty and economic dependence;
- build a sustainable and vibrant LNIB economy;
- every LNIB member to have a job;
- secure economic access to lands and resources;
- foster entrepreneurship and business start-ups;
- foster alliances, strategic partnerships, joint ventures and other business partnerships with those who want to work with us;
- expand and diversify economic activity;
- reduce economic leakages;
- compete in the marketplace;
- expand LNIB Government own source revenue; and
- equitable distribution of opportunities and resources.

LNIB is involved in a range of natural resource projects including impact management benefit negotiations with BC Hydro for the ILM Transmission Line, Highland Valley Copper mine, expansion; and the proposed Kinder Morgan Trans Mountain Pipeline. LNIB is also participating in consultation with Merritt Green Energy project, and a number of proposed mining and wind energy projects in its traditional territory (Lower Nicola Indian Band, 2013).

12.3.3.14 Education Characteristics

In terms of educational attainment (Table 12.3-8), 10% of members held a trade certificate or diploma as of 2011, while 30 members (7%) residing on reserve held a Bachelor's degree or higher (Lower Nicola Indian Band, 2014).

Table 12.3-8. Education Characteristics

	2011		
Highest Degree or Certificate[1]	Total	Male	Female
Population 15 years and over	455	240	210
No degree, certificate or diploma	170	105	70
High school diploma or equivalent only	125	70	55
Trades/apprenticeship or other non-university certificate	45	30	10
University certificate below bachelor level	25	0	15
University degree (bachelor level or higher)	30	10	20

Source: Statistics Canada (2011b)

LNIB operates a school focused on developing each students intellectual, spiritual, emotional, and physical well-being within the context of Nle?kepmx culture and provincial curriculum. New facilities include a full gymnasium, large playing field, and computer lab.

12.3.3.15 Workforce Characteristics

The participation rate (refers to the number of people who are either employed or are actively looking for work) for LNIB members living on-reserve is estimated to be 53.3%. The employment rate in 2011 was 38.9% (Table 12.3-9), with the agriculture and resource-based industry being the most common. Primary industry and trades and related occupations were the most popular.

The LNIB profile estimates that approximately two-thirds of members residing on-reserve had an annual income of less than $15,000 in 2011. Income was typically derived from employment (74.2%), pension income (12.4%), child benefits (8.1%), and social assistance (6.1%). Two-thirds of the households had only one maintainer (income from one person only; not both spouses).

[1] When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations

Table 12.3-9. Workforce Characteristics

Workforce Characteristics	2011		
	Total	Male	Female
Labour Force Indicators			
Participation rate	53.3%	59.2%	42.9%
Employment rate	38.9%	40.8%	35.7%
Unemployment rate	25.0%	31.0%	16.7%
Industry			
Total-Industry	220	140	85
Agriculture, resource based	65	60	0
Manufacturing, construction	30	30	0
Wholesale, retail	0	0	0
Finance, real estate	0	0	0
Health, education	30	0	25
Transportation, warehousing	0	10	0
Other services	10	0	0
Occupation			
Population 15 years and over	220	140	85
Management	15	10	10
Natural sciences, health	10	10	0
Social sciences, gov't	30	0	20
Sales and service	25	10	20
Trades and related	40	40	0
Primary industry	55	50	0
Other Occupations	10	10	0

Source: Statistics Canada (2011b)

12.3.4 Ashcroft Indian Band

12.3.4.1 History

AIB is located on a number of reserves near the Village of Ashcroft (approximately 2 km) and 10 km southwest of Cache Creek (Ashcroft Indian Band Website, 2013). Figure 12.2-3 presents the IRs located within the Project vicinity, including the AIB reserves.

As a part of the Nlaka'pamux Nation, there is a rich history and culture in the area. The Plateau region of BC was home to the Nlaka'pamux. The varied geography of this region includes mountains, grasslands, and foothills with waterways, notably the Fraser, Thompson, and Nicola rivers. Spences Bridge, where the Thompson and Nicola Rivers meet, was an important fishing location (Prince, 2003).

12.3.4.2 Language

The traditional language of the AIB is the Nłeʔkepmxcín language. According to a language needs assessment conducted in 2008, the AIB have three fluent speakers, 20 speakers that understand and speak the language somewhat and two speakers actively engaged in learning the traditional language (First Peoples' Language Map of British Columbia, n.d.).

12.3.4.3 Traditional Territory

At the time of writing, no asserted traditional territory maps for AIB were available. However, the AIB is a part of the Nlaka'pamux Nation, for which traditional territory maps are presented in Figure 12.1-2. In a meeting with AIB, it was noted that the Secwépemc and the Nlaka'pamux have historically strong family ties (AIB, pers. comm., 2014).

12.3.4.4 Reserves

The AIB has four reserves comprising 1,986 ha of land (Table 12.3-10) (AANDC, 2014).

Table 12.3-10. AIB Reserves

Name	Location	Hectares
105 Mile Post Indian Reserve #2	Along the right (north) bank of the Thompson River, west of the town of Ashcroft	1,365.60
Ashcroft Indian Reserve # 4	South of and adjoining 105 Mile Post Indian Reserve 2	123.30
Cheetsum's Farm Indian #1	On the right (north) bank of the Thompson River at the mouth of Cheetsum Creek	298.90
McLean's Lake #3	On McLean Lake, 11.3 km NW of the town of Ashcroft	198.30
Total		**1,986.10**

Source: AANDC (2014)

The main populated reserve is Ashcroft IR #4, which is adjacent to Highway 1 near Ashcroft.

12.3.4.5 Governance

AIB's governance system operates under an *Indian Act* Electoral System. As indicated in Table 12.3-11, there is a Chief and two councillors. The current Chief is Chief Greg Blain while the two elected councillors are Earl Blain and Dennis Pittman. The Chief and Council are proactive in supporting members, including those living off-reserve. During community gatherings, a meal is provided by Chief and Council at least once a week (AIB, pers. comm., 2014).

Table 12.3-11. AIB Officials

Title	Surname	Given Name	Appointment Date	Expiry Date
Chief	Blain	Greg	11/18/2014	11/17/2016
Councillor	Blain	Earl	11/18/2014	11/17/2016
Councillor	Pittman	Dennis	11/18/2014	11/17/2016

Source: AANDC (2014)

12.3.4.6 Social Setting

Population

The registered AIB population, as of October 2011, is presented in Table 12.3-12. As indicated, a greater proportion of AIB members currently reside off-reserve. During a meeting with AIB representatives in December 2014, it was estimated that 30-40 members reside in Kamloops (AIB, pers. comm., 2014).

Table 12.3-12. Registered AIB Population

Residency	# of People
Registered males on own reserve	39
Registered females on own reserve	32
Registered males on other reserves	4
Registered females on other reserves	3
Registered males off reserve	99
Registered females off reserve	92
Total Registered Population	**269**

Source: AANDC (2014)

12.3.4.7 Marital Status

The marital status characteristics for those AIB members residing on-reserve are presented in Table 12.3-13. As indicated, a greater proportion of AIB members were never married as of 2011.

Table 12.3-13. AIB Marital Status

	2011			2006		
Marital Status*	Total	Male	Female	Total	Male	Female
Total Population 15 years and over	75	45	30	40	20	25
Married (incl common-law)	25	15	10	15	0	10
Separated	0	0	0	10	0	0
Divorced	10	0	0	10	0	0
Widowed	0	0	0	0	0	0
Never married	45	30	10	20	10	10

Source: AANDC (2014)
** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.3.4.8 Mobility Characteristics

The mobility characteristics for AIB members residing on-reserve are presented in Table 12.3-14. As indicated, the AIB members living on-reserve exhibit low levels of mobility: the majority lived at the same address one year and five years ago.

Table 12.3-14. AIB Mobility Characteristics

Mobility Characteristics	2011			2006		
	Total	Male	Female	Total	Male	Female
Mobility Status - Place of residence 1 year ago						
Total population 1 year and over	90	55	35	50	25	25
Non-movers: Lived at the same address 1 year ago	85	50	35	35	20	20
Movers:						
Lived within the same prov./terr. 1 year ago but changed address within the same census division	0	0	0	10	0	10
Lived within the same prov./terr. 1 year ago but changed address from another census division	0	0	0	0	10	10
Lived in a different prov./terr./country 1 year ago	0	0	0	0	0	0
Mobility Status - Place of residence 5 years ago						
Total population 5 years and over	80	45	35	50	25	25
Non-movers: Lived at the same address 5 years ago	55	30	20	30	15	15
Movers:						
Lived within the same prov./terr. 5 years ago but changed address within the same census division	10	0	10	10	10	10
Lived within the same prov./terr. 5 years ago but changed address from another census division	15	10	0	0	10	0
Lived in a different prov./terr./country 5 years ago	10	0	0	0	0	10

Source: AANDC (2014)

12.3.4.9 Household and Dwelling Characteristics

The household and dwelling characteristics for AIB members residing on-reserve are presented in Table 12.3-15. As indicated, the existing housing stock is likely to have been constructed over ten years ago and is in need of repair. However, the Chief and Council expended approximately $60,000 in 2013 to support housing repairs. This included roof replacements, new appliances, repairs to electrical and plumbing services and the provision of firewood (AIB, pers. comm., 2014).

Table 12.3-15. AIB Household and Dwelling Characteristics

Household and Dwelling Characteristics*	2011	2006
Household Type		
Total - All private households	35	25
One family households	20	10
Couple family households	10	10
Female lone parent households	0	10
Male lone parent households	10	0
Multi-family households	0	0
Non-family households	10	10

Household and Dwelling Characteristics*	2011	2006
Selected Occupied Private Dwelling Characteristics		
Total number of Dwellings	35	25
Dwellings constructed more than 10 years ago	25	20
Dwellings constructed within the past 10 years	0	10
Dwellings requiring minor repairs only	15	15
Dwellings requiring major repairs	10	10

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.3.4.10 Health Services

Limited health care services are available in Ashcroft. The Ashcroft Indian Band Health Centre (recently developed) provides a nurse whom facilitates access to health services in Kamloops. Typical health challenges in the community relate to the rural location of Ashcroft, access to remote health services for serious illnesses, as well as related travel and accommodation in places such as Kamloops and Vancouver. Diabetes and high blood pressure are common health issues in the community while drug and alcohol issues appear to be minor (AIB, pers. comm., 2014).

12.3.4.11 Protective Services

The RCMP in Ashcroft also provide protective services to the AIB.

12.3.4.12 Land Use Setting and Planning

AIB has designated lands for residential, commercial, and industrial purposes (Ashcroft Indian Band Website, 2013). Recent infrastructure developments include:

- **Ashcroft Indian Band Community Centre:** With funding provided by Northern Development, the community centre underwent significant renovations. The centre now has the capacity to serve as a centre for social, health, and fitness in the community while also offering economic support should it be used to host events.
- **Internet access:** The AIB recently made high speed internet available to members in the community. In addition, 30 computers were distributed to the Computers for Schools program (Ashcroft Indian Band Website, 2013).

According to the KLRMP, the AIB was invited to participate in the development of the KLRMP but declined (Government of BC, 1995).

12.3.4.13 Treaty Status

The AIB is not participating in the BC Treaty process (BC Treaty Commission, 2013).

12.3.4.14 Historic Land Use

At the time of writing, a TLU study had not been developed by AIB and one is not expected. It is expected that the historical land uses for AIB would be similar to the larger Nlaka'pamux, described in Section 12.3.1.

12.3.4.15 Current Use of Lands and Resources for Traditional Purposes

At the time of writing, the understanding of current AIB land use for traditional purposes was limited. TLU pursuits remain an important activity for members, particularly elders. Moose, deer, and grouse are hunted in the areas near Ashcroft (AIB, pers. comm., 2014). AIB noted that members harvest salmon in the Thompson River although specific locations were not provided. Plants gathered include Hoosham, Indian celery, potatoes, and onions in the areas around Ashcroft. In fact, a course on traditional plants is being taught at Thompson Rivers University by an AIB member (AIB, pers. comm., 2014).

During consultation on the draft AIR/EIS Guidelines, the AIB asserted Aboriginal rights and title (including governing jurisdiction) to its traditional territory. The AIB stated their territory is a vast and ecologically diverse landscape with cultural values and interests inherent to Nlaka'pamux traditions. These areas include components such as medicine gathering, hunting, fishing, plant gathering, spiritual, archaeological, historical, and current family gathering sites. AIB members have carried and continue to carry out these practices and cultural heritage components throughout Ashcroft traditional territory, including Kamloops and the Project area. Subsequently, during a meeting in December 2014, AIB Chief and Council stated that there is limited, if any, TLU by AIB members in the vicinity of the Project (AIB, pers. comm., 2014).

Other land uses include the construction of a 10-acre communal garden area with an irrigation system. The AIB plant and harvest vegetables in the garden which is shared and distributed amongst members.

With respect to anticipated future land uses, consultation is ongoing between KAM and AIB. This may yield additional information on the anticipated future use of lands and resources that may potentially be affected by the Project. Should AIB provide additional information to KAM, it will be considered and incorporated in the effects assessment during the Application/EIS review phase.

At the time of writing, little to no land use information was available for those areas surrounding the Project. However, a detailed assessment of the changes to current use of lands that could occur as a result of the Project is presented in Section 13 (Aboriginal Interests) and Section 14 (Other Potential Effects on Aboriginal Interests).

12.3.4.16 Economy

In 2012, the AIB negotiated a deal to construct an Esso gas station (as well as a convenience store and coffee shop) on-reserve and along the TransCanada Highway. AIB will own the facilities and the land and will receive rental revenue from the franchise owner. It is anticipated that the enterprise will create 15 full-time jobs and augment service offerings through the Nl'akapxm Eagle Motorplex,

which has been in operation for over 25 years. The Nl'akapxm Eagle Motorplex recently added a 2.1-km motocross track, which was endorsed by the BC Motocross Association of the Southern Interior (Ashcroft Indian Band Website, 2013).

AIB recently negotiated a deal with the Village of Ashcroft to supply water to homes on-reserve. The Village of Ashcroft obtains its water supply directly from the Thompson River (Village of Ashcroft, 2011). This will require a 3-km pipeline system, to be constructed by the AIB. This system will replace the AIB's old well water system.

A pending issue for AIB is the McLean's Lake land claim, which is expected to be successful. The McLean Lake area, though originally part of the AIB territory was, in the 1920s, awarded by the government to another First Nation. AIB has been in dispute since, intensifying efforts in 2009. The economic restitution received will be invested in further promoting economic development and improving on-reserve infrastructure (Ashcroft Indian Band Website, 2013).

AIB is participating in a number of economic agreements (which includes revenue and contracting components) for the Kinder Morgan pipeline, Tolko, West Fraser, Waste Tech and Highland Valley Copper (AIB, pers. comm., 2014).

In March 2013, a number of Nlaka'pamux Nation member bands, including the AIB, entered into an ECDA with the Province of BC. The purpose and objectives of the agreement are in relation to the Highland Valley Copper Mine and describe the payments to support the signatory First Nations' to establish and fund socio-economic initiatives; and to describe the basis for the Province of BC to meet its legal obligations.

The objective of the ECDA is to enhance the socio-economic well-being of signatory Band members on matters related to governance, culture, heritage, language, social development, economic development, environment and natural resources, education and training, community infrastructure, and sport and recreation. Payments under the ECDA are based on annual tax revenue paid by, and tax credits received by, the mine operator. Payments to the Trust (Citxw Nlaka'pamux Assembly) will be 19.68% of annual mine tax revenue, with consideration of a range of conditions outlined in the ECDA (Government of BC, 2014c). The Citxw Nlaka'pamux Assembly was established to administer the ECDA. AIB is a participating band and a member of the board.

The Implementation Committee of the Citxw Nlaka'pamux Assembly will guide the long term use of the land in the agreement area following Decommissioning and Closure and final Reclamation. An End Land Use Plan is to be developed five years after the endorsement of the ECDA. The End Land Use Plan will be updated every five years.

The End Land Use Plan will inform other Highland Valley Copper Reclamation and Decommissioning and Closure-related planning processes including:

- ongoing reclamation plans, including activities such as soil capping, revegetation, landscaping or other activities;
- Closure Plan;

- Environmental Plan;
- Cultural Heritage Plan; and
- regulatory approvals.

Participating band members may apply for funding to support:

- governance;
- culture, heritage and language;
- social development;
- economic development;
- environment and natural resources;
- education and training;
- community infrastructure; and
- sport and recreation. (Citxw Nlaka'pamux Assembly, 2014)

While AIB had forestry-related agreements with the Province of BC, none of the publically available agreements are currently valid.

12.3.4.17 Education Characteristics

The educational characteristics for AIB members living on-reserve is presented in Table 12.3-16. As indicated, about one-quarter of members hold a high school diploma and/or a trades/apprenticeship certificate.

Table 12.3-16. AIB Education Characteristics

	2011			2006		
Education Characteristics*	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Highest Degree or Certificate						
Population 15 years and over	80	45	30	45	20	20
No degree, certificate or diploma	35	15	20	25	10	15
High school diploma or equivalent only	20	15	0	10	0	0
Trades/apprenticeship or other non-university certificate	20	10	0	15	10	0
University certificate below bachelor level	0	0	0	0	0	0
University degree (bachelor level or higher)	0	0	0	0	0	0

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

12.3.4.18 Workforce Characteristics

The workforce characteristics for AIB members living on-reserve is presented in Table 12.3-17. As indicated, the participation rate (refers to the number of people who are either employed or are actively looking for work) is 53.3% while the unemployment rate is 37.5%. Manufacturing and other services appear to be the largest industries for those residing on-reserve while the most common occupations are in social sciences/government, sales and service and trades related.

Table 12.3-17. AIB Workforce Characteristics

	2011			2006		
Workforce Characteristics*	Total	Male	Female	Total	Male	Female
Labour Force Indicators						
Participation rate	53.3	62.5	33.3	55.6	50.0	75.0
Employment rate	26.7	25.0	0.0	44.4	50.0	75.0
Unemployment rate	37.5	60.0	0.0	40.0	0.0	0.0
Industry						
Total-Industry	75	40	30	40	20	20
Agriculture, resource based	0	0	0	0	0	0
Manufacturing, construction	10	0	0	10	0	0
Wholesale, retail	0	0	0	0	0	0
Finance, real estate	0	0	0	0	0	0
Health, education	0	0	0	0	0	10
Business services	0	0	0	0	0	0
Transportation, warehousing	0	0	0	0	0	0
Other services	25	10	10	20	10	15
Occupation						
Population 15 years and over	75	40	30	40	20	20
Management	0	0	0	N/A	N/A	N/A
Natural sciences, health	0	0	0	N/A	N/A	N/A
Social sciences, gov't	10	0	10	N/A	N/A	N/A
Sales and service	10	10	0	N/A	N/A	N/A
Trades and related	15	15	0	N/A	N/A	N/A
Primary industry	0	0	0	N/A	N/A	N/A
Other Occupations	0	0	0	N/A	N/A	N/A

Source: AANDC (2014)

** When reporting census data, Statistics Canada employs random rounding, ensuring that numbers end in the digit 0 or 5 as a measure of confidentiality. The result of random rounding is that, in some cases, the totals may appear inconsistent with the sum of the numbers, particularly for smaller populations*

Chief and Council estimate there are approximately 12 AIB professionals with qualifications relating to law, accounting, and business administration. Similarly, there are approximately 12 members with trades-related training in electricity, plumbing, and mechanics. A number of AIB members are employed in resource extraction projects located in Northeastern BC and in Alberta (AIB, pers. comm., 2014).

12.4 MÉTIS NATION BRITISH COLUMBIA

12.4.1 History

Métis people have a culture that is recognized by Canada as a distinct population with its own languages, history, and cultural traditions. Métis were known as "Children of the Fur Trade" because the ethnicity was born when European explorers and settlers working in the fur trade established familial relationships with Aboriginal women. The offspring produced were of mixed Aboriginal ancestry (now known as Métis). As a result, "mixed" Aboriginal people began to marry one another and a culture developed that is a fusion of European and First Nation.

By the early 19th century, Métis people began to recognize themselves as having a "distinct national consciousness" (MNBC, n.d.). A unique society developed with its own culture, fashion, food, and dance.

The Métis first arrived in BC in the late 1700s as crew members of Sir Alexander Mackenzie's Expedition- explorers with the North West Company. The Métis were integral to the establishment of the North West Company in the west, and contributed to construction of forts, the farming of the land, and trading with First Nations (Goulet, 2012). Other Métis expeditions into BC included the Simon Fraser (1805) and Sinclair Expeditions (1841, 1854).

During this period, the Métis settled in a number of areas in BC including the Shuswap. One ethnologist documented the presence of Métis at a settlement in Tete Jaune Cache who were noted for trading beadwork leggings with the Shuswap and were referred to as the "*Le Mechif*" by Shuswap peoples (MNBC, n.d.).

The Métis in BC were both connected to Métis families that had settled in BC (after the expeditions) and also to the mixed Aboriginal communities that developed during the colonial era (MNBC, n.d.). The ability for the Métis people to practice their unique culture was impeded after the arrival of new Europeans (with discriminatory attitudes) and a hostile legal regime in BC.

12.4.2 Language

The language exclusive to the Métis is Michif (Métis Culture & Resource Centre Inc., 2013) but historically, the Métis also speak French. French became the language commonly used. As well, the Chinook jargon (a language used by early fur traders), was a combination of the native Chinook language, French, and a bit of English. The Chinook jargon was used by the Métis when trading with First Nations (Goulet, 2012).

12.4.3 Métis Nation British Columbia

MNBC is a non-profit organization recognized by the provincial and federal government, as well as the Métis National Council, as the governing Métis organization for the province of BC. In 2006, MNBC signed the Métis Nation Relationship Accord with the province of BC. MNBC is mandated to develop and augment opportunities for Métis communities through implementation of social and economic programs and services. The Province of BC noted in a joint press release that the Métis Relationship Accord is building relationships with Aboriginal peoples on the principles of mutual respect and reconciliation with the goal of ensuring that Aboriginal peoples share in BC's economic and social development (MNBC, 2015). MNBC's vision is to build a proud, self-governing, sustainable Nation for Métis Citizens.

In 2014, KAM provided MNBC with funding to support information-sharing and engagement in the Project and to obtain feedback from Métis chartered communities in the Thompson/Okanagan region. MNBC developed a report which provides a summary of the feedback received at community information sessions from members. The report titled MNBC- KGHM/Ajax Mine Initial Project Report, December 2014 (the Initial Project Report) was developed using a database of Métis harvesters to identify Métis land users in the Project vicinity. In order to inform Métis citizens about the Project and to solicit feedback MNBC used a variety of methods to reach out to citizens, including mail-outs, MNBC website posts, and social media post (e.g., Facebook). In addition, MNBC held information sharing meetings in three chartered communities including Kamloops, Merritt, and Ashcroft with over 50 Métis participants. The information solicited at the meetings was incorporated into the report (MNBC, 2014). 600 mail-outs were sent to Métis citizens in the Thompson/Okanagan region providing Project information.

12.4.4 Governance

MNBC was established and incorporated at the Métis Provincial Council of BC (MPCBC) in 1996. The Métis Nation governance structure was established in 2003 when Métis leadership ratified the MNBC Constitution (MNBC website, n.d.). MNBC is the governing organization for the Métis in BC representing over 10,000 provincially registered Métis people and nearly 70,000 self-identified Métis people. There are approximately 1,000 MNBC registered Métis citizens in the Thompson/Okanagan region. The objective of MNBC is to support and promote social and economic opportunities for the members of the Métis Charter Communities (MNBC, 2015). The structure is comprised of the following:

- **Board of Directors.** The Board has seven regional directors from across BC who are elected within their regions, two chairs, and a president and vice president.
- **Regional Governance Councils.** This includes the elected regional Community Presidents, a regional youth and women's representative and a regional director. The mandate is to develop policy that is consistent with the Métis chartered communities.
- **Métis Women of BC.** This organization represents the voice of Métis women and aims to ensure that voice is integrated into the governance, goals and objectives of the MNBC. The female representatives are elected across the province to represent their respective region.

- **Métis Youth of BC.** The Métis Youth of BC represents the future voice for the MNBC and is comprised of seven regionally elected youth representatives across the Province.
- **Métis Veterans of BC.** The mandate of the Métis Veterans is to conduct traditional and ceremonial duties during and for the MNBC General Meeting and Métis Nation Governing Assembly. It is comprised of seven representatives.
- **BC Métis Assembly of Natural Resources.** The organization is comprised of seven highly respected individuals chosen to represent each regions natural resource needs.

The governing structure of MNBC includes 35 Chartered Communities in seven regions: Vancouver Island, Lower Mainland, Thompson/Okanagan, Kootenay, North Central BC, Northwest BC and Northeast BC (MNBC, n.d.). Each of the seven regions has a Regional Governance Council that is governed by an appointed Senator. These Senators serve as the judicial branch for the MNBC (MNBC, 2013).

The Chartered Communities in the Thompson/Okanagan are shown in Table 12.4-1.

Table 12.4-1. Métis Region and Chartered Communities in Thompson/Okanagan

Region	Chartered Communities
Thompson/Okanagan	Kelowna Métis Association
	Boundary Local Métis Association
	Vernon and District Métis Association
	Two Rivers Métis Society
	South Okanagan Similkameen Métis Association
	Salmon Arm Métis Association
	Ashcroft and District Métis Association
	Nicola Valley and District Métis Association

Source: MNBC website (n.d.); MNBC (2015)

The Two Rivers Métis Society is located in Kamloops. According to MNBC, there are 52 Métis Harvester Card holders in the Kamloops area.

12.4.5 Land Use Setting and Planning

At the time of writing, a Métis-specific land use plan for the Project area was unavailable but the Initial Project Report provides important information for this section. The MNBC conducted an Assertion of Métis Rights and Traditional Land Uses Study in 2009, which included compiling 14,000 historical documents that indicate "a significant Métis presence throughout BC" (MNBC, 2010). Métis TLU interviews support Métis land use in BC since 1920, and demonstrate that "Métis continue to exist and use land as our ancestors did" (MNBC, 2010). MNBC clarified in a recent submission to the BC Utilities Commission that it does not assert rights to specific areas of BC; instead, "Métis Nation BC, on behalf of our Métis Citizens, assert Rights and Traditional uses over the entire province," with documented TLU in 95% of the provincial watersheds (MNBC, 2010).

The Initial Project Report identifies the values of Métis citizens for land use which includes:

- sustainable use of natural resources;
- sustaining natural resources for future generations;
- stewardship of natural resources that is based on respect for the land;
- conserving biological diversity, soil, water, fish, wildlife, scenic diversity;
- restoring damaged ecologies; and
- balancing economic and productive objectives with the social and cultural needs of Métis peoples.

12.4.6 Treaty Status

MNBC are not participating in the BC Treaty process.

12.4.7 Traditional Land Use

There are 52 Harvester Card holders in the Kamloops area. They harvest mule deer, white-tail deer, moose, grouse, migratory birds, and plants such as medicinal plants, berries, and firewood (MNBC, pers. comm., 2014). Harvester Cards grant Métis people in BC limited harvesting rights but does not authorize freshwater fishing, saltwater fishing, hunting (other than migratory birds), cutting timber or trapping (MNBC website, n.d.). It should be noted that not all Métis citizens possess harvester cards and therefore there may be more Métis harvesters within the vicinity of the Project.

The Initial Project Report notes there are five management units within the Project area. Land use activities within these areas include hunting, trapping, fishing, gathering (food and medicines), gathering of firewood, cultural sites, and spiritual practices, camping and hiking.

During the community information sessions, Métis citizens noted concern about potential effects to Jacko Lake where some citizens may be harvesting fish. Citizens also identified Goose Lake as a plant gathering area for some citizens (MNBC, 2014). They also raised concerns about potential effects to badgers that may be present in the Project area. At the time of writing, no other TLU information for the Project area was available.

12.4.8 Economy

In May 2006, the Province of BC and MNBC signed the Métis Nation Relationship Accord. The Accord formalized the relationship between Métis people of BC and the Province of BC. The Accord identified mutual goals intended to close the quality of life gap between Métis people and other British Columbians. It provides a platform for Métis people to collaborate with the Province of BC to address a range of social and economic issues. Annual funding is provided by the Province of BC to support MNBC self-governance, organizational capacity building, and youth engagement.

The following objectives were identified in the Accord:

- strengthen existing relationships based on mutual respect, responsibility and sharing;
- improve engagement, coordination, information sharing, and collaboration; and
- follow through on intentions and commitments of the First Ministers' Meeting on Aboriginal issues as they pertain to Métis people and their aspirations to close the gap in the quality of life between Métis people and other British Columbians.

Subjects for the Métis Nation Relationship Accord include:

- collaborative renewal of the Métis tripartite processes;
- Métis identification and data collection;
- health (community, family, individual);
- housing;
- education (lifelong learning); and
- economic opportunities. (Government of BC, 2012)

The MNBC website identifies 68 Métis businesses; however, it was not possible to identify how many are in the vicinity of the Project (MNBC, 2013). This is not an exhaustive list since it is up to the discretion of the Métis entrepreneur or business owner to submit their business information to the organization. The BC Hydro Aboriginal Business Directory identifies 30 businesses that have a Métis affiliation in the Southern Interior –Thompson Okanagan region. This is also not an exhaustive list since business owners voluntarily add their business information to the BC Hydro Aboriginal Business Directory (BC Hydro, 2013).

MNBC developed an Industry Engagement Protocol that focuses on enhancing access to procurement, training and employment opportunities for Métis people. The protocol outlines an engagement process for industry, both to enhance opportunities to access procurement, training and employment and to ensure that MNBC is aware of projects, their potential effects and how Métis rights, way-of-life, culture and economy may be affected (MNBC, 2015).

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