

**APPENDIX 30-B
SKII KM LAX HA TRADITIONAL KNOWLEDGE
AND USE RESEARCH REPORT**

Seabridge Gold Inc.

KSM PROJECT Skii km Lax Ha Traditional Knowledge and Use Research Report

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KSM PROJECT

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KSM PROJECT

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Acronyms and Abbreviations

Terminology used in this document is defined where it is first used. The following list will assist readers who may choose to review only portions of the document.

Application	Application for an environmental assessment certificate
BC EAA	<i>BC Environmental Assessment Act</i> , SBC 2002, Chapter 43
BC EAO	British Columbia Environmental Assessment Office
BC MOE	British Columbia Ministry of Environment
CEA Agency	Canadian Environmental Assessment Agency
CEAA	<i>Canadian Environmental Assessment Act</i> , S.C. 1992, c. 37
CMT	Culturally Modified Tree
EA	Environmental Assessment
EIS	Environmental Impact Statement
GTS	Gitxsan Treaty Society
ha	Hectare(s)
km	Kilometre(s)
KSM	Kerr-Sulphurets-Mitchell
LSA	Local Study Area
NTL	Northwest Transmission Line
PTMA	Processing and Tailing Management Area
the Project	The proposed KSM Project
Rescan	Rescan Environmental Services Ltd.
RSA	Regional Study Area
Seabridge	Seabridge Gold Inc.
TCAR	Treaty Creek Access Road
TK	Traditional Knowledge
TMF	Tailing Management Facility
TU	Traditional Use

1. Introduction

This report provides information relating to Skii km Lax Ha Traditional Knowledge (TK) as well as the traditional use (TU) and current use of areas in and around the proposed KSM Project (the Project). The purpose of the study is to gain an understanding of Skii km Lax Ha interests, activities and land uses within their traditional territory which may be affected by Project activities.

An initial report, presenting the results of desk-based research and literature review, was provided to the Skii km Lax Ha for review and comment in July 2012, and comments were not provided at that time. An information interview with Skii km Lax Ha leadership took place on May 27, 2013. Additional TK/TU information and mapped data were provided by the Skii km Lax Ha on June 18, 2013. Subsequent to these events, this report was amended, and represents the proponent's understanding of Skii km Lax Ha interests, activities and land uses. This report has not been reviewed by the Skii km Lax Ha.

The Project is subject to an environmental assessment (EA) review under British Columbia's *Environmental Assessment Act* (BC EAA) and Canada's *Canadian Environmental Assessment Act* (CEAA). This report is intended to help Seabridge Gold Inc. (Seabridge) fulfill the requirements of the Project's Application Information Requirements issued by the BC Environmental Assessment Office (BC EAO) on January 31, 2011. Information from this report has been incorporated into the Application/Environmental Impact Statement (EIS) for the proposed KSM Project.

1.1 PROJECT PROPONENT

Seabridge Gold Inc. (Seabridge) is the proponent of the Project, a gold, copper, silver and molybdenum mine.

1.2 PROJECT OVERVIEW

1.2.1 Project Location

The Project is located in the coastal mountains of northwestern British Columbia. It is approximately 950 kilometres (km) northwest of Vancouver and 65 km northwest of Stewart, within 30 km of the British Columbia-Alaska border (Figure 1.2-1).

1.2.2 Overview

The Project is located in two geographical areas: the Mine Site and Processing and Tailing Management Area (PTMA), connected by twin 23-km tunnels, the Mitchell-Treaty Twinned Tunnels (Figure 1.2-2). The Mine Site is located south of the closed Eskay Creek Mine, within the Mitchell, McTagg, and Sulphurets Creek valleys. Sulphurets Creek is a main tributary of the Unuk River, which flows to the Pacific Ocean. The PTMA is located in the upper tributaries of Teigen and Treaty creeks. Both creeks are tributaries of the Bell-Irving River, which flows to the Nass River and into the Pacific Ocean. The PTMA is located about 19 km southwest of Bell II on Highway 37.

The Mine Site will be accessed by a new road, the Coulter Creek Access Road, which will be built from km 70 on the Eskay Creek Mine Road. This road will follow Coulter and Sulphurets creeks to the Mine Site. The PTMA will also be accessed by a new road, the Treaty Creek Access Road (TCAR), the first 3-km segment of which is a forest service road off of Highway 37. The TCAR will parallel Treaty Creek.



Figure 1.2-1

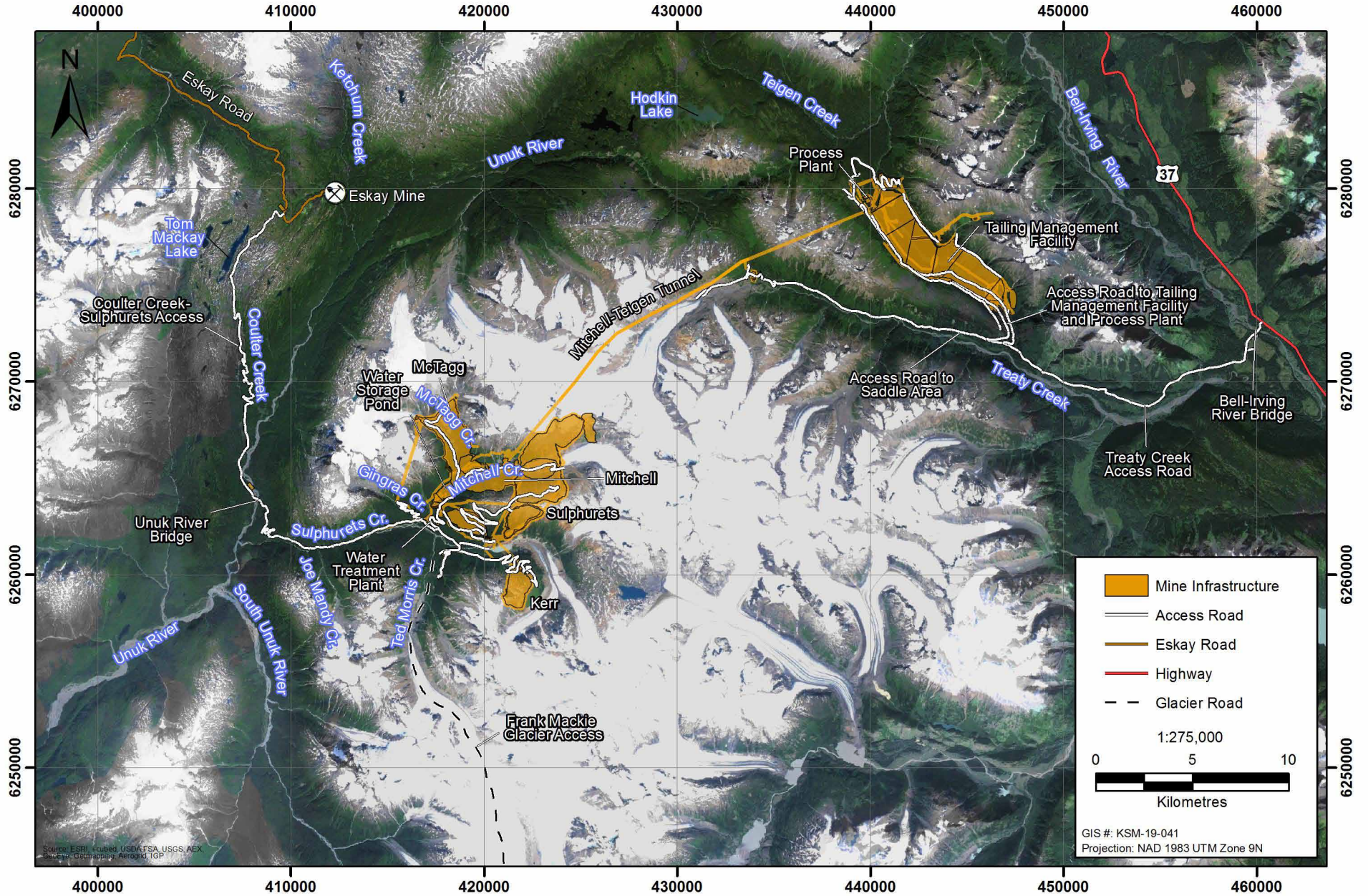


Figure 1.2-2

Figure 1.2-2

Four deposits will be mined at the KSM Project—Kerr, Sulphurets, Mitchell, and Iron Cap—using a combination of open pit and underground mining methods. Waste rock will be stored in engineered rock storage facilities located in the Mitchell and McTagg valleys at the Mine Site. Ore will be crushed and transported through one of the Mitchell-Treaty Twinned Tunnels to the PTMA. This tunnel will also be used to route the electrical power transmission lines. The second tunnel will be used to transport personnel and bulk materials. The Process Plant will process up to 130,000 tonnes per day of ore to produce a daily average of 1,200 tonnes of concentrate. Tailing will be pumped to the Tailing Management Facility from the Process Plant. Copper concentrate will be trucked from the PTMA along highways 37 and 37A to the Port of Stewart, which is approximately 170 km away via road.

The mine operating life is estimated at 51.5 years. Approximately 1,800 people will be employed annually during the operation phase. Project construction will take about five years, and the capital cost of the Project is approximately US\$5.3 billion.

1.3 SKII KM LAX HA AND GITXSAN

The Skii km Lax Ha estimate that it has approximately 15 to 30 members, most of whom live off-reserve in Hazelton and New Hazelton (D. Simpson, pers. comm.). Hazelton is approximately 450 km south of the KSM Project, and 71 km northwest of Smithers. The Skii km Lax Ha do not reside on any Indian reserves.

The definition of First Nations in the KSM Project Section 11 Order issued pursuant to the BC EAA on November 6, 2009 refers to “...the wilps of the Gitksan First Nation (as identified by the Gitksan Hereditary Chiefs Office), including, but not limited to, wilp Skii km Lax Ha”. The Gitksan Treaty Society (GTS) has confirmed that with respect to land and resource matters, the Skii km Lax Ha are to be consulted as the proposed Project has the potential to impact land and resource use within Skii km Lax Ha territory (Sebastian and Sampare, pers. comm.). The GTS advised that engagement of the broader Gitksan community on land and resource matters is not required unless the Skii km Lax Ha requests their input.

Figure 1.3-1 identifies Skii km Lax Ha and Gitksan Nation traditional territory in relation to the Project.

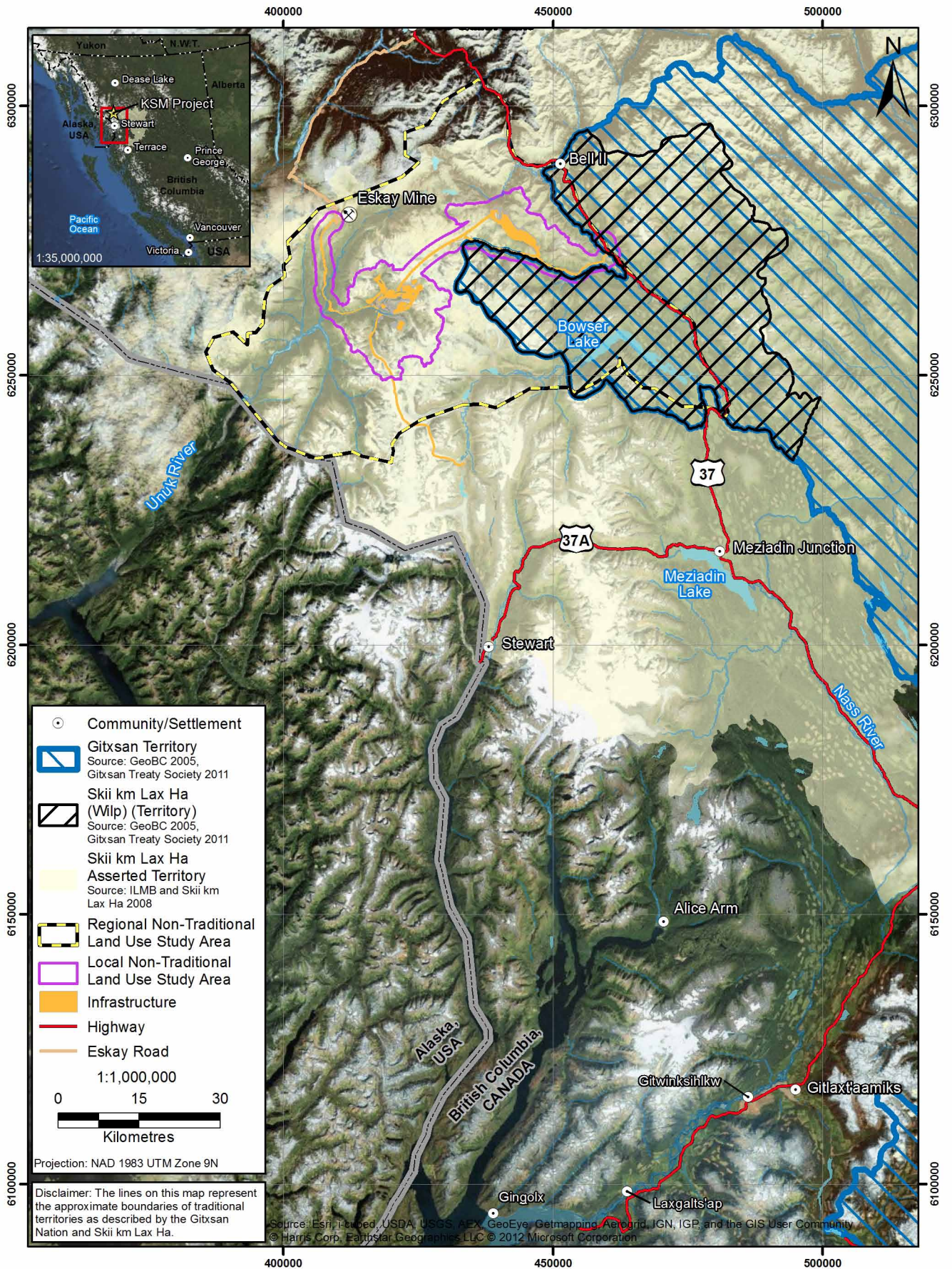


Figure 1.3-1

2. Purpose

Traditional Knowledge and Traditional Use (TK/TU) studies can provide important information on First Nations' interests and elucidate technical, academic, and indigenous information about the traditional and contemporary use and knowledge of the Project and surrounding areas. The overall purpose of the collection of TK/TU information is to document and understand the pre-contact, historic and contemporary Skii km Lax Ha activities, practices and uses of the Project area.

3. Methodology

3.1 APPROACH

The overall approach for the study involved a desktop review of available ethnographic information for both the Skii km Lax Ha and the Gitxsan Nation as well as northwest British Columbia. This included a review of other EA Applications containing information regarding the Skii km Lax Ha, such as the Application for the Northwest Transmission Line (NTL) project (Rescan 2009). Further information was provided by the Skii km Lax Ha through an interview conducted on May 27, 2013 in Vancouver, BC. Additional information was provided by the Skii km Lax Ha in the form of shapefiles and mapped data on June 18, 2013. Information from all of the sources noted above have been incorporated into this report.

3.2 STUDY AREAS

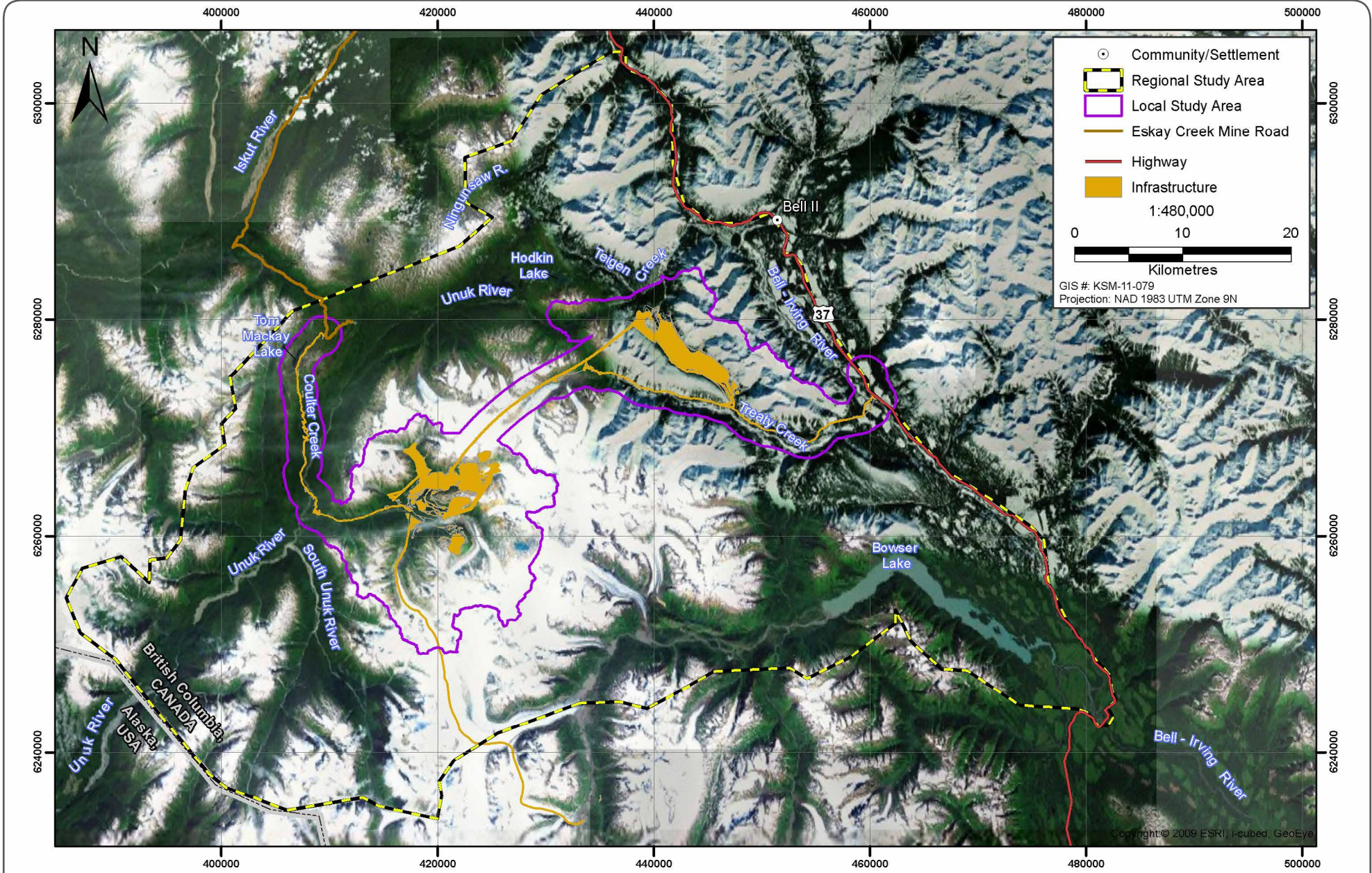
The information collected for this report covers two study areas: a Regional Study Area (RSA) and a Local Study Area (LSA). The LSA is defined as the area that will be directly disturbed by the activities associated with the mining. Specifically, the LSA is defined by a buffer extending at least to the height of land or 1.5 km around the outer limits of the proposed infrastructure and linear developments, whichever comes first (Figure 3.2-1). The LSA provides a representative area that allows the assessment of potential direct impacts associated with the Project and covers approximately 55,187 hectares (ha).

The RSA is 338,008 ha in size and follows the same boundary as the RSA used for Wildlife and Terrestrial Ecosystems baseline studies (Figure 3.2-1). Both human land and resource uses and wildlife activities are influenced by terrain. Consequently, naturally occurring barriers (e.g., major mountain ranges and watersheds) define subsets of different human land use and movement (i.e., trapping, hunting, guide outfitting, etc.). The RSA took into account the area that provides habitat for wildlife species that may come into contact with proposed Project infrastructure during the course of a season or a lifetime. The boundaries consider other ecological factors, including distinctive ecosystems, the species with the largest habitat range, and natural landform barriers (such as mountain ranges) beyond which effects diminish considerably.

Data from publically available sources, such as the NTL Project EA Application (Rescan 2009), was used to triangulate the mapped data provided by the Skii km Lax Ha for the Project on June 18, 2013. As different study areas were used for the NTL Project, some of the data collected for this project falls outside of the KSM RSA but is included in this report to provide a comprehensive picture of Skii km Lax Ha traditional and current land use.

3.3 DESKTOP ETHNOGRAPHIC INFORMATION COLLECTION AND ANALYSIS

Bibliographic and internet sources, including *adaawks* (oral histories), were searched to identify references for applicable ethnographic information. Topics for information collection included cultural setting (history, social organization, family and kinship, and language use), economic life, subsistence strategies, and spiritualism and ceremony. Identified journal articles, books and book chapters, reports and proceedings, as well as information from government and organization web sites, were reviewed. The analysis included studying pre-contact culture and historic patterns that occurred in northwest British Columbia through to the present. A list of these references is provided at the end of this report.



○ Community/Settlement
 [Dashed Yellow Line] Regional Study Area
 [Purple Line] Local Study Area
 [Yellow Line] Eskay Creek Mine Road
 [Red Line] Highway
 [Yellow Shaded Area] Infrastructure
 1:480,000
 0 10 20
 Kilometres
 GIS #: KSM-11-079
 Projection: NAD 1983 UTM Zone 9N

Figure 3. & 1

Figure 3.&1

Publicly available documents produced for EAs for other Projects were also reviewed for TK information relevant to the Skii km Lax Ha. Based on the results of the review, an analysis and synthesis of the available ethnographic information was prepared.

The Skii km Lax Ha were provided with a draft report of desk-based research for their review and input in July 2012. No comments were received on the desk-based research report.

3.4 PRIMARY SOURCE INFORMATION

To understand how historic and current uses, practices and customs may interact with the Project, the Skii km Lax Ha were engaged to conduct TK/TU studies. An attempt to draft a work plan and funding agreement with the Skii km Lax Ha early in the pre-Application process was unsuccessful. However, the Skii km Lax Ha leadership participated in a semi-structured interview in May of 2013. This interview included questions relating to country foods consumption; use of registered trapline territories; Skii km Lax Ha observations on changes to traditional use patterns; Skii km Lax Ha observations on environmental changes in their harvest areas; navigation; and issues and concerns regarding the Project's potential impact on the exercise of their traditional activities. The interview was audio recorded, and maps were provided to frame the discussion relative to Project infrastructure and development.

Additional traditional and current land use information relative to the LSA and RSA was compiled by the Skii km Lax Ha and provided to Rescan in the form of mapped shapefile data on June 18, 2013. This information was incorporated into the report.

3.5 DATA CHALLENGES AND LIMITATIONS

3.5.1 Desktop Information and Ethnographic Research

Historical secondary ethnographic information from published sources has limitations and should not be considered conclusive or complete, or necessarily reflective of the values, interests, and concerns of Aboriginal groups in the vicinity of the Project. Ethnographic observations were recorded by Euro-Canadians in the 18th, 19th and 20th centuries; these observations were largely informed by a western worldview. Nevertheless, this work provides important accounts into daily life, social and political structures, and subsistence methods employed by members of the related Aboriginal groups. Similarly, Aboriginal groups typically transmitted their history through oral stories (*adaawks*) which, though they may not provide complete accounts of past use and traditions, are still important sources of information, particularly from the point of view of the Aboriginal groups who lived in the area.

Historical and cultural overviews provide useful information, but are often broadly scoped, providing information about culture, land use, and travel with relatively few details regarding specific locations within the Project area. In addition, there is little literature readily available to describe aspects of the Skii km Lax Ha's social and heritage existence.

3.5.2 Primary Source Information Interview/Mapping

Oral interview information, while indispensable as a source of information on the local environment, is representative of information at a specific point in time. The context and nature of the study determines the level and types of information the knowledge holder is willing to disclose. Moreover, information may be incomplete as interviewees may have trouble remembering specifics about certain time periods, places, or activities during the course of an interview. Finally, interviews are by their very nature anecdotal, and may provide limited insight in terms of statistical data regarding use or observations. Nevertheless, results of interview and mapping sessions are crucial to forming a comprehensive picture of Skii km Lax Ha's use of their traditional territory over space and time.

4. Results

4.1 ETHNOGRAPHIC OVERVIEW

4.1.1 The Tsetsaut

The Skii km Lax Ha people identify themselves as descendants of the Raven Clan of the Laxwiiyip or Eastern Tsetsaut (D. Simpson, Pers. Comm.). Boas (1895) translates Laxwiiyip as “on the prairie”, referring to their territory - the plateau at the headwaters of the Stikine, Nass, and Skeena Rivers. Boas (1895) states that “Tsetsaut” is a Tsimshian word meaning “those of the interior”, applied by the Gitxsan and Nisga’a indiscriminately to the Athapaskans that inhabited territory north and northeast of themselves. The Tsetsaut language is part of the Northern variant of the Athapaskan language family.

4.1.2 Traditional Territory

The Skii km Lax Ha assert their territorial boundary in northwest BC to extend from the north side of the Cranberry River in the south, to Beaver Pond in Ningunsaw Pass in the north. The traditional territory’s total area is approximately 19,800 km². Skii km Lax Ha territory is described as “running 40 miles north and south of Bowser Lake” (Simpson and Latz 1934; Mortimer 1938). A map of their traditional territory submitted to BC’s Integrated Land Management Bureau in 2008 (Figure 4.1-1) shows the eastern boundary of their territory running from the upper Klappan River drainage in the north, down the Skeena River and the Groundhog Range of mountains, then along the Slowmaldo Pass to Blackwater or Damdochax Lake. It then runs southwest along the Nass River to Sallysout Creek, taking in Mount Skuyhil and the Kwinageese Valley, to the Kispiox River, then crossing over to Cranberry River. From here the boundary runs northwest across the Cambria Icefield to the town of Stewart, incorporating the upper Nass River, White River and Meziadin Lake. It continues northwest to the upper Unuk River, then follows the Unuk to its source. It skirts around the outer edge of Teigen Lake, incorporating the entire Bowser River and Lake Valley, and the Bell-Irving River, and meets up with the Ningunsaw Pass.

Figure 1.3-1 identifies Skii km Lax Ha traditional territory in relation to the Project. All major components of the proposed Project infrastructure lie within the area claimed by the Skii km Lax Ha. It should be noted that, although the area attributed to *wilp* Skii km Lax Ha is also included within the larger traditional territory of the Skii km Lax Ha (Figure 1.3-1), the Skii km Lax Ha do not recognize the boundaries of the *wilp* territory.

The landscape of Skii km Lax Ha traditional territory is mountainous and the habitats range from coniferous forests and areas with thick underbrush, as well as smaller subalpine open areas and alpine tundra, and steep rugged landforms surrounded by glaciers. Black bear, grizzly bear, moose and mountain goat are common in this area, especially in subalpine parkland areas around Todedada Lake, upper Scott Creek, and upper Wildfire Creek. Fur-bearing species such as marten, fisher, wolverine, and red squirrel are also common in upland areas. Common vegetation includes Alaskan blueberries and black huckleberries, though in alpine areas with little soil formation, dwarf willows, grasses, sedges, and lichens are more common (Meidinger and Pojar 1991; Daly 2005; Meidinger and MacKenzie 2006). The climate within Skii km Lax Ha traditional territory is characterized by high precipitation levels and deep snow packs.

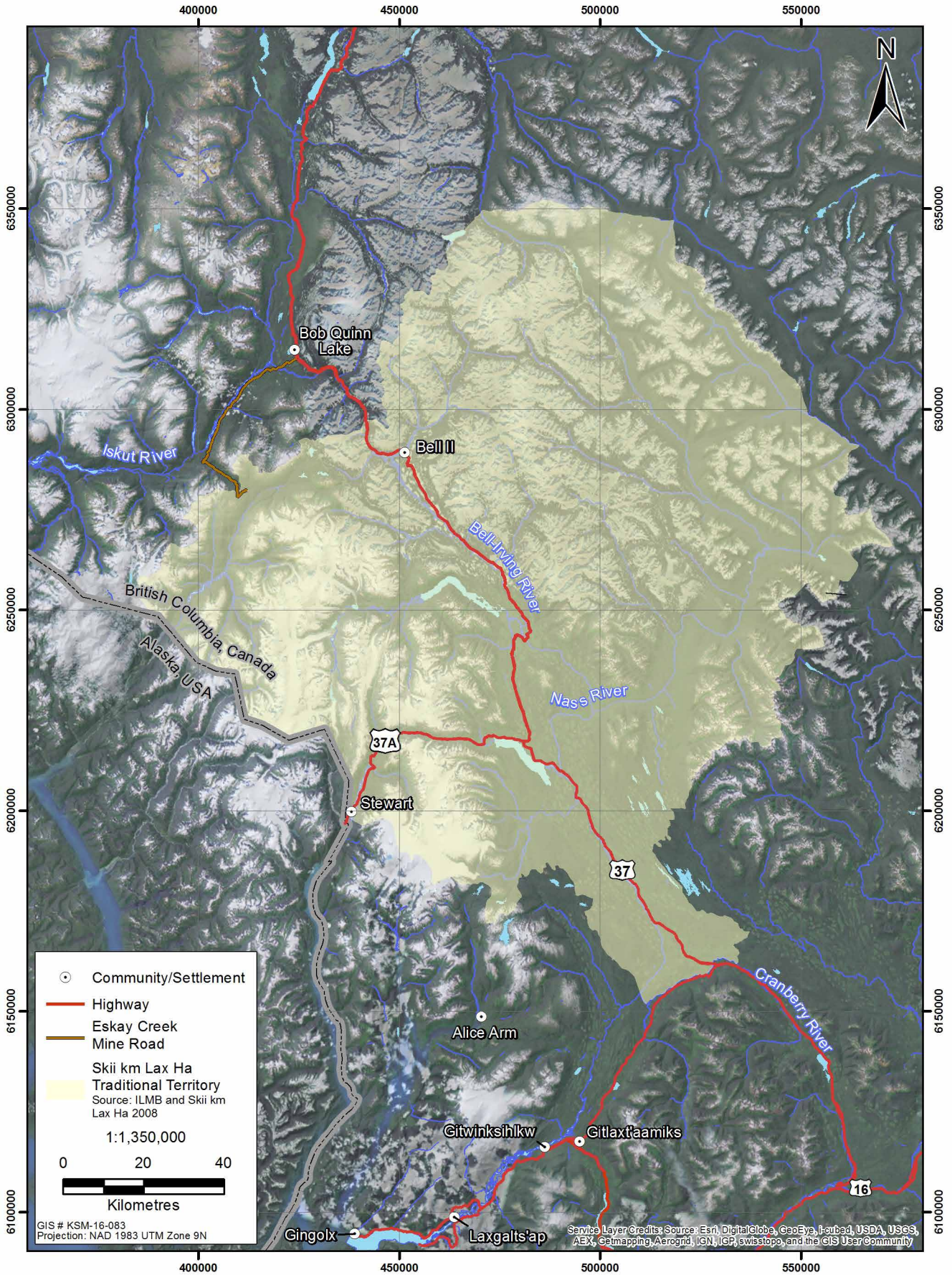


Figure 4.1-1

4.1.3 Language

The Skii km Lax Ha have indicated that previous generations spoke the Tsetsaut language, also known as *Wetalh*, a northern dialect of the Athapaskan language family (FPHLCC n.d.). The language is no longer spoken and is thought to be extinct (N. J. Sterritt et al. 1998). It was studied by the ethnographer Franz Boas, who succeeded in collecting a fragmentary amount of linguistic information (Boas 1895; Boas and Goddard 1924; Duff 1981). Linguists who have studied this information have described Tsetsaut/*Wetalh* as one of the most divergent of all the Northern Athapaskan languages, and more similar to the Han and Kutchin of the Yukon than its immediate Athapaskan neighbours, the Tahltan and Kaska (Krauss and Golla 1981).

Today, English is the predominant language spoken by the Skii km Lax Ha, though some of their members can speak the Gitksan language as well (D. Simpson, Pers. Comm.).

4.1.4 Social Organization

Tsetsaut social organization would have resembled that of other Athapaskan groups in the Cordillera (McClellan 1981), prior to their penetration into areas inhabited by coastal peoples. By the time this penetration was complete, however, they had copied their neighbours in carving out territories for each kin group rather than devising shared territories. Duff (1981) states that the Tsetsaut had been divided into two matrilineal exogamous clans, Eagle and Wolf. Emmons (Emmons 1911), on the other hand, stated the Tsetsaut originally claimed three totemic families - Wolf, Eagle, and Raven. By the time of Boas' 1894 field work the Eagle clan was extinct, and the Wolf clan maintained exogamy by marrying members of foreign tribes. Barbeau and Beynon (1950), however, showed that the Eastern Tsetsaut (or Laxwiiyip) were descended from the Raven clan, from which the present-day Skii km Lax Ha claim descent.

The kin group or "house" was the basic social unit of the Tsetsaut, as well as that of their neighbours, the Nisga'a and Gitksan. A "house" was a corporate matrilineage, the members of which, together with spouses, children belonging to other lineages, and slaves, occupied one or more dwellings. Houses fluctuated widely in size, and hence in productivity, at times resorting to adoption to prevent extinction, at other times growing so large that they split into two or more separate houses (Halpin and Seguin 1990). Each house owned hunting and gathering territories which were exploited at the direction of the house chief. Being a matrilineage, possession of a house's territory passed through the female line. Succession to a man's names and position went in theory to a brother, or to a sister's son (Garfield 1939), and not his own children, since they obtained their names from their mother's line. Matrilineal succession was confirmed by Boas in his work with the Western Tsetsaut (Boas 1895).

Important features of the house system, which reinforce the common understanding of history, house territory boundaries, status, and names, include oral history, laws/crests, totem poles, and songs. The house system serves an important social organizing function and is supported by feasting. Oral histories contain key historical events for the house, which are recounted in the context of feasts to reinforce house title.

Totem poles are a significant visual indication of house title and provide an account of a house's history (Halpin and Seguin 1990). The totem pole of Skii km Lax Ha and Gyetem Galdo in Hazelton (Plate 4.1-1) are those which narrate the Skii km Lax Ha people's possession of their history and title (Rescan 2009).

The Skii km Lax Ha recognize four remnant Tsetsaut houses from which they claim descent, and all trace their ancestry to the Raven clan. They are Gyetem Galdo, Skawill, Ksemgunqweek, and Skii km Lax Ha (Rescan 2009). Barbeau had stated that the first three were extinct (Barbeau 1910-1969); however, Skii km Lax Ha informants state that Skawill and Ksemgunqweek were amalgamated with the Skii km Lax Ha in the post-contact era. Gyetem Galdo remains separate and is affiliated with the Gitksan Hereditary Chiefs in their treaty negotiations with Canada and BC (Rescan 2009).



Plate 4.1-1. Gyetem Galdo (Ski km Lax Ha) totem pole, Hazelton.

A detailed genealogy of the Skii km Lax Ha is presented in a TK/TU study carried out as part of the EA for the NTL Project (Rescan 2009). Descent is matrilineal, but Skii km Lax Ha indicate that several factors have interrupted the Aboriginal system of transfer of names, including re-marriage, polygamy and the patrilineal-oriented trapline registry that followed contact with Euro-Canadians (Rescan 2009).

4.1.5 Spiritualism and Legends

Boas (1896, 1897) recorded many traditions of the Tsetsaut during his brief time with them. Mountain goat and marmot play prominent roles in their stories, and the transformation of humans into animals (and vice versa) indicates the connection that the Tsetsaut had with their immediate surroundings. The animals also brought the weather from the sky. Physical or spiritual cleansing of individuals is also a common theme. In order to secure good luck in hunting, for example, hunters fasted and washed their bodies with gingerroot (wild ginger) for three to four days and abstained from female contact for two to three months. They also drank concoctions of devil's club to purify themselves. The tail feather of an eagle was used in shamanistic ceremonies to cure patients of physical or spiritual sickness (Boas 1895).

One legend recounts how a Tsetsaut woman and her child went to the headwaters of the Nass River, where they still continue to live on a lake (Boas 1895). In another version of the legend, the woman made a rock resembling her shape at the source of the Unuk River, and can still be seen today (Boas 1896). This legend indicates a spiritual connection of the Tsetsaut with these places, and provides further understanding of territorial boundaries.

4.1.6 Traditional Economy

As the Tsetsaut ethnographic group became assimilated into other Aboriginal groups in the early 20th century, there is little readily available information on the Tsetsaut annual round of resource harvesting. Boas (1895) makes it clear that the Western Tsetsaut economy was based on inland game hunting. Only in the summer when they descended the rivers to Portland Inlet did they take any salmon, drying their excess catch for winter use. He mentions in a legend, also, how the Tsetsaut went up Portland Inlet to catch oolichan in the spring. Their principal food was the marmot, though they also relied on mountain goat, bear, and porcupine. In the winter, the Western Tsetsaut lived to a great extent upon meat dried during the summer months, primarily marmot. It was mixed with marmot grease, boiled and preserved in marmot intestine for future use (Boas 1895).

The Eastern Tsetsaut would have been more reliant on salmon than their western kin, as they occupied areas along the Bell-Irving River and Meziadin Lake, which contained plentiful salmon stocks (Neil J. Sterritt et al. 1998). George Derrick in his 1924 interview with Barbeau and Beynon stated that they caught spring and sockeye salmon at Meziadin Lake and “used hooks to spear the salmon” (Barbeau and Beynon 1950). Fishing also occurred throughout the lake itself using drift nets or gaff hooks from a canoe.

The Tsetsaut commonly employed deadfalls to snare marmot (Duff 1981). Porcupines were hunted at night with lances, clubs or arrows. The Eastern Tsetsaut used nets for hunting rabbits, but the Western Tsetsaut did not (Boas 1895). The Tsetsaut also employed the sinew-backed bow when hunting large game (Duff 1981). The skins of mountain goat, bear and marmot were used for quilts and blankets. Mountain goat horn was used to make spoons. The Tsetsaut never ate the head of a mountain goat as they believed doing so would turn their hair grey prematurely (Boas 1895). Marmot skins were used for clothing and boots, as well as mountain goat and beaver, and porcupine quills were used for embroidery (Boas 1895). One of the legends recounted by Boas notes how the Tsetsaut hunted mountain goats at the head of the Unuk River (Boas 1897).

The collection of vast quantities of salmonberries, and mixing them with bear grease to preserve them, was noted in a legend recorded by Boas (1896).

Cedar bark was used to make bed mats. Arrow shafts were made from yellow cedar and winged with eagle feathers. Yellow cedar bark was also used to make canoes, though they were not often used. Baskets, made of spruce roots and bark, were used for cooking and carrying water, berries and other kinds of food. Yew wood was used for making bows for hunting and for firedrills. Beaver skin was cut into strips and twisted to make the sting for the firedrill. Beaver skin was also used for the netting of snowshoes (Boas 1895).

While harvesting methods have changed over time, activities such as fishing, hunting, trapping and plant/berry harvesting are still important to the Skii km Lax Ha and are outlined in section 4.2.

4.2 TRADITIONAL AND CURRENT USE OF LAND AND RESOURCES

This section describes Skii km Lax Ha current as well as pre-contact and historic use of land and resources in or near the Project area. The information is based in part on the findings in the NTL TK/TU report (Rescan 2009) as well as preliminary interview data. Contemporary and traditional use maps from the NTL TK/TU study were examined to identify sites within or near the Project. Sites within and directly adjacent to the Project area are identified in Section 4.3, Figures 4.3-1 through 4.3-6, and Tables 4.3-1 through 4.3-4. Sites are also described and referenced in the text, with relevant site numbers listed in parentheses.

4.2.1 Country Foods Consumption

The whole of Skii km Lax Ha traditional territory is important to Skii km Lax Ha people for food. As one knowledge holder explained “...this territory is my food bank and this is where I - when I’m up against it, this is where I’m going to go” (Rescan 2009).

According to a country foods survey completed by the Skii km Lax Ha in 2013, the animals most utilized by the Skii km Lax Ha are moose and salmon. All parts of a moose are utilized, and eaten two or three times per week. In 2009, it was reported that Skii km Lax Ha would harvest up to 15 moose in a season, to feed their immediate and extended families (Rescan 2009).

Chinook and sockeye salmon are also eaten two to three times per week, though at certain times of the year may be consumed at every meal. The meat, head and bones of the salmon are consumed. Both moose and salmon are consumed throughout the year.

Black bear is consumed fresh in the spring, and also processed into sausage for consumption in the fall and winter. In recent years, beaver and hoary marmot have been harvested for their skins only, although their meat was consumed in the past. Dolly Varden and Steelhead trout are consumed on occasion (less than once per week) and only the meat of these fish is consumed. Oolichan is utilized for its grease, and is consumed two to three times per week with dried meat.

Use of birds is not as intensive as that of fish or land mammals. Ducks are consumed approximately two or three times per month, while grouse, ptarmigan and Canada geese are occasionally consumed. Berries make up the majority of wild plants currently consumed by the Skii km Lax Ha. Soapberries are the most important plant in terms of consumption, being consumed daily. Blueberries (all types) are consumed two to three times per week, and notably are consumed during feasts. The berries as well as the juice of bog cranberries are consumed occasionally (less than once per week). The inner bark of devil’s club is intensively consumed in the springtime, as much as four to five times per week.

4.2.2 Fish

Fishing is historically described as an important activity undertaken by Tsetsaut. For example, the Tsetsaut people were known to fish at a village along the Nass River, where a tributary joins the main river at a large waterfall. The people caught spring and sockeye salmon, using “hooks to spear the salmon” (Barbeau and Benyon 1950a).

Fishing for salmon, steelhead and trout continues to be an important Skii km Lax Ha activity today. Summer is the main season for fishing. Current fishing areas include Oweegee Creek, Cranberry River and Meziadin Lake. It was reported that as much as 80% of the salmon that ascend the Bell-Irving River spawn in the Awijjii (Oweegee) system (i.e. Oweegee Creek, Skowill Creek and Oweegee Lake; D. Simpson, Pers. Comm., 2013). However, the Cranberry and Meziadin locations have fresher fish, as they are closer to the coast. Fish that reach Bowser Lake are worn out and thus not as desirable (Rescan 2009).

Preferred Skii km Lax Ha fishing locations include the Cranberry River (for spring salmon), the west side of the Bell-Irving River (for steelhead), the confluence of Treaty Creek and the Bell-Irving River, as well as the confluence of Snowbank Creek and the Bell-Irving River (for spring salmon). Steelhead and rainbow trout are fished along the Bell-Irving River between Treaty and Wildfire creeks (site 7064). A net is used to catch fish (Rescan 2009).

4.2.3 Hunting and Trapping

Hunting and trapping is historically and currently important to the Skii km Lax Ha. Species hunted and trapped by the Skii km Lax Ha include caribou, moose, grizzly bear, black bear, grouse, rabbit, beaver, marten, wolverine, fisher, muskrat and hoary marmot (groundhog).

Historic

A review of the literature highlights some of the hunting and trapping activities conducted by ancestors of the Skii km Lax Ha in the recent past. For example, Cox (1958) reported that Simon Gunanoot's father taught Simon the law of the woods at Meziadin Lake, where the family spent five to six years trapping and hunting. Daniel Skowill held a 30 mile (48.2 km) long trapline in the Bowser Lake, Todedada Creek and Todedada Lake area. Between 1931 and 1932, the harvest from the line was reported as including 34 beaver, one fisher, seven marten and two muskrats (Province of B.C. 1929). Daniel Skowill is also said to have hunted at the head of the Nass (Barbeau and Benyon 1950b), an area which includes the Groundhog Range, Tsimanluuskeexs (see section 4.2.5) and the territory of Ksemgunqweek, which roughly translates as "groundhog hunting grounds" (Simpson 2007).

Some topographic features are named after Skii km Lax Ha ancestors who used the areas for hunting and trapping. For example, Skowill Creek was named after Daniel Skowill, whose winter camp was at Oweege Smokehouse, near the creek (BC GNIS 2010a). Mount Skowhill and Mount Skuyhil are named after Daniel Skowill, who had hunting rights in the Meziadin and Bowser Lake areas (BC GNIS 2010b, BC GNIS 2010c).

Current

Hunting and trapping continue to be important for Skii km Lax Ha sustenance. Several traditional use activities may be combined in one trip, such as hunting moose while trapping. Moose is an important contemporary food source and is the predominant animal hunted. Moose dew claws (or hooves) are collected and used in regalia, aprons and leggings. Groundhogs are important to Skii km Lax Ha history and regalia (Simpson, pers. comm. 2010). Black bear and grizzly bear are also hunted.

Based on interviews during the environmental assessment of the NTL Project, there are concentrated clusters of Skii km Lax Ha hunting and trapping sites around Meziadin Lake, Bell I, Bell-Irving River and Bell II (Rescan 2009). Current hunting and trapping areas are located along the Bell-Irving River valley between Ningunsaw Pass and Bowser River. The areas are described here from north to south, as per the sites in Tables 4.3-1 to 4.3-4. Grizzly bear and moose are hunted near Ningunsaw (7071). Grizzly bear, moose and wolverine are hunted in the wetlands near Oweege and Teigen Creeks (7070). Moose calving grounds and beaver trapping areas are located near Oweege Creek (7058). Grizzly bear are also known to occur in the area. Moose, bear and beaver are hunted and trapped along Bell-Irving River near Wildfire Ridge (7040, 7054). Moose, bear and marten are hunted and trapped in the wetlands at the mouth of Bowser Lake (7030). A rabbit snaring area is located near confluence of the Bowser and Bell-Irving rivers (7042). Hunting areas along the northeast flanks of Snowslide Range and northwards (7070 and 7071) are steep and prone to avalanches. As such, harvesters leave these areas by November (Rescan 2009).

Many goats are found along the glaciers of the Oweege Range, east of the Bell-Irving River and the Project area. The area also is home to two grizzly bear groups - one high alpine group and another group that fishes down on Oweege Creek (Rescan 2009).

Before 2009, the Skii km Lax Ha were active trappers (see section 4.2.3.1). One area they actively trapped was along the Highway 37 corridor for beaver, marten and wolverine. This trapline ran from

the Cranberry River to a Skii km Lax Ha cabin on Skowhill Creek. Wetlands are preferred trap locations (Rescan 2009).

4.2.3.1 *Registered Traps*

The Skii km Lax Ha currently hold three registered trapline areas (Figure 4.2-1). Two trapline areas overlap with Project infrastructure:

- TR 0616 T011 (Bowser Lake/Bowser River) was originally Daniel Skowill's trapline area, registered in 1929. Bob and Steven Skowill inherited the area upon his death in 1945. Martha Risdale inherited the trapline from them and she added Johnny Wilson (Skii km Lax Ha) to it, and then they both added Darlene Simpson to the trapline. Johnny Wilson passed away in 2005, and Martha Risdale passed away in 2012, leaving Darlene Simpson as the holder of the trapline. As the hereditary chief for the Skii km Lax Ha, Ms. Simpson has trapped this line for decades. Further, TR 0616 T013 (Treaty Creek) was previously owned by David Gunanoot, the son of Simon Gunanoot. It then passed to his nephew Gerry Gunanoot, and then Gerry's niece, Verna Benson from Gitanyow. Ms. Simpson purchased it from Verna Benson and in 2009 and amalgamated it with TR 0616 T011 so that it is now a single trapline area (M. Williams, Pers. Comm., 2010).
- TR 0617 T015 (Teigen Creek) is held by Shelly Johnson, a Skii km Lax Ha member. It was purchased some years ago, though no specific date was provided.

A third trapline, TR 0617 T013 (Taft Creek), is held by George Simpson, a Skii km Lax Ha member. This trapline is located to the east of the Project across the Bell-Irving River.

While traplines and harvesting are important to the Skii km Lax Ha, due to their recent involvement in a number of power and mineral exploration projects within their traditional territory, they have had no time to trap of late. Ms. Simpson, for instance, reported that she last trapped in her trapline area around 2009.

Marten (in higher areas), beaver (in marshy areas and lowlands) and wolf were generally trapped. Marten were typically trapped from October to December; the trapping season for marten would usually shut down in December as the fur gets too thick and bunched up, making them undesirable for pelts. As many as 160 marten were trapped in one year on TR 0616 T011. Wolves were trapped for their pelts and also to prevent them from preying on other trapped species. Beaver were trapped for their pelts but beaver meat was also consumed on occasion. Trapped animals were also used as bait for trapping other animals. Pelts sold from harvested furbearers would pay for the cost of the trapping trip, as well as for the year's moose hunt.

The Skii km Lax Ha typically moved traplines throughout a trapline area to avoid over-harvesting in one place. Traps were moved to a different watershed or valley, for instance, if they caught too many females or too many juveniles, to avoid disruptions to reproductive activities. If a particular area was over-harvested of one species, it would take a long time for that species to recover.

Skii km Lax Ha traplines are accessed by access roads, foot or snowmobile. Lots of beaver can presently be found on the Taft Creek (TR 0617 T013) and Teigen Creek (TR 0617 T015) traplines. The Skii km Lax Ha are not aware of anyone else trapping in their trapline areas; however, resident hunters have been known to poach in their trapping territory. According to interviews, poaching has decreased dramatically since the acquisition of these trapline areas, particularly poaching (of bears) by other Aboriginal people. However, resident hunters have been occasionally noted to pursue poaching within these areas.

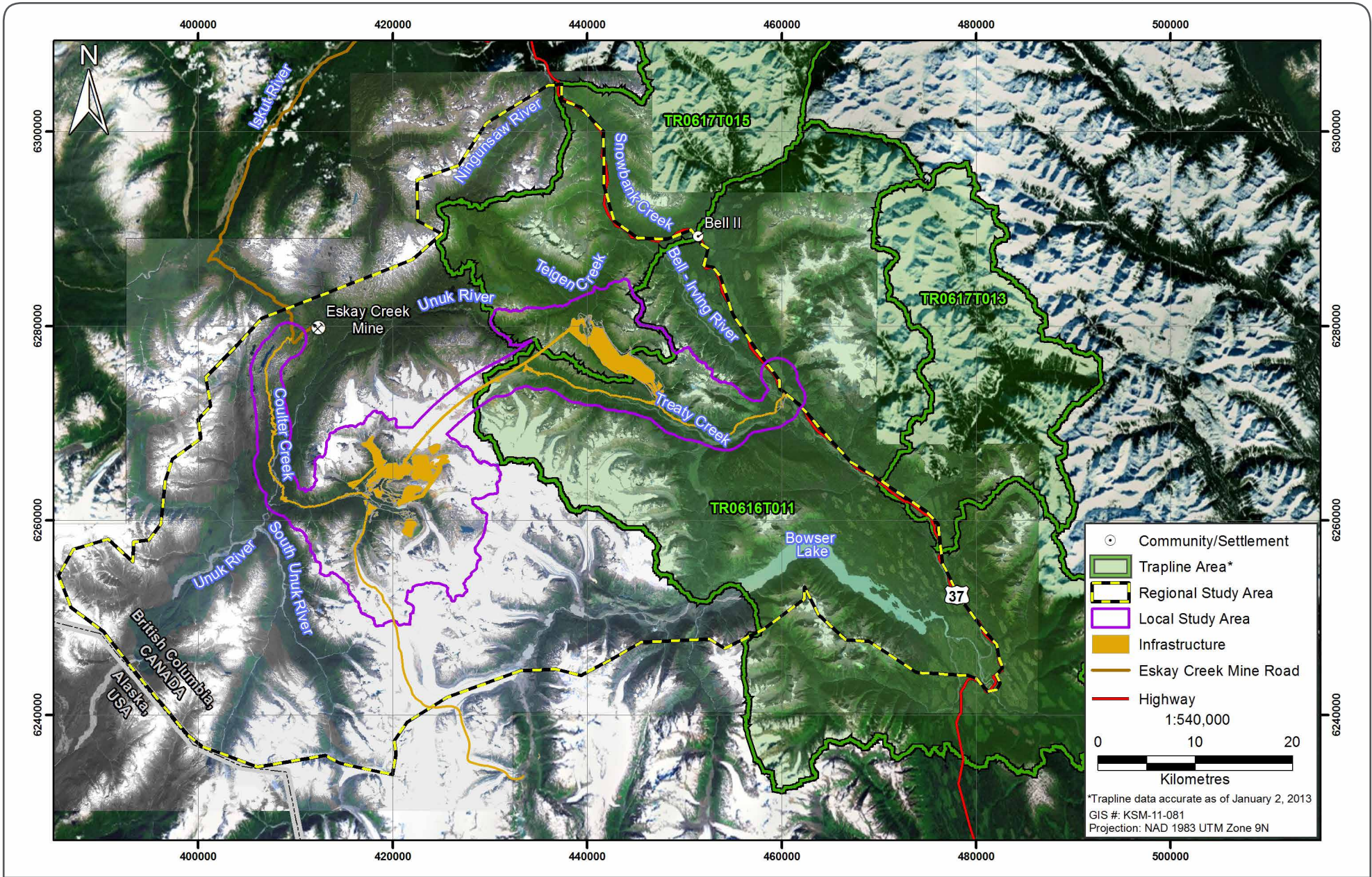


Figure 4.2-1

4.2.4 Plant and Berry Gathering

The Skii km Lax Ha used to conduct controlled burns to encourage the growth of berry patches, mostly on south facing hills (which get the most sunlight). One particular burn patch identified by the Skii km Lax Ha was along Bowser River near the Jeannette Creek cabin site. Controlled burns are no longer performed by the Skii km Lax Ha as they have been prohibited by the provincial government for decades (Gottesfeld 1994).

Skii km Lax Ha generally harvest berries along ridges on south-facing slopes. These berries are ready for harvest earlier in July or August. The success of the berry harvest is dependent on the weather during the previous winter (Rescan 2009).

Berry, plant and mushroom harvesting occurred, and still occurs, at numerous sites throughout the asserted territory. Nine contemporary berry and plant harvesting sites were identified within or near the Project area during research for the NTL project. Berry and plant collection areas include Ningunsaw (site 7071), the east side of Bell-Irving River north of Mehan Lake (7063), Spruce (Bell) Creek (7041), Oweege Creek (7058, 7063), Oweege Lake (7062) and Bowser Lake (7033).

Berries collected include huckleberries, blueberries, cranberries and soapberries. Cranberries are harvested around Bowser Lake. Soapberries are an important food, with harvesting success related to weather and temperature. Hot and dry weather causes the soapberries to ripen later in the season. The Oweege area is noted as a picking location for soapberries. Skii km Lax Ha collected soapberries and traded them for herring eggs and seaweed with members of Nisga'a Nation and the coastal Tsimshian (Rescan 2009).

Skii km Lax Ha have noted the presence of culturally modified trees (CMTs) in the Spruce (Bell) Creek, Hodder Lake, Beaver Pond Creek, Snowbank Creek and Meziadin Lake areas.

4.2.5 Villages and Cabin Sites

Skii km Lax Ha and several ethnographic sources describe a Tsetsaut village site named Tsimanluuskeexs, however there are discrepancies as to its location. Skii km Lax Ha understand the village site to be in the Groundhog Range/Blackwater area, while Sterritt et al. (1998) indicate the location is in the Bowser area, 80 km to the west. Barbeau and Benyon (B.F. 59.5, 61.3, 64.1, 61.8) place the village at the headwaters of the Nass and Skeena rivers in Groundhog Country.

The Meziadin Lake area at the head of the Nass was an important summer trading location, where neighbouring groups (Gitksan, Nisga'a and Tsetsaut) would gather during the summer to conduct annual trading (Barbeau and Benyon 1950b). This place is known in the oral histories as Laxanjok or Laxandzok, and was used by the Tsetsaut as a summer base camp for the procurement of salmon at the falls. Many skirmishes between the Gitanyow and Tsetsaut were fought here. Cox (1958) stated that Johnson Nagun lived at Meziadin Lake, where he fished and raised his son, Simon Gunanoot. The location of his cabin was most likely at the old village site of Laxanjok.

Daniel Skowill had cabins on Skowill Creek by Oweege Lake and on Bowser Lake (*Delgamuukw vs Queen*, cr-ex Gerry Gunanoot 1988). The cabins were used by people who ran traplines in the area. For winter trapping, supplies could be flown in and dropped off on Bowser and Gilbert Lakes.

In May 2000, the BC Ministry of Transportation and Highways contracted Skii km Lax Ha to research and map graves, sensitive areas, and possible archaeological sites adjacent to Highway 37N. One of the sites identified is the Oweege (Awijji) Village site, located between Highway 37N and the Bell-Irving

River. The site was used as a seasonal fishing camp, near an open meadow. Site investigations revealed pit house depressions, pit caches and three grave sites (Belford 2000).

Several historic and active camps and cabins were documented by Skii km Lax Ha during their interview and mapping sessions for the NTL project TK/TU study (Sites 7024, 7025, 7026, 7027, 7036, 7038, 7053, 7057, 7061 and 7069 listed in Tables 4.3-1 to 4.3-4). Historic cabins are located at Spruce (Bell) Creek, along Bowser River and Bowser Lake, along the Bell-Irving River near Wildfire Ridge, at Hidden Lake and north of Teigen Creek. For contemporary use, the cabin at Skowill Creek (7061) is of particular importance to Skii km Lax Ha. The Spruce (Bell) Creek cabin (7024) is also heavily used (Rescan 2009).

Burial sites near the Project area include the graves of Simon Gunanoot, his father and mother and two of his children, at Graveyard Point on Bowser Lake (7035); and a site near Bell I (7023) (Rescan 2009).

The Skii km Lax Ha are currently planning to re-build cabins at Todedada Lake, Gilbert Lake, and Taft Creek, and replacing the cabin they have along Teigen Creek with a new cabin. These cabins are and will be used on their resource harvesting excursions, where activities such as hunting, trapping and trout fishing are conducted on the same trip.

4.2.6 Trails and Travel Corridors

David Gunanoot's nephew, Gerry Gunanoot, described a travel route between Hanna Ridge and Stewart, passing along Hanna Ridge to the top of Meziadin Lake over a glacier, then about 14 miles to Stewart (*Delgamuukw vs. Queen*, cr-ex Gerry Gunanoot 1988). A camp location at Taft Creek, east of Bowser Lake, was also described by Gerry Gunanoot. The area was accessed on foot, by snowshoe and by snowmobile.

Historic travel routes included going from Prince Rupert and Stewart by boat, then hiking to Bowser and Awijjii, a trip which took two weeks. The journey from Bowser to Stewart required travel over a glacier (Sterritt and Risdale, 1980). In the winter, travel was facilitated with the use of snowshoes.

A 1926 report to the Assistant District Engineer, Department of Public Works, Province of BC recounting the reconnaissance survey of T.D. McLean describes an encounter with Simon Gunanoot, and provides evidence of Gunanoot's use and knowledge of the Bell-Irving and Teigen area. The report states that

"...right alongside Graveyard Point we discovered a freshly blazed trail, and having followed it we met a party of Indians camped on Bell-Irving River. These Indians, [Simon] Gunnanoot and party, have trapped in this country regularly for a number of years, and know it thoroughly. In the course of conversation with them they told me they did not think it feasible to build a trail up the west bank of the Bell-Irving, because as one approaches the Telegraph Line, the country is subject to very bad snowslides. They also told me of a canyon in the Bell-Irving that would afford a suitable bridge site. ...I found that the information given me by the Indians was amply verified. For 5 miles below the junction of the Salmon [Teigen] and Bell-Irving the snowslides run clear from the top of the mountains into the river and at times block it up; consequently it would be impossible to maintain a trail here ... [submitted by] T. D. McLean." (BC GNIS 2010d).

A series of historic trails were used extensively as a means of foot travel, connecting cabins and different hunting and trapping areas. Several trails were identified during Skii km Lax Ha interview and mapping sessions for the NTL project TK/TU study. Trails traversed along the Bell-Irving River and Bowser Lake; to Treaty Creek crossings and through Ningunsaw Pass; up Taft Creek to the Nass watershed; and to Teigen Lake. Some trails (such as those along Bell-Irving River and to Teigen Lake)

are still in use. Knowledge holders expressed interest in maintaining old trails and cutting new ones. Contemporary hunting and trapping activities utilize a series of cabins along an old Aboriginal trail, which is now Highway 37 (Rescan 2009).

The Skii km Lax Ha occasionally used canoes (and currently use motorized boats) in the summer along lakes and larger rivers (particularly Bowser Lake, Bowser River and the lower portion of Bell Irving River near its confluence with the Nass) to hunt bear and moose that forage near the banks. The use of boats would occur when water levels are high after the spring freshet. At all other times of the year, river travel would be limited because of the low water levels. Other creeks in their territory are considered too small to navigate. The upper Bell-Irving River could never be navigated because it is too braided and marshy. Rather, they used wooden rafts to cross the upper Bell Irving where it was shallow, particularly when crossing over from the mouth of Treaty Creek to Oweege Creek, or vice versa, during resource harvesting excursions. Crossing locations changed annually with river movements, though were generally in the same area where the river was braided and shallow with gravel and sand bars (Rescan 2009). In the winter, when the rivers froze, the Skii km Lax Ha could walk upon and cross the rivers unimpeded; in recent years, however, the rivers no longer consistently freeze over in the winter, making travel more difficult.

4.2.7 Changes to Traditional Use Patterns

The Skii km Lax Ha have observed that hunting and trapping near the Project area has decreased in recent years. They used to be the biggest harvesters in that area; when Ms. Simpson was young, for example, each of her family members subsisted on half a moose per year. Currently, neither hunting nor trapping are pursued due to the Skii km Lax Ha's involvement in the various proposed mineral exploration and energy production projects located in their traditional territory. Despite the decrease in hunting activity, however, the Skii km Lax Ha have noticed that moose numbers are still declining, and the congregations of moose are smaller than they used to be.

Skii km Lax Ha knowledge holders are familiar with wildlife population trends and movements, based on their observations during hunting and trapping. The knowledge holders indicated a recent increase in wolf and wolverine populations. Knowledge holders have observed deer and cougars moving into the Wildfire Ridge area north of Bowser Lake, as well as a high population of moose in the Cranberry area. Deer are found around Meziadin and are starting to move north of there (Rescan 2009).

In the past, goats inhabited the area around Spruce (Bell) Creek. Skii km Lax Ha believe the departure of goat from this area is due to helicopter-assisted mineral exploration and environmental survey work. Skii km Lax Ha are concerned about the impacts of helicopters on wildlife (goats and bears) during mineral exploration and environmental surveys (Rescan 2009). Poaching was identified by the Skii km Lax Ha as an issue in and around Awijii Lake, Meziadin Lake and Bear Pass (Rescan 2009), as well as within their trapline areas (see section 4.2.3.1).

It was noted that, as a result of the number of work camps in the area, furbearers are moving away from areas where the Skii km Lax Ha had traditionally set their traps, and into the camps themselves. Attractants range from odours produced from food and food waste, to noise and light produced by various activities at the camp. Consequently, the furbearers that enter the camps are either culled, transplanted to other areas, or kill each other over competing territory, thereby affecting potential future trapping activities. Further, many animals are killed at a time when their furs are immature and of little value.

Being diverted away from their traditional activities was noted as an ongoing concern as it prevents the Skii km Lax Ha from accessing and using the land and harvesting culturally important foods for their consumption.

A core resource harvesting area used to be along the NTL corridor within their traditional territory (between the Cranberry River and Ningunsaw Pass). The Skii km Lax Ha have noted that since construction of the NTL Project began, its usefulness as a harvesting area has declined dramatically. Increased access, hunting pressures and sensory disturbances were cited as causes.

According to the Skii km Lax Ha, fish harvests were also reported to have declined in recent years due to a decrease in fish quantities in the streams.

The use of controlled burns to create productive berry patches was curtailed decades ago, so the Skii km Lax Ha resorted to picking berries in areas that had been clear cut. However, since the Skii km Lax Ha are prohibited from conducting controlled burns in their traditional territory, the clear cuts have grown back in, and the trees crowd out the berry bushes, making these areas unproductive. There are few natural forest fires in this area to produce berry patches, as the abundance of wetland and moist forest inhibit the ignition of natural fires.

The grandchildren are being taught their traditional ways of hunting moose, processing fish and picking mushrooms. However the Skii km Lax Ha do not believe in harvesting country foods for the sake of merely preserving tradition. If a country food is harvested, it needs to be consumed, and harvesting should be conducted only when the economic means are not available to purchase store-bought food. Due to the sensitivity of wildlife populations in the area (particularly moose), the Skii km Lax Ha believe in conserving the resource rather than killing wildlife needlessly.

4.2.8 Climate Change Observations

Skii km Lax Ha knowledge holders have observed changes in the climate (i.e., warmer temperatures) in their traditional territory over the last 20 years. The changes are evident in the quality of salmon, an increase in water temperature, and weather changes such as increased rain during the winter (Rescan 2009). Most streams are now unsafe to cross as they no longer freeze over. The Skii km Lax Ha noted that the Bell-Irving River does not freeze over anymore either, and is not safe to travel on in winter. Furthermore, the Skii km Lax Ha have noticed less snowfall from Cranberry River north to Meziadin. Snowfall is heavier north of Meziadin.

There are also more extreme flood events on the rivers in some years. One year a high water event on the Bell-Irving River cut a 70-foot chunk of river bank and washed away one of their cabins. Their cabin on Skowill Creek was almost washed away a few years ago. Lake levels in general however have been dropping. Oweege Lake, for example, has more weeds in it because the water level has dropped.

Skii km Lax Ha knowledge holders have observed an increase of parasites in fish, which they relate to climate change and warmer water temperatures. With colder water, fish are less likely to have parasites. Skii km Lax Ha have noted that salmon now contain more worms and lice, with some worms up to 30 cm long. More fish now also have a jaundiced colour (especially spring salmon), and well as a different taste and texture. Skii km Lax Ha have sped up the timing of processing their catch, due to increased rates of spoilage. Fish are now processed within a few hours of being caught, rather than the next day (Rescan 2009).

4.3 SIGNIFICANT SITES IDENTIFIED DURING THE NORTHWEST TRANSMISSION LINE PROJECT

This section summarizes Skii km Lax Ha sites within the KSM Project area that were identified during the NTL Project TK/TU study. The geographic extent of information is limited to the NTL study area, encompassing the eastern portion of the KSM Project area. As such, the information provides only a partial picture of Skii km Lax Ha use in relation to the KSM Project area. Further, sites identified during

the NTL Project TK/TU study are not necessarily all of the TK/TU sites that are known to or used by the Skii km Lax Ha (see section 4.4).

Contemporary and traditional knowledge and use sites are displayed in maps (Figures 4.3-1 through 4.3-6, as reproduced from Rescan 2009) and outlined in Tables 4.3-1 to 4.3-4. The tables are organized according to geographical region, with one table for each of Bell-Irving River, Bowser Lake, Bowser River and Snowbank Creek/Ningunsaw areas. Information in the tables is taken directly from Rescan (2009).

Table 4.3-1. Skii km Lax Ha Sites along Bell-Irving River Corridor, as Identified in the NTL Project TK/TU Study

NTL Site Number	Location	Past/Current Use	Site Type	Site Description
7002	Along Bell-Irving River	Past, Current	Trail, trapline	Old trail, trapline
7023	Near Bell I	Past	Gravesite	Burial site
7029	Along Bell-Irving River	Past	Camp	Peter Morrison's camp
7036	Along Bell-Irving River	Past	Cabin	Hunting and trapping cabin Moose area
7038	Hidden Lake	Past	Cabin	Cabin on Hidden Lake
7039	Along Bell-Irving River, near Wildfire Ridge	Current	Culturally modified trees	Culturally modified trees Area is logged
7040	Along Bell-Irving River, near Wildfire Ridge	Current	Hunting area, trapline	Good moose and bear hunting in winter and spring Beaver along Taft Creek Area is logged
7041	Spruce Creek On edge of KSM desk-based TK/TU Project area.	Current	Plant collection	Huckleberry picking at Spruce Creek.
7052	Along Bell-Irving River, north of Bowser River	Past	Cabin	Lean-to (Peter Morrison buried).
7053	Along Bell-Irving River, near Wildfire Ridge	Past	Cabin	Cabin (Peter Morrison, Skawill)
7054	Along Bell-Irving River, near Wildfire Ridge	Current	Hunting area, trapline	Moose hunting Beaver City
7057	Oweegee Creek	Past	Cabin	Daniel Skawill's smokehouse, 4-5 cabins, graves, split timbers, pots, pans
7058	Oweegee Creek	Current	Hunting area, Trapping, Plant collection, Fishing area	Moose calving grounds Trapping area Beaver Berries Fish
7059	Groundhog area, Treaty Creek and Ningunsaw Pass	Past	Trail	Trail easterly to Groundhog area; trail to Treaty Creek crossings and through Ningunsaw Pass (not depicted on map)
7060	Mehan Lake	Past	Cabin	Lean-to Culturally-modified trees Trapline in the area
7061	Skowill Creek	Current	Cabin	Heavily used cabin

(continued)

Table 4.3-1. Skii km Lax Ha Sites along Bell-Irving River Corridor, as Identified in the NTL Project TK/TU Study (completed)

NTL Site Number	Location	Past/Current Use	Site Type	Site Description
7062	Oweegee Lake	Current	Plant collection	Huckleberries, blueberries
7063	Bell-Irving, on outside edge of KSM desk-based TK/TU Project area.	Current	Plant collection, Hunting area	Huckleberries, blueberries Grizzly bear Moose hunting
7064	Along Bell-Irving, between Treaty and Wildfire Creeks	Current	Fishing area	Steelhead and rainbow trout fishing
7070	Oweegee-Teigen Creek	Current	Hunting area	Grizzly bear, moose and wolverine hunting in wetlands
7073	Skowill Creek	Unknown	Burial site	Burial site
7074	Oweegee Creek	Unknown	Burial site	Burial site
7075	Oweegee Creek	Unknown	Cabin / Camping site	Cabin / Camping site
7076	Oweegee Creek	Unknown	Cabin / Camping site	Cabin / Camping site
TBD	Surveyors Creek	Unknown	Cabin	Cabin- further information required by Skii km Lax Ha to map its location
TBD	Buffer	N/A	Occupancy Various	20 mile occupancy buffer as indicated by Chief Justice MacEachern in the <i>Delgamuukw</i> decision- further clarification required by Skii km Lax Ha.

Source: Rescan 2009

Table 4.3-2. Skii km Lax Ha Sites near Bowser Lake, as Identified in the NTL Project TK/TU Study

NTL Site Number	Location	Past/Current Use	Site Type	Site Description
7026	Bowser Lake	Past, Current	Cabin, Fishing area	Historical cabin, fishing site
7028	Bowser Lake	Past	Camp	Hunting and trapping camp
7033	Bowser Lake	Current	Plant collection	One of the better areas for cranberry, huckleberry and blueberry picking
7034	Bowser Lake	Past	Trails, Cabins	Trails along Bowser Lake to a cabin at Graveyard Point Branching trails to Hidden Lake over Mt. Anderson Remnants and cabins (not depicted on map)
7035	Bowser Lake	Past	Cabin, Burial site, Sacred area, Religious/ceremonial site	Graveyard Point Spiritual site, sacred area Graves belonging to members of the Gunanoot family

Source: Rescan 2009

Types of sites recorded include trails, camps, cabins, hunting, fishing and plant collection areas, traplines, animal breeding areas, one drinking water location, CMTs, burial sites, spiritual sites/sacred areas, historical sites and boundary areas. Twenty-one sites recorded during the NTL project lie along the Bell-Irving River corridor, with another three sites just bordering the Project area. Five sites are located around Bowser Lake. Eight sites lie in the Bowser River area, with a ninth site bordering the

Project area. Another five sites are found in the Snowbank Creek, Ningunsaw and Teigen Creek areas. Eighteen of the sites are currently used, including two on the edge of the Project area.

Table 4.3-3. Skii km Lax Ha Sites near Bowser River, as Identified in the NTL Project TK/TU Study

NTL Site Number	Location	Past/Current Use	Site Type	Site Description
7023	Bowser River	Past	Burial site	Grave site
7024	Bowser River	Past, Current	Cabin, Drinking water	Heavily used cabin at Spruce Creek; hunts and berries are documented on walls
7025	Bowser River	Past	Cabin	Historical cabin
7027	Bowser River	Past	Cabin	Paul's cabin
7030	Bowser River	Past, Current	Hunting area, Plant collection, Trapline	There are wetlands in the area "Moose alley" - particularly concentrated in fall and spring; bear in spring; marten Spruce Creek is a moose crossing area Huckleberries and cranberries Trap collection area
7031	Bowser River On border of KSM project TK/TU Project area.	Past, Current	Hunting area, Plant collection, Trapline	Similar to 7030 but not as good.
7032	Bowser River	Past, Current	Historical site, Hunting area	Areas burnt approximately 70 years ago to encourage berries Culturally modified trees Area has been logged on north side Moose hunting - heavy area, corridor, moose river crossing Wolves watch moose from the ridge Trail along the river Rabbit snaring
7042	Bowser River	Current	Hunting area	Rabbit snaring near the gravel pit and at the "bushy flat"

Source: Rescan 2009

Table 4.3-4. Skii km Lax Ha Sites near Snowbank Creek and Ningunsaw Area, as Identified in the NTL Project TK/TU Study

NTL Site Number	Location	Past/Current Use	Site Type	Site Description
7067	Ningunsaw area	Past	Historical site	Culturally modified trees on the ridge, from before 1846
7068	Teigen Creek and Lake/Ningunsaw area	Past, Current	Trail	Trail to Teigen Lake, beaver trapping
7069	Ningunsaw area	Past	Cabin	Cabin
7071	Ningunsaw Pass	Past, Current	Hunting area, Plant collection	Grizzly bear and moose hunting Some berry picking
7072	Ningunsaw area	Past	Boundary area, Breeding area	Buffer zone agreed upon by Bear Lake Sekani and Skii km Lax Ha in approximately 1897 Beaver breeding area that feeds Snowbank and Beaver Pond

Source: Rescan 2009

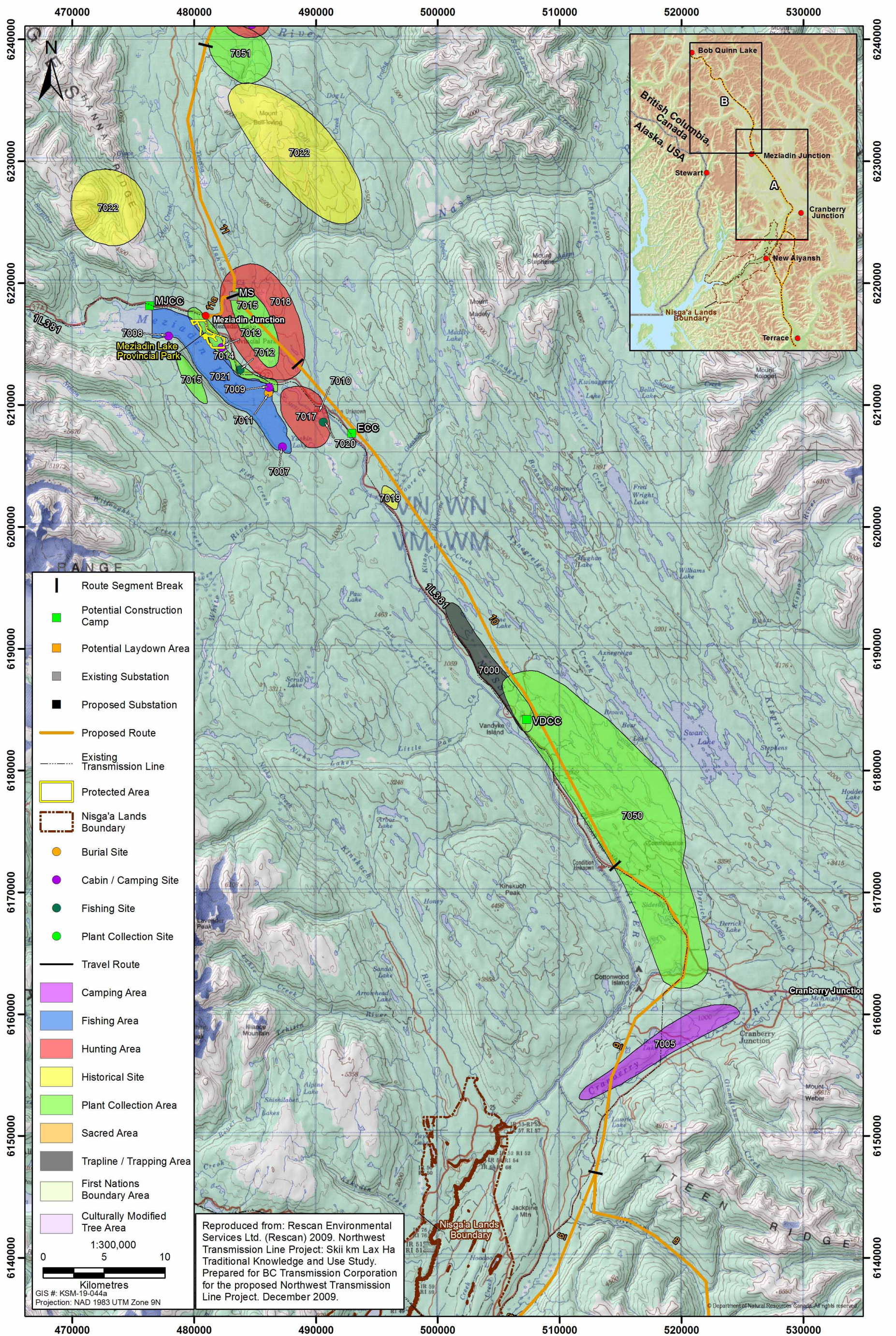


Figure 4.3-1

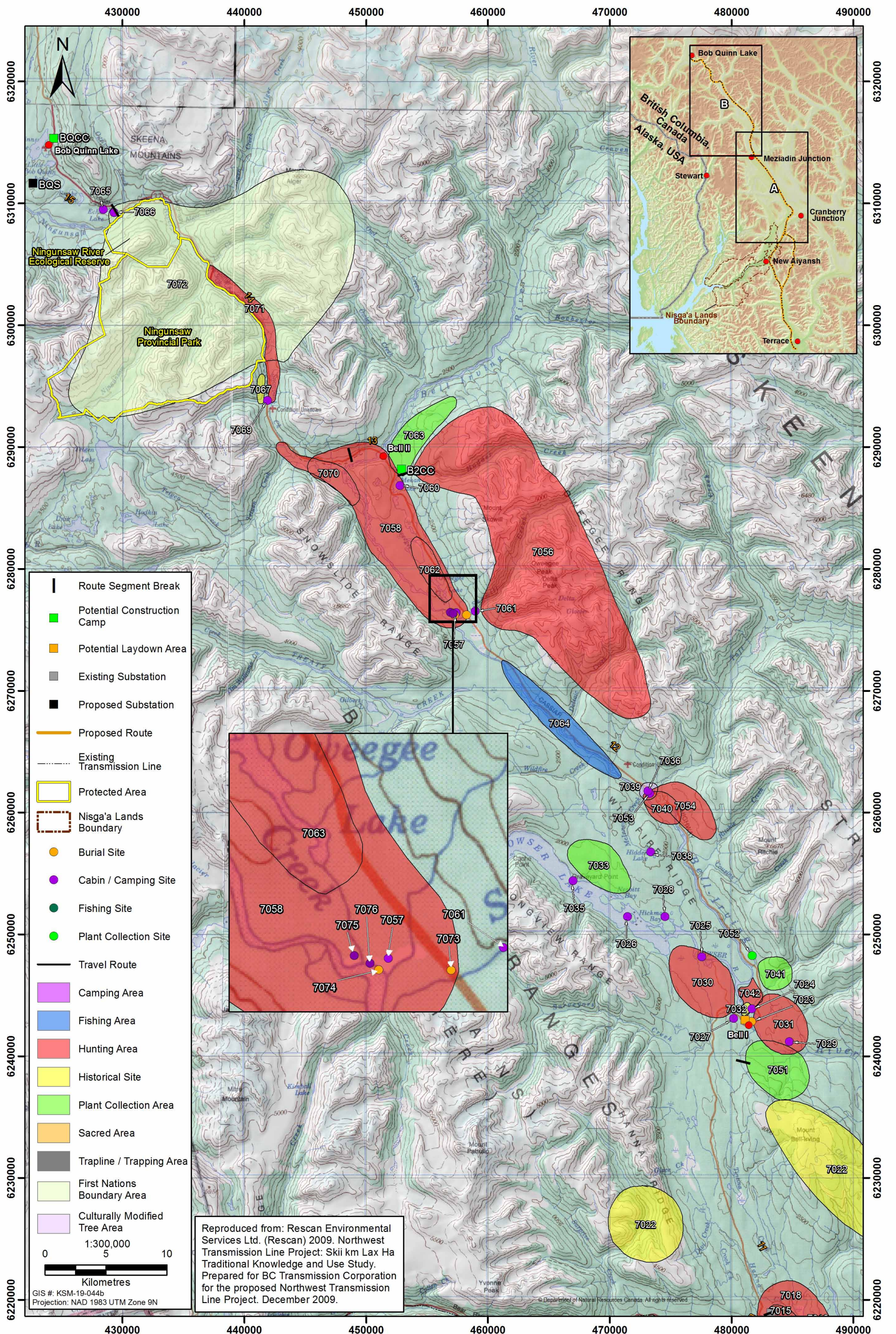
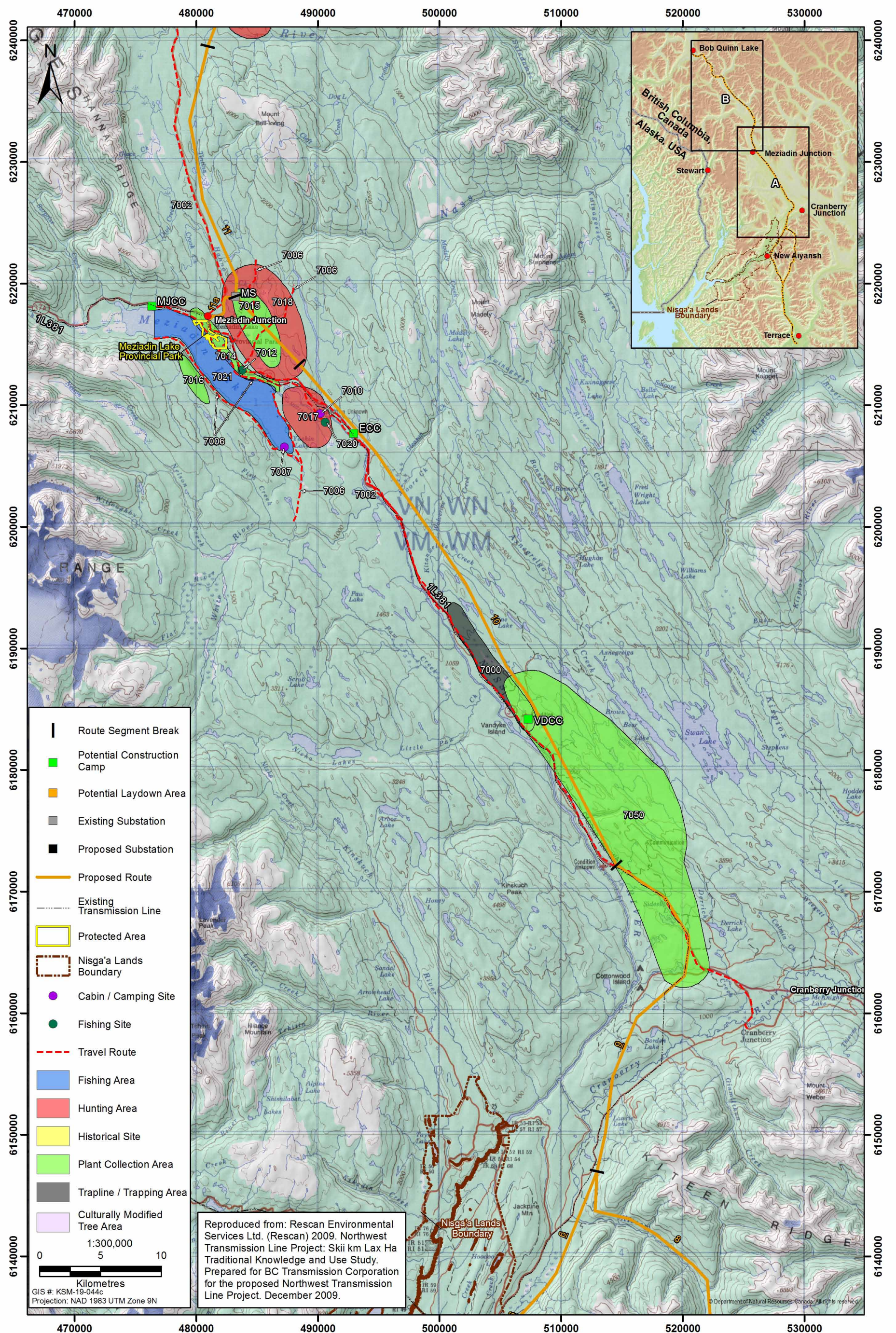


Figure 4.3-2

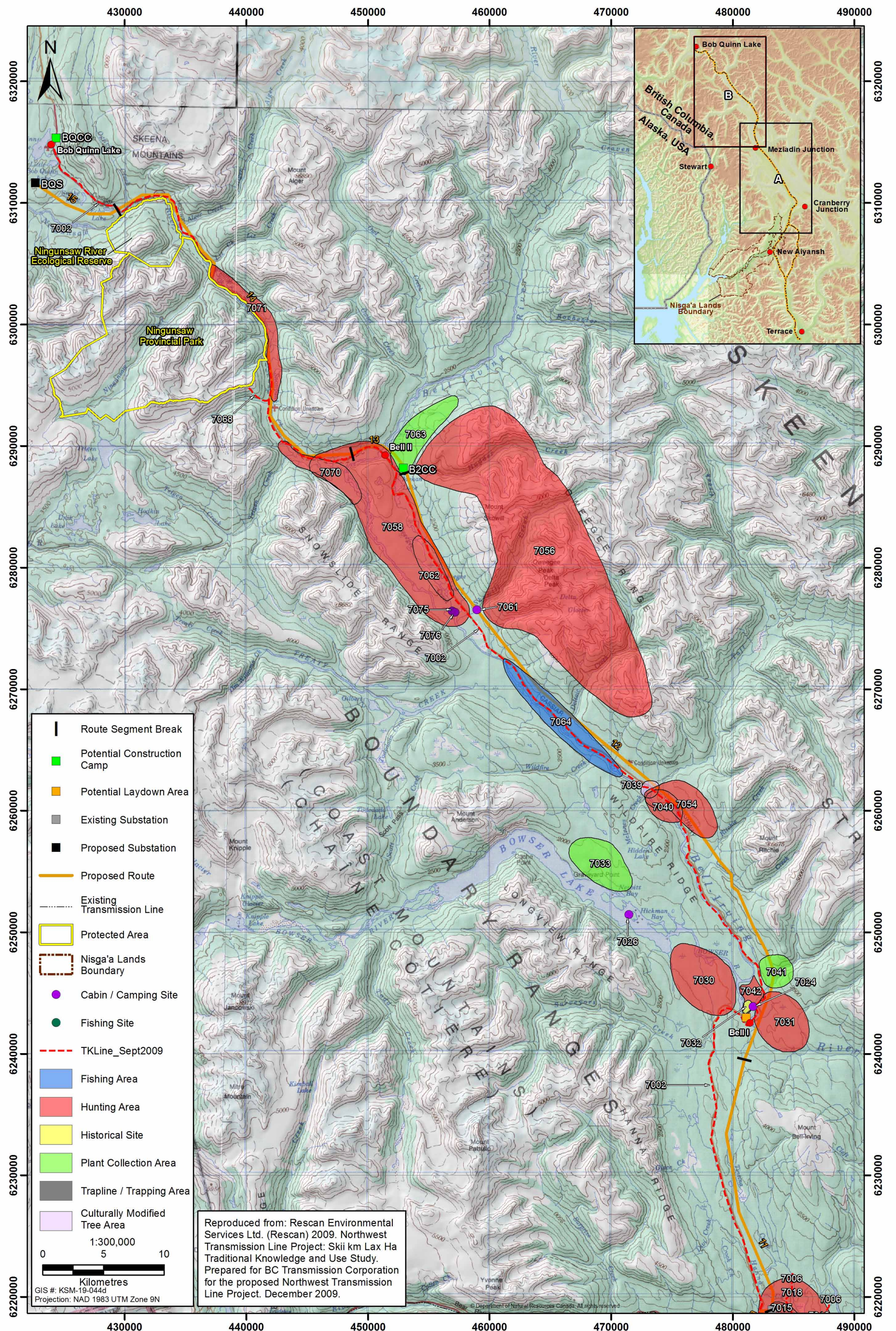


Reproduced from: Rescan Environmental Services Ltd. (Rescan) 2009. Northwest Transmission Line Project: Sii km Lax Ha Traditional Knowledge and Use Study. Prepared for BC Transmission Corporation for the proposed Northwest Transmission Line Project. December 2009.

Figure 4.3-3

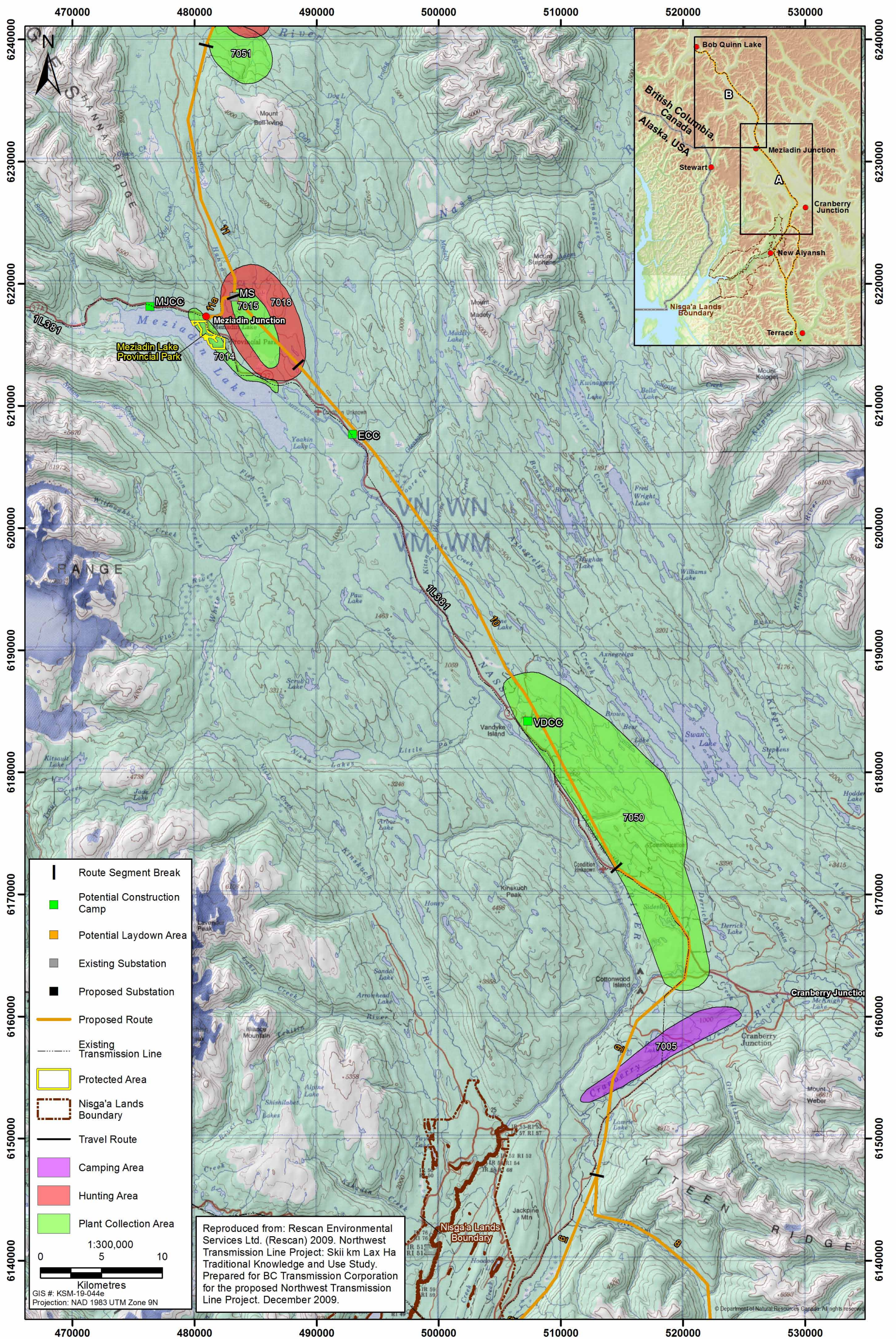
Sii km Lax Ha Traditional Knowledge and Use Sites Identified in the NTL TK/TU Study

Figure 4.3-3



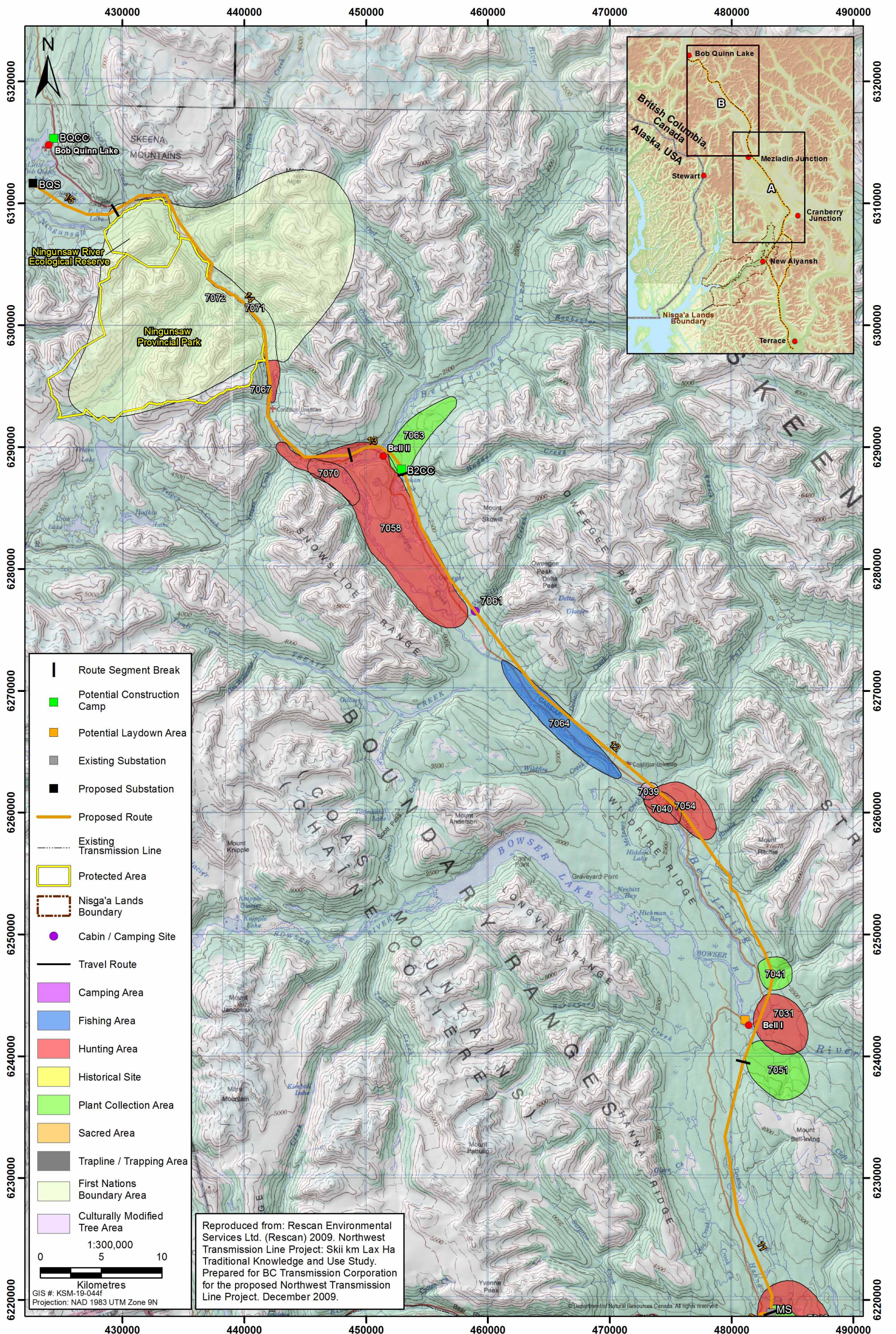
Reproduced from: Rescan Environmental Services Ltd. (Rescan) 2009. Northwest Transmission Line Project: Skii km Lax Ha Traditional Knowledge and Use Study. Prepared for BC Transmission Corporation for the proposed Northwest Transmission Line Project. December 2009.

Figure 4.3-4



Reproduced from: Rescan Environmental Services Ltd. (Rescan) 2009. Northwest Transmission Line Project: Skii km Lax Ha Traditional Knowledge and Use Study. Prepared for BC Transmission Corporation for the proposed Northwest Transmission Line Project. December 2009.

Figure 4.3-5



Skii km Lax Ha Traditional Knowledge and Use Sites Identified in the NTL TK/TU Study

Figure 4.3-6

Of the eighteen sites in active use identified during the NTL Project, ten are used for hunting, six for trapping, nine for berry and plant collection, three for fishing, and one for drinking water. Two of the sites in current use are cabins and three are trails. Some of the sites are used for multiple purposes, such as site 7058 in the Oweege Creek area which is used for hunting, trapping, plant collection and fishing.

Skii km Lax Ha current use sites identified during the NTL Project that are closest to and downstream of the proposed KSM Project infrastructure include hunting, trapping, plant collection and fishing areas along the Bell-Irving River Valley between Teigen and Treaty Creeks (7058, 7062, 7063, 7064, 7070). Trails currently in use include one along Bell-Irving River (7002), and one to Teigen Lake (7068). The cabin at Skowill Creek (7061) is heavily used and of particular value to Skii km Lax Ha. Nearby upstream sites include culturally modified trees (7067), and a hunting area in Ningunsaw Pass (7071).

4.4 TRADITIONAL AND CURRENT LAND USE OF THE PROJECT STUDY AREAS

Figure 4.4-1 is based on current land use data provided by the Skii km Lax Ha as shapefiles and highlights the nature of overlap of traditional and current land use with the Project LSA and RSA. Data is presented in the form of points (reflecting either houses, smokehouses, or cabins used during harvesting activities); lines (reflecting trails or travel corridors); and polygons (reflecting hunting, trapping, and gathering areas in various combinations, as well as areas of particular importance to the Skii km Lax Ha). Each point, line and polygon has been provided with a unique identifier number. Information associated with this data is provided in Tables 4.4-1 (for points), 4.4-2 (for lines) and 4.4-3 (for polygons). Where evident, mapped data for the KSM Project was triangulated to that provided during the NTL Project, as shown in the tables.

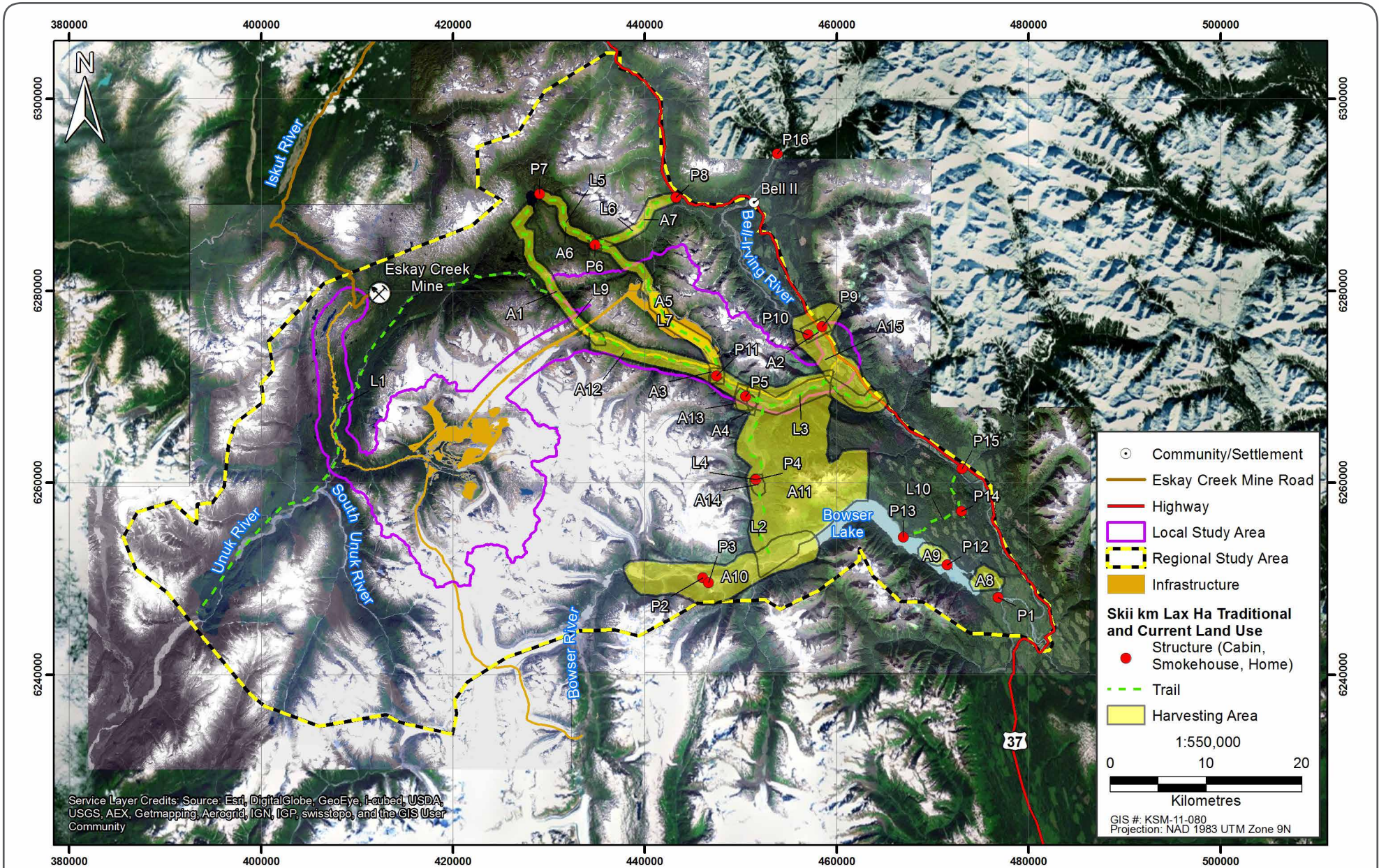
Analysis of the data within the LSA shows that traditional use of the Mine Site area is limited to a travel corridor through the Unuk River valley (L1; Figure 4.1-1). The Mitchell Treaty Twinned Tunnels pass under a trail and harvesting area that spans the Treaty Creek headwaters to Teigen Lake (L9, A1). The TCAR runs along Treaty Creek, which is an important travel corridor (L3) and hunting and trapping area (A3, A12). Cabins were located along Treaty Creek at the North Treaty Creek confluence (P11) and at Gilbert Lake (P5, still standing). The Gilbert Lake harvesting areas (A4, A13) are also located along the TCAR. The PTMA overlaps the North Treaty Creek travel corridor (L7) and harvesting area (A5).

The eastern limit of the LSA, which crosses over the Bell-Irving River, overlaps with the Awijii area (confluence of Oweege Creek and Skowill Creek with the Bell-Irving River), which is still used by the Skii km Lax Ha for hunting, trapping, fishing and gathering (A2, A15). A Skii km Lax Ha cabin (P9) and smokehouse (P10) is located within the eastern limit of the LSA and are used to support harvesting activities.

With respect to the RSA the shores of Bowser Lake and Bowser River are used for harvesting (A8, A9, A10). A cabin and house are located along the Bowser River midway between Bowser Lake and Knipple Lake (P3, P2). Cabins are located along Bowser Lake at Graveyard Point (P13), the island in Hickman Bay (P12), and at its outlet into the lower Bowser River (P1).

One of the most important harvesting routes for the Skii km Lax Ha in the RSA is along the north side of Mount Anderson, which overlooks Bowser Lake (A11). A trail from Bowser Lake through this area (L2) passes by Todedada Lake (A14) where a cabin is also located (P4). The trail continues north (L4) along Todedada Creek to Gilbert Lake and the Treaty Creek valley.

In the northern section of the RSA, trails to Teigen Lake from the south (L9) and east (L5, L6) were used for harvesting activities as well (A1, A6, A7). Abandoned cabins are located at Teigen Lake (P7) and at the bend in Teigen Creek (P6), the latter of which is still standing.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 4.4-1

Skii km Lax Ha Traditional and Current Land Use in the KSM Traditional Knowledge and Traditional Use Study Areas

Figure 4.4-1

Table 4.4-1. Structures Identified as Points in the KSM Study Areas

KSM Unique ID	NTL Site Number	Site Type	Description (Provided by the Skii km Lax Ha)
P1	7025	Cabin	Cabin at outlet of Lake
P2	n/a	Home	Skii km Lax Ha's new house, c. 2012
P3	n/a	Cabin	Cabin between Bowser and Knipple Lake
P4	n/a	Cabin at Todedada	
P5	n/a	Cabin at Gilbert Lake	
P6	n/a	Cabin on Teigen Creek	
P7	n/a	Cabin at Teigen Lake	
P8	7069	Cabin on Snowbank Creek	
P9	7061	Skii km Lax Ha's Cabin	Johnny Wilson's (Skii km Lax Ha) cabin
P10	7057	Skawil's Smokehouse	Daniel Skawil's smokehouse
P11	n/a	Cabin	Along Treaty Creek.
P12	7026	Cabin at Bowser	
P13	7035	Cabin at Graveyard Point	
P14	7038	Cabin at Hidden Lake	Cabin at Hidden Lake
P15	7053	Cabin	This cabin used to be used in conjunction with the cabin at Hidden Lake
P16	n/a	Trapping Cabin	Current Use

Source: Skii km Lax Ha, June 18, 2013.

Note: n/a= Not Applicable

Table 4.4-2. Trails Identified as Lines in the KSM Study Areas

KSM Unique ID	NTL Site Number	Site Type	Description (Provided by the Skii km Lax Ha)
L1	n/a	Trail	
L2	n/a	Trail	Trail connecting Gilbert Lake and Todedada to Bowser River.
L3	n/a	Trail	Trail along Treaty Creek from Bell Irving, to cabin at Gilbert Lake
L4	n/a	Trail	Trail connecting Gilbert Lake cabin to Todedada Lake.
L5	n/a	Trail	Trail from cabin at Teigen Lake to cabin at Teigen Creek
L6	n/a	Trail	Trail from cabin at Teigen Creek to cabin on Snowbank Creek
L7	n/a	Trail	Additional route from Teigen Lake area south down Treaty Creek.
L8	n/a	Trail	Trail between Skii km Lax Ha's cabin and the area of Skawil's smokehouse at the mouth of Oweege Creek.
L9	n/a	Trail	Trail to Unuk
L10	n/a	Trail	Trail from cabin at Taft Creek to cabin at Hidden Lake to cabin at Bowser Lake.

Source: Skii km Lax Ha, June 18, 2013.

Note: n/a= Not Applicable

Table 4.4-3. Harvesting Areas and Areas of Significance Identified as Polygons in the KSM Study Areas

KSM Unique ID	NTL Site Number	Site Type	Description (Provided by the Skii km Lax Ha)
A1	n/a	Harvesting	Harvesting along transportation corridors.
A2	7058, 7062, 7063	Area of Significance [Awijii- Oweege and Skowill creeks area at confluence with Bell-Irving River]	Site of multiple cultural and land uses and considered a place of inherent importance to Skii km Lax Ha history and resource management.
A3	n/a	Area of Significance [Treaty Creek/North Treaty Creek confluence]	Site of multiple cultural and land uses and considered a place of inherent importance to Skii km Lax Ha history and resource management.
A4	n/a	Area of Significance [near Gilbert Lake]	Site of multiple cultural and land uses and considered a place of inherent importance to Skii km Lax Ha history and resource management.
A5	n/a	Harvesting	Hunting and Trapping along the travel corridors.
A6	n/a	Harvesting	
A7	n/a	Harvesting	
A8	7030	Harvesting [Hickman Bay]	Current moose hunting in these bays.
A9	n/a	Harvesting [Nesbitt Bay]	Current moose hunting in these bays.
A10	n/a	Harvesting [upper Bowser River]	Skii km Lax Ha members have traditionally and currently harvest a variety of big game and fur-bearers. Skii km Lax Ha intend to continue to pursue subsistence and trapping opportunities in this location.
A11	n/a	Harvesting [Between Bowser Lake and Treaty Creek]	Area used for past, current and anticipated future hunting and trapping.
A12	n/a	Harvesting - Future Use	Location of anticipated future use activities including trapping, hunting, and fishing
A13	n/a	Harvesting	Gilbert Lake: An important past, current, and anticipated future land use area for hunting, trapping, and fishing.
A14	n/a	Harvesting	Important location for traditional, current, and future fishing, hunting, trapping at Todedada Lake, in conjunction with the cabin there.
A15	7058, 7062, 7063	Harvesting	Traditional, recent past and current hunting and trapping.

Source: Skii km Lax Ha, June 18, 2013.

Note: n/a= Not Applicable

5. Conclusion

The Skii km Lax Ha have traditionally, and still currently, engage in hunting, trapping, plant, berry and mushroom harvesting, as well as fishing and camping in their asserted territory. Due to the Skii km Lax Ha's involvement in projects within their traditional territory, they have not had time to hunt and trap, thus the scale of harvesting has declined in recent years. Areas still used and highly valued by the Skii km Lax Ha include the upper Bell-Irving River, the mountains on the west side of the Bell-Irving north of Bowser Lake, the Bowser Lake and Bowser River areas, and the Meziadin Lake area.

The Skii km Lax Ha have observed changes both in the abundance and quality of fish, wildlife and furbearers in recent years. Prohibitions on traditional activities such as controlled burns have reduced the quantity and size of berries in their traditional territory. Increasing temperatures and changes in water flow have also been observed by the Skii km Lax Ha, though it is unknown what the cause may be.

According to mapped data provided by the Skii km Lax Ha in June of 2013, a total of 18 traditional and current use sites fall within the LSA, nine of which directly overlap potential Project infrastructure. No cabin sites, however, lie within the infrastructure footprint. An additional 22 traditional and current use sites fall within the boundaries of the RSA.

In the LSA, a travel corridor passes through the Unuk River valley in the vicinity of the Mine Site. The Mitchell Treaty Twinned Tunnels pass under a trail and harvesting area that spans the Treaty Creek headwaters to Teigen Lake. The TCAR runs along Treaty Creek, which is an important travel corridor and hunting and trapping area. Cabins were located along Treaty Creek at the North Treaty Creek confluence and at Gilbert Lake. The Gilbert Lake harvesting areas are also located along the TCAR. The PTMA overlaps the North Treaty Creek travel corridor and harvesting area.

The eastern limit of the LSA, which crosses over the Bell-Irving River, overlaps with the Awiiijii area, which is still used by the Skii km Lax Ha for hunting, trapping, fishing and gathering. A Skii km Lax Ha cabin and smokehouse is located within the eastern limit of the LSA and are used to support harvesting activities.

One of the most important harvesting routes for the Skii km Lax Ha is along the north side of Mount Anderson, which overlooks Bowser Lake. A trail from Bowser Lake through this area passes by Todedada Lake where a cabin is also located. The trail continues north along Todedada Creek to Gilbert Lake and the Treaty Creek valley.

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