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15.1 Introduction and Approach

15.1.1 Definition of Aboriginal Rights

Aboriginal rights are categorized as general Aboriginal rights, title, and treaty rights. The following sections offer a brief background and definition of these rights.

15.1.1.1 General Aboriginal Rights

Aboriginal rights refer to practices, traditions, and customs that are unique to and distinguish each First Nation’s culture. These practices, traditions, and customs were practiced prior to European contact and are held communally. Examples of rights include the right to fish, hunt, and trap on traditional lands, including the right to subsist on these resources, and may include cultural practices. Aboriginal rights are grounded in the recognition of the long-term use and occupancy of the land by Aboriginal peoples who were resident in Canada prior to European arrival and flow to descendants on this basis.

Canada has recognized and affirmed Aboriginal rights under section 35(1) of Canada’s Constitution Act, 1982 (Government of Canada, 2014). While the legal responsibility for fulfillment of the duty to consult on potential effects on these rights resides with the Crown, the day-to-day procedural aspects can be delegated to third parties directly involved in resource development projects, such as a proponent of a mining project. The Crown will maintain oversight and determine
whether the consultation has been adequate to discharge delegated aspects of the duty of the Crown.

Similarly, the Province of BC has a duty to consult and where required, accommodate First Nations whenever a decision or activity could impact Aboriginal rights (including title). This duty stems from Canadian common law and BC EAO works to ensure the Crown fulfills its duties of consultation and Accommodation (BC EAO, 2013). As discussed, the Province and the Crown may delegate the procedural aspects of consultation to Proponents. Procedural elements may include:

- Providing information about the proposed project to Aboriginal groups;
- Obtaining and discussing information about specific Aboriginal Interests that may be affected; and
- Considering modifications to plans to avoid or mitigate effects to Aboriginal Interests; and
- Documenting engagement, specific Aboriginal Interests that may be affected and any modifications to address concerns and providing this record to EAO (BC EAO, 2013).

Documenting engagement, specific Aboriginal Interests that may be affected and any modifications to address concerns and providing this record to EAO (BC EAO, 2013). However, procedural delegation does not include authority to make decisions with regard to the Crown’s duties to consult and accommodate on the strength of a claimed Right or Title, whether the project infringes on Treaty rights or the adequacy of the Crown’s duty to consult and accommodate.

15.1.1.2 Aboriginal Title

As an Aboriginal right, Aboriginal title is communal (an individual cannot hold Aboriginal title), and it is site-, fact-, and group-specific. However, Aboriginal title can be distinguished from other Aboriginal rights in that:

Aboriginal rights refer to practices, traditions, and customs that distinguish the unique culture of each First Nation and were practiced prior to European contact. The rights of Aboriginal peoples to hunt, trap, and fish on ancestral lands are examples of Aboriginal rights; and

Aboriginal title, a sub-set of Aboriginal rights, is a right to the exclusive use and occupation of the land itself and is not limited to the resources and traditional practices such as fishing, hunting, and gathering.

The Proponent was assigned certain responsibilities to undertake procedural aspects of Aboriginal consultation in support of the Crown’s duty toconsult and this includes collecting information about how Aboriginal rights and title may be affected by the Project. However, it is not a Proponent’s responsibility to provide an analysis of the strength of claim to Aboriginal rights and title. The Application includes all information that has been provided to date to the Proponent and for which the Proponent has been granted permission to present in the Application with respect to Aboriginal rights and title. In addition, concerns or issues raised by Aboriginal groups with respect to asserted
rights (and title) are documented in the Application and the Proponent remains committed to continued dialogue with Aboriginal groups about Aboriginal rights.

15.1.1.3 Treaty Rights

Treaty rights refer to Aboriginal rights set out in a treaty and are protected under Section 35 of the Constitution Act, 1982. Starting in 1701, in what was to eventually become Canada, the British Crown entered into treaties to encourage peaceful relations with First Nations. However, few early treaties were negotiated in BC, with the exception of the Douglas Treaties of Vancouver Island and Treaty 8 that spans portions of northern BC, Alberta, and Saskatchewan.

In 1871, when BC joined Confederation, it did not recognize Aboriginal title so the government was not compelled to negotiate treaties. Since that time, Aboriginal people have fought through the legal system to have Aboriginal rights and title recognized. The courts have determined that Aboriginal title still exists in BC, and many Aboriginal groups have entered into negotiations with the provincial and federal governments to settle their claims to title through treaties. A number of modern treaties have been negotiated; however, many are still in early stages of negotiation.

Of the First Nations that may be affected by the Project, several have entered into treaty negotiations. According to its website, the Carrier Sekani Tribal Council (CSTC) represents the Nadleh Whut’en First Nation (NWFN), Saik’uz First Nation (SFN), and Stellat’en First Nation (StFN) in treaty negotiations (CSTC, 2014). Treaty negotiations in BC proceed in a six-stage process and the CSTC has progressed through Stage 3 (the framework agreement) and is currently undergoing Stage 4 of the six stages (BC Treaty Commission, 2014).

The Nazko First Nation (NFN) has entered into treaty negotiations independently (NFN, 2013a). The NFN signed a Framework Agreement in 1999. On 15 August 2012, NFN signed an Incremental Treaty Agreement with the BC Government that will expand economic development and job creation opportunities and will provide early land transfers to the First Nation in advance of a Final Agreement. The NFN received a land and cash offer in March 2013. The NFN is reviewing this offer internally and consulting with the community on next steps (BC Treaty Commission, 2013).

As yet, treaty rights have not been defined for any of these First Nations or Tribal Councils participating in the treaty negotiations process.

The Lhoosk’uz Dene Nation (LDN), Ulkatcho First Nation (UFN), the Skin Tyee Nation (STN) and the Tsilhqot’in Nation (TN) have not signed treaties, nor have they entered into treaty negotiations. However, the TN initiated legal action against the Province of BC in 1989 to stop resource developments such as timber harvesting in the Tsilhqot’in Claim Area. In 2012, the BC Court of Appeal issued a ruling that gave the Tsilhqot’in certain rights to hunt, trap, and trade in its traditional territory. However, the Court agreed with the federal and provincial governments that the Tsilhqot’in must identify specific sites where its people once lived, rather than asserting a claim over a broad area. The TN appealed this ruling to the Supreme Court of Canada. On 26 June 2014, the Supreme Court of Canada confirmed that Aboriginal title gives the Tsilhqot’in the right
to control the land, thereby rejecting the view that Aboriginal title is restricted to small intensively used sites (Tsilhqot’in, 2014). The historic decision, confirmed Aboriginal title to approximately 1900 km² of the Claim Area, including the Nemiah Valley (Xeni) and much of the surrounding area, stretching north into Brittany Triangle (Tachelach’ed) and along the Chilko River (Tsilhqox).

Having recognised Aboriginal title, the Supreme Court noted the rights which flow from Aboriginal title are very broad but confer ownership rights similar to those associated with fee simple, including: the right to decide how the land will be used; the right of enjoyment and occupancy of the land; the right to possess the land; the right to the economic benefits of the land; and the right to pro-actively use and manage the land (Tsilhqot’in, 2014). Given the recent Tsilhqot’in decision, the Proponent has not considered this decision in its assessment and it has not received guidance from EAO on this whether this decision should be captured in its assessment.

15.1.2 Approach to Integration of Traditional Knowledge and Input from Aboriginal Groups

Traditional knowledge and land use information has been identified through interviews and discussions with Aboriginal community members and through Traditional Knowledge/Traditional Land Use (TK/TLU) studies. Use of traditional resources was also identified through documentary research of ethnographic materials. The Proponent provided funding to LDN, SFN, StFN, UFN, and STN to complete TK/TLU studies. At the time of writing, only LDN and UFN had completed their studies and these assisted in the identification of Aboriginal rights that have the potential to be affected by the Project.

Information collected through consultation on traditional resources and use is tracked in the Stakeholder and Issues Information Management System (SIIMS; refer to Section 3). Information is provided to those responsible for preparing the environmental assessment (EA) by subject and geographic region so that they consider Aboriginal traditional resources and concerns in their assessments and in formulating management plans. First Nations participated in archaeological field studies and assisted in identifying cultural sites of concern. Where resources such as culturally modified or trail marker trees are identified, these resources are geo-referenced and will be managed in consultation with the Aboriginal groups in whose territory the resources are located.

As part of the EA, the Proponent completed an assessment of potential effects on current land and resource use for traditional purposes (CLRUTP) (Section 7.2.7). There is a close linkage between the rights discussed in this section and the current uses assessed in Section 7.2.7. Section 7.2.7 and Section 14 presents baseline information on the current use of lands and resources for traditional purposes for each of the Aboriginal Groups assessed in this section. This includes a description of the nature and location of the use or activity (including fishing, hunting, trapping, and plant gathering), and the species targeted. Section 7.2.7 also provides a description of potential Project effects on those uses or activities (including residual effects, if any), as well as descriptions of proposed mitigation to reduce or avoid potential effects.

This section draws on the results of the CLRUTP analysis and other Valued Components to assess the potential effects of the Project on the exercise of asserted or established Aboriginal Rights.
The Proponent will continue to work with Aboriginal groups as necessary throughout the EA review phase and Project implementation to identify resources and concerns related to rights and to address them within the EA and management process.

15.1.3 Identifying Rights with Affected Aboriginal Groups
The Proponent developed an understanding of the identified Aboriginal groups’ asserted rights through a range of activities:

- Consultation meetings with Chief, Council, and community representatives;
- Secondary research that included a range of historic and ethnographic studies including the following:
  - Morice, A. (1893). Notes on the Western Dene. Transactions of the Canadian Institute, 4-122;
- Review of previous EAs, Proponent guidance documents and legal cases;
- Correspondence between the Proponent (letters and email) and Aboriginal groups;
- Community open houses;
- Primary research, such as interviews with Aboriginal community members and leadership;
- Site visits and tours;
- Traditional Knowledge and Traditional Land Use studies (TK/TLU studies);
- Historic use and occupancy study (Dewhirst, 2013);
- Telephone discussions; and
Letters and comments submitted to the Canadian Environmental Assessment Agency (Agency) and BC EAO

The Proponent continues to consult with communities to gather further information about their asserted Aboriginal rights. The Proponent will continue to work with Aboriginal groups to develop its understanding of Aboriginal rights and how to avoid or mitigate potential effects from the Project on those rights.

The measures proposed to mitigate potential effects on Aboriginal Rights are discussed for each of the potentially affected First Nations. A summary of key project design changes made to mitigate effects on rights as result of consultation with First Nations is presented in Section 15.11.

15.1.4 Location of the Project in Aboriginal Traditional Territories

The proposed mine site and off-site infrastructure (mine site access road, airstrip, freshwater supply system, Kluskus FSR and transmission line) fall within the asserted traditional territory of several First Nations as presented in Table 15.1-1. It should be noted that the Kluskus FSR is an existing forestry road and permanent feature on the landscape. It has been included in the following estimates because there will be some increases to traffic as a results of the Project.

Table 15.1-1: Project Overlap with Aboriginal Group Traditional Territory

<table>
<thead>
<tr>
<th>Aboriginal Group</th>
<th>LDN</th>
<th>NWFN</th>
<th>SFN</th>
<th>StFN</th>
<th>UFN</th>
<th>NFN</th>
<th>STN</th>
<th>TN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Area of Traditional Territory (ha)</td>
<td>1,405,246</td>
<td>531,505</td>
<td>983,175</td>
<td>696,402</td>
<td>3,030,804</td>
<td>1,550,042</td>
<td>3,822,960</td>
<td>9,673,000</td>
</tr>
<tr>
<td>Project Components Overlap with Traditional Territory (ha)</td>
<td>4,777</td>
<td>237</td>
<td>574</td>
<td>219</td>
<td>3,233</td>
<td>57</td>
<td>5,168</td>
<td>4,595</td>
</tr>
<tr>
<td>% Overlap of the Traditional Territory with the Project Footprint</td>
<td>0.34</td>
<td>0.04</td>
<td>0.06</td>
<td>0.03</td>
<td>0.11</td>
<td>0.004</td>
<td>0.14</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Note: *Calculations based on traditional territory boundaries presented in Section 14.
15.2 Lhoos’uz Dene Nation

15.2.1 Past, Current, and Anticipated Land Uses

The LDN traditional territory covers approximately 1,405,246 hectares (ha), of which 4,777 ha are overlapped with portions of the mine site and its off-site infrastructure (less than 1%) overlap and its off-site infrastructure. Historically, the LDN territories were owned by four primary descent family groups (sadeku). The territories were split into four family Keyoh that were the exclusive traditional use areas that sustained each family under the direction of the most senior family male (detso). Others who wished to use the Keyoh had to seek permission from, or be invited by, the detso. The Keyoh were used for all traditional use activities, including hunting, trapping, fishing, and plant harvesting. The Keyoh were inherited primarily through male descendants. In the early twentieth century the government began to licence trappers and record locations and extent of traplines. Some provincially-registered traplines followed the boundaries of the Keyoh. However, provincially-registered traplines and Keyoh are not identical. As explained by the Carrier Sekani Tribal Council (2007: 9),

Keyoh can be bigger than a trapline; some Keyohs have several traplines in them. Trapline boundaries established by the provincial government attempted to follow the Keyoh boundaries and gave exclusive trapping rights to registered owners of the trapline. They did not, however, replace the Keyoh system. Traplines can be bought and sold - Keyoh cannot. The Keyoh system was impacted by the provincial trapline system in that the original boundaries were adjusted by the province. Some of the trapping rights were sold to non-native trappers, but the Keyoh holders still hold Aboriginal rights and title to those lands. The boundaries of Keyoh are respected and managed through permission. Anyone entering another person's Keyoh for hunting or fishing must seek permission of the Hereditary Chief, as the Chief's first obligation is to their own extended family members. (Emphasis in original).

Provincially-registered traplines are used for commercial trapping, but also continue to provide food and resources for the family group (Dewhirst, 2013).

The Project is within the historical Mashu family Keyoh, which was inherited by the Jimmie family through marriage in the early twentieth century. The total area of the historical Mashu Keyoh is larger than the registered trapline (TR0512T014) (see Section 7.2.7). The Project also intersects with portions of the historical Baptiste Keyoh, which was inherited by the Cassam family through marriage in the early twentieth century. A portion of this Keyoh is has an associated registered trapline (TR0512T027).

Desk-based research provides some evidence of the past and present practice of use of lands by LDN people. Ethnographer Elizabeth Furniss has information from interviews with knowledgeable LDN Elders conducted in the 1990s. She notes that one of the favourite fishing spots for the Kluskus was at the mouth of the Blackwater River (Furniss, 1993). Similarly, other studies report there was a minor sockeye run in the Blackwater River to Kluskus Lake and a more important
spring salmon run later in the season (Kew, 1973). Lhoosk’uz and Ulkatcho people shared use of the area around the headwaters of the Blackwater River.

Fish resources were an important source of food for LDN people (Dewhirst, 2013). LDN families would gather at strategic locations in late spring to catch fish using traps, weirs, and nets. Examples of fish harvested include Dolly Varden, rainbow trout, ling, whitefish, kokanee, suckers, squaw fish and chub fish. Some of the harvest would be dried and used for consumption through the year (Dewhirst, 2013). Summer was an important time for salmon fishing and salmon were taken from areas along the Blackwater River. Historically, salmon ascended the Kluskus Creek and the salmon could be captured in the Kluskus Lakes system (Dewhirst, 2013).

West Kluskus Lake (also known as Squirrel Lake) has historical fishing camps that have been used for hundreds of years. In 1793, there were reportedly two detached huts conveniently located for fishing. Historically, 25 members of the (Lhoosk’uz Dene) Jimmie family used this fishing camp from June to mid-July (Alexander, 1997). It is located at the westernmost part of the Kluskus Indian Reserve #1. In addition, the Jimmie family historically used a camp at the west end of East Kluskus Lake in May and June to engage in trapping and to fish Tesli Lake (Alexander, 1997).

LDN people rely on traditional activities that include hunting, gathering, and fishing (Indigenous Work Force, 2013). Indeed, fish continues to be a primary food staple and source of protein for the LDN diet (Indigenous Work Force, 2013). Personal communication with an LDN trapline holder in 2013 (TR0512T014) indicate that trout fishing continues in Kuyakuz Lake, middle Chedakuz Creek (the portion of Chedakuz Creek between Kuyakuz and Tatelkuz Lake), as well as in Tatelkuz Lake and lower Chedakuz Creek (Trapline-Holder-TR0512T014, 2013). In December 2013, LDN representatives also noted the presence of a fish trap on Chedakuz Creek (Pers. Communication with LDN Representative, 2013).

During a face-to-face interview, a member of the LDN family residing at Tatelkus Lake Indian Reserve #28 noted that fish comprises three to four meals per week and is eaten dried or fresh depending on the season.

There are a number of trails in the Kluskus area used for centuries by local First Nations people. The Alexander Mackenzie Heritage “Grease Trail” used by the LDN extends from the Fraser River through to the headwaters of the Blackwater River and overland to the Pacific Ocean (Dewhirst, 2014). The “Grease Trail” was one of the most important travel and trade routes in the area. It was an essential connection for oolichan oil obtained from the Coast, and it accesses the salmon fisheries shared with neighbouring people on the Dean, Fraser, and Quesnel Rivers (Birchwater, 1994). Obsidian was also obtained along this travel route. Sourced from the Anahim Mountains, it provided an important resource for tool making. LDN people still use an existing network of trails to hike to the Grease Trail and to fish, hunt, and gather food along the way. The Messue Wagon Trail connects the Grease Trail to the north side of Tatelkuz Lake and is open to foot, horse or snowmobile traffic only.

According to an LDN member, portions of the LDN Traditional Territory used to be wholly populated by caribou before the 1930’s (Trapline-Holder-TR0512T014, 2013). He noted that...
caribou were displaced by moose. Some caribou hunting still occurs on the south side and summit of Mount Davidson. Historically, LDN members would herd the caribou into snow drifts and harvest them immediately. The LDN member did note that caribou hunting is no longer as popular due to the costs associated with gaining access to areas where caribou can be found. Moose hunting occurs today although it was noted that moose populations in the area appear to be declining (Trapline-Holder-TR0512T014, 2013).

A number of areas are considered sacred to the LDN people. Extensive archaeological resources also exist in the area, especially around the large lakes. Primary and secondary data indicate that Kuyakuz Mountain and the north-eastern shores of Tatelkuz Lake have sites held sacred to the LDN (Interview with LDN Elders, 2013; Andrew Leach & Associates, 2008).

The Proponent initiated discussions with the registered holder of trapline TR0512T014 and the associated keyoh members and determined that they continue to actively use the trapline and Keyoh to hunt, fish, and trap as well as to harvest plants for food and medicinal purposes. In an interview, the trapline holder discussed how the LDN would travel up the mountains from the north and south sides to hunt moose and caribou. They would smoke the meat and return to the communities with meat for the winter. Some of the family resides at the north end of Tatelkuz Lake, and it is anticipated that they will continue their traditional way of life and rely on the resources they currently use well into the future.

The Proponent also conducted interviews with the registered owner of trapline TR0512T027. The trapline is closely related to the Keyoh, or traditional family resource area. Interviews with family members identified that they used their trapline until about 20 years ago and that trapping and associated activities were focused on the shores of Kuyakuz Lake. They ice-fished Kuyakuz Lake for trout and ate meat from the animals that they trapped. They trapped beaver most notably, but also other furbearers. They collected plants/medicine while on the trapline. The family members do not continue to use the trapline and resource area in this manner today.

Some LDN members continue to maintain their traditional practices. For these families traditional activities provide an essential supplement to income from the wage economy and they have a strong interest in preserving these cultural practices. It is anticipated that they will continue their current practices through the life of the mine and beyond.

15.2.2 Asserted Lhoosk’uz Dene Nation Aboriginal Rights

It is assumed that LDN members engage in traditional activities, including the Aboriginal right to hunt, trap, fish, and gather plants and berries in and around the Project footprint within their asserted territory.

Through a variety of consultation activities, the Proponent has developed an understanding of potential effects on rights asserted by the LDN. The LDN has been actively engaged since the commencement of the Project. The Proponent’s consultation approach is tailored to meet the LDN’s interests through creation of a formal process captured in the Exploration Agreement negotiated between the LDN and the Proponent in November 2011. The Agreement describes
how consultation activities will be carried out with the LDN. It defines a consultation process to address Project-related issues and agrees to the frequency and location of community meetings and meetings with leadership and to the sharing of information.

The Proponent and the LDN engaged in a number of discussions to determine a process for collecting TLU information for the Project. With the signing of the Exploration Agreement in 2011, the LDN and the Proponent agreed on a framework to guide the manner in which the Proponent would respect and utilize confidential information provided by the LDN. Pursuant to the Exploration Agreement, the Proponent has also provided the LDN with financial support to undertake a land use and occupancy study. The ethnohistoric report authored by John Dewhirst entitled “An Ethnohistory of Lhoosk’uz Dene Nation Traditional Territory” was provided to the Proponent in 2013 and contains TK/TLU information (Dewhirst, 2013). Where appropriate and not confidential, it was utilized in the preparation of this Section and the effects assessment for the CLRUTP (Section 7.2.7).

The Proponent provided site visits to Chief and Council and interested community members. Community members participated in assessing archaeological and heritage resources at the overview stage and in archaeological impact assessment field studies. Field studies provided opportunities for participants to identify sensitive areas or resources of concern.

The Proponent discussed the Wildlife Management Plan (WLMP) with LDN and addressed concerns that were raised.

As noted earlier the Project overlaps with two family Keyohs and traplines that are registered to members of the LDN. The Proponent met with the two registered trapline holders to discuss potential effects on their ability to practice traditional activities in their Keyohs. The owner of TR0512T014 provided the Proponent with a tour of his trapline and identified key areas that he wanted protected from development. This included taking measures to protect marten habitat. The Proponent will continue to work with trapline holders to discuss management of any effects identified.

In addition, the Proponent interviewed other members of the Jimmie and Cassam families, including Elders with knowledge of the areas surrounding the Project and its components. In 2014, the Proponent met with LDN representatives twice to present the results of effects assessments and obtain input into the mitigation strategies proposed. The Proponent remains committed to continued dialogue with the LDN to identify further concerns related to potential effects on LDN rights.

At this point, the nature and extent of any asserted Aboriginal claim by LDN with respect to lands affected by the project footprint remain uncertain. A discussion of consultation activities conducted with LDN is provided in Section 17. Table 15.2-1 provides a summary of LDN asserted rights identified to date in relation to the Project, the manner through which they were identified, and if the rights have the potential to be affected by the Project. Future consultation with the LDN may provide additional information on their concerns, values, and rights related to the Project.
Table 15.2-1: Summary of Lhoos’uz Dene Rights and Concerns Raised in Relation to the Project

<table>
<thead>
<tr>
<th>Concern</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality and quantity and the potential for contamination of fish and fish habitat (Tatelkuz Lake, Nechako Reservoir, Tascha Lake, and/or Davidson Creek)</td>
<td>Fishing</td>
<td>Meetings with LDN Chief and community representatives</td>
<td>22 Aug 2011, 18 Jun 2013, 03 July 2014</td>
</tr>
<tr>
<td>Restoration of fish habitat</td>
<td>Fishing</td>
<td>Meeting with Chief and LDN community representatives</td>
<td>22 Aug 2011</td>
</tr>
<tr>
<td>Maintaining caribou herds</td>
<td>Hunting</td>
<td>Meeting with Chief and LDN community representatives</td>
<td>22 Aug 2011</td>
</tr>
<tr>
<td>Traditional cultural sites</td>
<td>Use of spiritual/traditional sites</td>
<td>Letter to the Proponent</td>
<td>23 May 2012</td>
</tr>
<tr>
<td>Traditional cultural sites Effects on trapping resources, trapline holders and keyohs that are intersected by the Project</td>
<td>Use of spiritual/traditional sites Trapping/Use of traditional resources/Aboriginal title</td>
<td>Meeting with Chief and LDN community representatives</td>
<td>22 Aug 2011, 03 July 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meeting with LDN Chief and community representatives</td>
<td>22 Aug 2011</td>
</tr>
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<td></td>
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<td>Meeting with LDN Chief and community representatives</td>
<td>22 Aug 2011</td>
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<td>03 July 2014</td>
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<td>03 July 2014</td>
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<td>22 Aug 2011</td>
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<td></td>
<td></td>
<td>22 Aug 2011</td>
<td></td>
</tr>
<tr>
<td>Indian tobacco collection</td>
<td>Traditional plant harvesting</td>
<td>Letter to the Proponent</td>
<td>23 May 2013</td>
</tr>
<tr>
<td>Indian tobacco collection</td>
<td>Traditional plant harvesting</td>
<td>Site visit</td>
<td>2 Nov 2011</td>
</tr>
<tr>
<td>Potential displacement and contamination of berry-picking sites</td>
<td>Traditional plant harvesting</td>
<td>Email to the Proponent with comments on Valued Components</td>
<td>10 Jun 2013</td>
</tr>
<tr>
<td>Protecting sacred areas (e.g. Mount Kuyakuz, the north-eastern side of Tatelkuz Lake)</td>
<td>Use of spiritual sites</td>
<td>Raised by community representatives during field study and during face-to-face interviews with LDN elders</td>
<td>24 Sep 2013, 04 June 2013</td>
</tr>
</tbody>
</table>

Note: LDN = Lhoos’uz Dene Nation.

15.2.3 Lhoos’uz Dene Nation Rights Effects Assessment and Mitigation

The potential effects for the practice of LDN rights will result from changes related to the mine site area, mine access road, and FSS, which overlap their Traditional Territory, as well as the lower sections of the Kluskus FSR and transmission line corridor, which also overlaps their Traditional Territory by 44.4 km and 51.6 km, respectively. The Proponent is committed to meaningful consideration of the rights of the LDN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential adverse effects identified during the EA process. The final section in this document describes design changes made as a result of Aboriginal groups consultation, including consultation with LDN (Section 15.11). The Proponent will continue to consider information on
rights as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.

With respect to the right to fish, a number of preferred fishing locations were identified by LDN. The Blackwater River and its tributaries (i.e. Tsacha Lakes) were identified as critical fishing areas for LDN. The Proponent made substantive changes to the Project design, including on-site and off-site infrastructure, to avoid the Blackwater River drainage.

It is expected that LDN practices the right to fish throughout their Traditional Territory. However, it was noted that it is practiced in Tatelkuz Lake, Chedakuz Creek and the lower reaches of Davidson Creek. There are no expected significant changes to Tatelkuz Lake, Chedakuz Creek nor in the middle and lower reaches of Davidson Creek. Based on input by LDN, the Proponent designed the Project to avoid the lower reaches of Davidson Creek. It was found that LDN fisheries values were higher in the lower reaches where Kokanee salmon spawning occurs and the Project was designed to avoid effects in this area. No effects to availability of kokanee, trout, suckers, mountain whitefish, ling cod and burbot are predicted in Tatelkuz Lake.

To address concerns about water quality and contaminants that may affect traditional resources such as fish, additional surface and groundwater monitoring stations were established as part of the baseline program. Results of all water quality sampling will continue to be posted for the BC EAO Working Group and Aboriginal groups, including LDN, to review. All potential effects from contamination of the water system (Tatelkuz Lake, Tascha Lake, and/or Davidson Creek) are fully addressed in the Application in Section 5.3. Potential effects to LDN land use is described in Section 7.2.7. Surface water and sediment quality will meet applicable provincial and federal standards so as not to affect fish, furbearers, or animals that may be trapped for food. This issue is fully addressed in the Application in Section 5.4.13 and will be communicated through community meetings as requested by LDN. Water will also be monitored on an ongoing basis throughout the life of the Project and after closure. The Proponent is committed to employing LDN members for on-going environmental monitoring of the exploration program.

LDN has hunted caribou and other ungulates in the past and will likely continue to do so in the future. With respect to concerns raised by the LDN about caribou herds and the ungulate winter range (UWR), the Proponent redesigned the proposed mine site to avoid the UWR by modifying the Tailings Storage Facility (TSF) to be located completely outside of the UWR. In addition, the existing mine access road will be moved out of the UWR. Access to the mine site will not be from the west but from the north starting at KM 124 of the Kluskus Forest Service Road (FSR). A caribou sub-working group was established to better understand cumulative effects on caribou and establish best management practices and mitigation strategies. Effects on caribou are assessed in the Application in Section 5.4 and mitigation strategies are developed and presented in Section 5.4.11 and in the WLMP (Section 12.2.1.18.4.6). Concerns raised by LDN about potential effects to caribou and moose, influenced the writing of the WLMP which now includes mitigation and management strategies specific to caribou and moose. In 2014, a draft WLMP was provided to the LDN for input.
The Proponent met with the registered trapline holders TR0512T014 and TR0512T027, whose traplines and keyohs are overlapped by the proposed Project. Trapline TR0512T027 has not been used for 20 years (Trapline TR0512T027 pers. comm.). Trapline TR0512T014 continues to be used today, although the economic return is low due to a number of factors (e.g., price of fuel, fur prices) (Trapline TR0512T014 pers. comm.). The mine site overlaps these two traplines, TR0512T014 and TR0512T027, by 0.01% and 9.4% respectively. The keyoh boundaries associated with trapline TR0512T014 were also compared with the overlap of mine components and the overlap was estimated at about 1.0%.

The Proponent remains committed to resolving issues or concerns with LDN through timely responses and transparent communication throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the Aboriginal groups on which territories the Project is located. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas. In addition, the Proponent will implement a Country Food Monitoring Program (CFMP) to ensure that baseline levels of contaminants in country foods are understood, and that possible changes in these levels are monitored and reported over the life of the Project. Results of the CFMP will help prevent any Project-related human health risks from consumption of country foods obtained from the study area. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures will be undertaken with regulators and Aboriginal groups (Appendix 9.2.2B). Table 15.2-2 provides a summary of rights raised by the LDN during pre-Application consultations to date, how the issues were addressed, and the identified residual effects.
Table 15.2-2  Lhoosk’uz Dene Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
| Aquatic Environment         | Effects on fish from water quality changes; Effects from change in water quality on furbearers and animals trapped for food | Surface Water and Sediment Quality; Fish; Furbearers; Current Land and Resource Use for Traditional Purposes | Changes in water quality or sediment that may affect fish populations or animals that rely on these resources. | C; O; DC; PC; | • Additional surface and groundwater monitoring stations were established as part of the baseline program.  
• Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review.  
• Water will be monitored on an ongoing basis throughout the life of the Project and post-closure.  
• Surface water and sediment quality will meet applicable provincial and federal standards downstream of the proposed mine site to avoid effects on fish, furbearers, or animals that use those waters.  
• The proposed mine site will aim to operate as a zero discharge facility.  
• Erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding, will be implemented to protect erodible soils from entering waterbodies.  
• Implementing design and operational procedures to limit risks associated with malfunctions and accidents  
• Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.  
• Implementation of Environmental Management Plans, addressing mine water management; water quality and liquid discharges management; transportation and access management; emergency and spill preparedness and response; landscape, soils, and vegetation management and restoration; erosion and sediment control; aquatic resources management; and wetlands management.  
• LDN member to be employed in on-going environmental monitoring.  
• Implementation of a Country Food Monitoring Plan around the Project mine site to monitor species that represent potential pathways for metals concentrations in country foods. Metal concentrations in a set of indicator plants, mammals, and fish will be analyzed to assess levels against existing baseline levels. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures would be undertaken with regulators and First Nations.  
• Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. | Not expected | 5.3.2 Surface Water Flow; 5.3.3 Surface Water Quality; 5.3.4 Sediment Quality; 5.3.6 Fish; 5.3.9 Fish Habitat; 5.4.13 Furbearers; 7.2.7 Current Land Use for Traditional Purposes; Appendix 9.2.2.B County Food Monitoring Plan; 10 Accidents or Malfunctions; 12.2 Environmental Management Plans. |
| Aquatic Environment         | Effects on the right of fishing from the loss of fish and fish habitat               | Fish; Fish Habitat                                                             | There will be an unavoidable loss of fish and fish habitat on the mine site and loss of access by fish to the headwaters of Davidson Creek and Creek 861 | C; O; DC; PC; | • Pump water from Tatelkuz Lake to a water reservoir below the ECD to meet instream flow needs in Davidson Creek. Commence flow maintenance immediately prior to the start of Project-induced flow reductions and operate through the operations and closure phases until the TSF discharges to Davidson Creek.  
• Fish habitat losses will be offset with ‘in-kind’ and ‘out-of-kind’ habitat restoration, enhancement, and creation. Fish salvage and translocation will also reduce loss of fish. | Yes | 5.3.8 Fish; 5.3.9 Fish Habitat; 7.2.7 Current Land Use for Traditional Purposes; Fisheries Mitigation and Offset Plan for the Project (Appendix 5.1.2.6D). |
<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
| Terrestrial Environment | Effect on caribou herds that may be hunted | Caribou; Current Land and Resource Use for Traditional Purposes | Changes in migration patterns or habitat that may reduce caribou populations. | C; O; D/C; PC | • Tailings facility and access road to mine redesigned to avoid UWR.  
• LDN member to be employed in on-going environmental monitoring of exploration.  
• Minimizing the Project footprint.  
• Establishing an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.  
• The Caribou Sub-working Group met to review baseline and assessment methods.  
• Developing mitigation and avoidance strategies through ongoing discussions with the Caribou Sub-working Group.  
• Participating in regional wildlife and resource management initiatives (specifically for ungulates).  
• Setting reclamation goals to re-establish later winter habitat.  
• Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats.  
• Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats. | Yes | 5.4.11 Caribou  
7.2.7 Current Land Use for Traditional Purposes;  
12.2 Environmental Management Plans |
| Terrestrial Environment | Effect on caribou herds that may be hunted | Caribou | Changes in migration patterns or habitat that may reduce caribou populations. | C; O; D/C. | • Modifying the timing of clearing trees in lichen conifer forest habitat where caribou may feed.  
• Implementing progressive reclamation using local native vegetation wherever possible.  
• Restoring disturbed habitats at mine closure or development of habitats capable of supporting caribou.  
• Implementing caribou awareness and protocols in regular safety and environmental orientations performed by the Project.  
• Implementing invasive plant management techniques as defined in the Invasive Species Management Plan.  
• Implementing dust control measures as defined in the Air Quality and Emissions Management Plan.  
• Enforcing speed limits along mine access roads and implement best management practices for road maintenance to reduce potential wildlife collisions.  
• Prohibiting mine employees from hunting on mine site property.  
• Implementing Environmental Management Plans addressing wildlife management; transportation and access management; landscape, soils, and vegetation management and restoration; and invasive species management.  
• Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. | | |
##Vegetation

<table>
<thead>
<tr>
<th>Asserted Rights/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| Vegetation            | Environmental Exposure; Ecosystem Composition; Plant Species and Ecosystems at Risk; Current Land and Resource Use for Traditional Purposes | Potential loss or change in access to areas for plant harvesting and potential contamination from dust. | C; O; D/C. | - Locations of berry sites where collection takes place were identified in the LDN TLU study and through interviews. The Proponent will continue to discuss potential Project effects with LDN throughout the life of the Project.  
   - Establish a group including affected Aboriginal group representatives to discuss access management for the transmission line corridor and the mine site.  
   - LDN member to be employed in on-going environmental monitoring of exploration activities.  
   - Minimizing the Project footprint.  
   - Implementing Environmental Management Plans to reduce dust deposition, nitrogen deposition, and invasive species proliferation (Air Quality and Emissions Management Plan; Transportation and Access Management Plan; Landscape, Soils, and Vegetation Management and Restoration Plan; Invasive Species Management Plan).  
   - Including traditional use plant species habitat in reclamation prescriptions.  
   - Implementing design and operational procedures to limit risks associated with malfunctions and accidents.  
   - Implementing a no plant harvesting policy for all workers while resident at the work site.  
   - Implementing a Country Food Monitoring Plan around the Project mine site to monitor species that represent potential pathways for metals concentrations in country foods. Metal concentrations in a set of indicator plants, mammals, and fish will be analyzed to assess levels against existing baseline levels. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures would be undertaken with regulators and First Nations.  
   - Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. |

##Heritage Resources

<table>
<thead>
<tr>
<th>Asserted Rights/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| Heritage Resources    | Archaeological Sites | Potential disturbance or changes in access to traditional and archaeological sites. | C; O. | - Archaeological and traditional sites have been fully documented. Potential effects will be avoided or minimized during construction and mitigated through reclamation programs.  
   - Implementing Environmental Management Plans addressing archaeology and heritage resources management.  
   - Informing workers of sensitive cultural areas, and implementing a policy of reporting and respectful use; |

##Potential Residual Effect

- 5.4.5 Ecosystem Composition;  
- 5.4.6 Plant Species and Ecosystems at Risk;  
- 7.2.7 Current Land Use for Traditional Purposes;  
- 9.2.1 Environmental Exposures;  
- Appendix 9.2.2 B County Food Monitoring Plan  
- 10 Accidents or Malfunctions  
- 12.2 Environmental Management Plans;  

##Full Response

- 8.1 Heritage Baseline  
- 8.2 Heritage Effects Assessment  
- 8.2.2 Archaeological Sites;  
- 7.2.7 Current Land Use for Traditional Purposes;  
- 12.2 Environmental Management Plans;  

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**Appendix 9.2.2 B County Food Monitoring Plan**

**6.4.5 Ecosystem Composition:**
- Vegetation Potential displacement and contamination of berry-picking sites and/or effects to other plant harvesting (Indian tobacco)
- Potential loss or change in access to areas for plant harvesting and potential contamination from dust.

**6.4.6 Plant Species and Ecosystems at Risk:**
- Potential disturbance or changes in access to traditional and archaeological sites.

**7.2.7 Current Land Use for Traditional Purposes:**
- Current land and resource use for traditional purposes.
- Potential loss or change in access to areas for plant harvesting and potential contamination from dust.

**9.2.1 Environmental Exposures:**
- Air quality and emissions management, transportation and access management, and visual resources and aesthetics management to address potential noise, emissions, and effects on visual resources.
- Developing alternative access plans with Aboriginal groups, where access to or use of specific cultural sites needs to be altered or is impeded.
- LDN member to be employed in on-going environmental monitoring of exploration activities.
- LDN sacred and culturally sensitive sites are outside of the Project footprint.

**10 Accidents or Malfunctions:**
- Implementing Environmental Management Plans addressing air quality and emissions management, transportation and access management, and visual resources and aesthetics management to address potential noise, emissions, and effects on visual resources.
- Developing alternative access plans with Aboriginal groups, where access to or use of specific cultural sites needs to be altered or is impeded.
- LDN member to be employed in on-going environmental monitoring of exploration activities.
- LDN sacred and culturally sensitive sites are outside of the Project footprint.
### Terrestrial Environment

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
|                     | Effects on migratory birds and mammals that may access water in the tailings ponds | Waterbirds; Current Land and Resource Use for Traditional Purposes | Changes in habitat or populations of trapped species that may reduce resources | C, O          | • Effects on wildlife, including animals that are trapped, are assessed in the Application, and management strategies are presented in the Wildlife Management Plan.  
• No trapping or hunting policy for workers during shifts will avoid competition.  
• Surface water and sediment quality will meet applicable provincial and federal standards so as not to affect wildlife.  
• Water will also be monitored on an ongoing basis throughout the life of the Project and after closure.  
• Implementation of Environmental Management Plans addressing wildlife management; transportation and access management; landscape, soils, and vegetation management and restoration; mine water management; and water quality and liquid discharges management.  
• Implementation of a Country Food Monitoring Plan around the Project mine site to monitor species that represent potential pathways for metals concentrations in country foods. Metal concentrations in a set of indicator plants, mammals, and fish will be analyzed to assess levels against existing baseline levels. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures would be undertaken with regulators and First Nations. |  
Not expected |  
|                     |                      |                  |                               |               | • 5.4.8 Water Birds; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans |                           |  |

### Social

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
|                     | Effects on traplines and Keyohs | Non-traditional Land Use; Current Land and Resource Use for Traditional Purposes | Potential reduction in access or availability of land for trapping and other traditional activities | C, O, D/C     | • The Proponent met with all trapline and Keyoh holders in the proposed mine site area.  
• The Proponent will continue to discuss potential Project effects on trapping and other traditional uses with affected Aboriginal communities throughout the life the Project.  
• Project site design that minimizes total footprint area.  
• Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.  
• Compensating affected trapline holders in accordance with industry and provincial protocols with associated proof of lost revenue.  
• Informing holders of affected trapline areas and Keyohs of Project activities, schedules, and locations.  
• Locating and maintaining breaks in the rollback to facilitate access to trapping trails during clearing.  
• Disposing of wastes generated on site to limit the attraction of wildlife to the mine site (Industrial and Domestic Waste Management Plan).  
• Implementing design and operational procedures to limit risks associated with malfunctions and accidents.  
• Prohibiting mine employees from trapping, hunting or fishing on mine site property.  
• Implementing the respective Environmental Management Plans, addressing air quality and emissions management; transportation and access management; landscape, soils, and vegetation management and restoration; and wildlife management.  
• LDN member to be employed in on-going environmental monitoring of exploration activities.  
• Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. | Yes |  
|                     |                      |                  |                               |               | 7.1.2 Non-traditional Land Use; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans |                           |  |

**Note:**  
C = construction; D/C = decommissioning/closure; O = operations; PC = post-closure; VC = Valued Component  
LDN = Lhoosk’uz Dene Nation; LSA = Local Study Area; TK/TLU = Traditional Knowledge/Traditional Land Use; TLU = Traditional Land Use; TSF = Tailings Storage Facility;  
UWR = Ungulate Winter Range.
15.2.4 Summary of Residual Effects on Lhoosk’uz Dene Nation Rights

15.2.4.1 Rights to Hunt and Trap

Residual effects on LDN rights to hunt and trap will result from changes related to the mine site area, mine access road, and FSR upgrade, which overlap LDN traditional territory, as well as the lower sections of the FSR and transmission line corridor that also overlap LDN traditional territory by 44.4 km and 51.6 km, respectively. The residual effect on the ability of LDN members to hunt results from limited access to certain areas that are used for hunting (upper north slope of Mount Davidson), the loss of some land area (mainly related to the mine site), and the potential decrease in the availability of harvesting resources. These effects will be for the duration of the operations and closure phase and are reversible during closure (Section 7.2.7).

The potential changes in the availability of wildlife resources for LDN is quantified through spatial analysis of habitat losses in the LDN traditional territory (Table 15.2-3). The wildlife study areas (unique for caribou and moose/beaver) were used to describe losses of habitat for those portions that overlap with LDN’s traditional territory.

Table 15.2-3: Potential Changes in the Availability of Harvested Resources for LDN

<table>
<thead>
<tr>
<th>Species</th>
<th>Changes in the Availability of Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou</td>
<td>Very little (3%) of moderate to high caribou habitat is being lost in the caribou RSA portion that overlaps LDN’s traditional territory both for summer/fall habitat and winter habitat</td>
</tr>
<tr>
<td>Moose</td>
<td>Very little (2%) of moderate to high moose habitat is being lost in the wildlife RSA portion that overlaps LDN’s traditional territory both for winter and growing habitat</td>
</tr>
<tr>
<td>Beaver</td>
<td>Almost no (0%, about 7 ha) beaver habitat will be lost in the wildlife RSA portion that overlaps LDN’s traditional territory</td>
</tr>
</tbody>
</table>

The development of the mine access road may indirectly increase outside competition for resources with non-LDN hunters due to greater accessibility. To mitigate these effects in LDN traditional territory, the Proponent is establishing an access management working group (of which LDN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with LDN will occur with respect to design and implementation of the final Transportation and Access Management Plan (TAMP). One access management strategy (further details provided in Section 12.2.1.18.4.14) includes installation of a security station and gate to prevent public use of the mine access road.

Risks associated with the increased ease of access to wildlife habitat by predators will most likely occur along the mine access road and transmission line. Linear corridors through habitat that was previously difficult to travel through may allow wolves and other predators to access areas that previously had low predation rates for moose. Wolves frequently use linear corridors to facilitate travel instead of forested areas. In addition, recreational users (e.g., all-terrain-vehicle or snowmobile users) may create access with machines that further create pathways through these
areas and an increasing ease of travel for predators. Effects have the potential to occur from the start of construction to the end of post-closure. To mitigate these effects, the WLMP proposes the use of vegetation and Coarse Woody Debris (CWD) to form visual barriers on cutlines, trails or other linear features to reduce predator access and efficiency.

In summary, Project related activities will not reduce accessibility or use of the south side and summit of Mount Davidson. The Project design avoids any overlap with caribou ungulate winter range on the south side of Mount Davidson to minimize effects to caribou. Given that the potential contamination of country foods has been raised as a serious concern by LDN, the Proponent has committed to engaging LDN in ongoing monitoring, and this includes the Country Foods Monitoring Program. In summary, the Project will not limit the ability to practice this activity within the LDN Traditional Territory or within the identified hunting areas.

LDN does not typically hunt caribou due to the low abundance in the area, but LDN may hunt caribou in the future. Residual effects of the Project on caribou population and habitat include habitat loss and alteration (e.g., cleared vegetation), and change in caribou population dynamics associated to abundance of predators (Section 5.4.11). Given the proposed mitigation strategies, there are negligible effects on caribou health from contaminants, caribou movement patterns or mortality risk associated with hunting and vehicle collisions.

There is an unavoidable loss of caribou habitat that will occur during the construction phase and will be reversible through to the closure and post-closure phases due to slow anticipated recovery of lichens. This effect will be limited to the mine site footprint and is not expected to affect the viability of caribou or their habitat in the caribou Regional Study Area (RSA), due to the extent of caribou and their habitat within subpopulation areas outside of the caribou RSA (Section 5.4.11). It is not anticipated that the Project will limit the ability of LDN members to exercise their rights to hunt caribou within the LDN traditional territory.

The mine site overlaps two traplines registered to members of the LDN, TR0512T014 and TR0512T027. These traplines are part of historical family Keyohs that were the exclusive traditional use areas that sustained each family group. The family (and trapline TR0512T014) continue to actively use their trapline and Keyoh for trapping and other traditional purposes. The Project overlaps with a very small portion of this trapline and sensory disturbances such as noise are not anticipated to affect the presence of furbearers such as marten and beaver in the trapline. The keyoh, larger than the trapline, is 126,394 ha in size. 855 ha of the Project components will overlap with the Jimmie keyoh, which is also less than 1%. The wildlife effects assessment for furbearers (Section 5.4.13) identifies that the residual effects of habitat loss and alteration, sensory, and change in furbearer population dynamics will not be significant. Effects on trapping due to a TSF dam failure or spills of hazardous materials are considered extremely rare and will be managed by design and operational standards (Section 10). The effects are limited to the mine site and are reversible.

Very little habitat for furbearers (see Section 7.2.7 for additional detail) is predicted to be lost near the traplines as a result of the Project. It is not expected that Project activities will affect users in accessing traplines as no road access will be impeded. The Messue Wagon Trail, the Alexander
Mackenzie Trail, and the Kluskus Ootsa FSR (all three of which could be used to access the south side of Mount Davidson nearby the trapline) will not be impeded by the Project footprint. Foot access from the Tatelkus Lake Indian Reserve #28, crossing over Mount Davidson from the north side, will be impeded by the Project footprint. It was noted that family members historically accessed the trapline from the north but was not clear whether this occurs currently. The Proponent will work with the trapline holder to reduce any disruption, as required. The Proponent will also facilitate access to trapping trails during clearing, as appropriate. Compensation, in accordance with industry standards, will be provided.

Residual effects on other traditional activities in the Keyohs are described in Sections 15.2.3.

15.2.4.2 Right to Fish

The LDN currently fish in Tatelkuz and Kuyakuz Lakes, Davidson Creek, and Chedakuz Creek. There are no significant effects on fish or fish habitat anticipated for Tatelkuz and Kuyakuz Lakes, Chedakuz Creek, nor in the middle and lower reaches of Davidson Creek. Effects on fish and fish habitat will be mitigated and accessibility to these waterbodies will not be changed by the Project. However, the upper reaches of Davidson Creek will be permanently altered from the commencement of Project construction. There will be a permanent loss of fish habitat in the upper reaches of Davidson Creek. Some historical evidence demonstrates LDN use of the upper reaches of Davidson Creek areas for fish harvesting. These losses will be offset with ‘in-kind’ and ‘out-of-kind’ habitat restoration, enhancement, and creation – most of which will benefit waterbodies within the traditional territory of LDN. Additional detail is provided in the Fisheries Mitigation and Offsetting Plan (FMOP) for the Project (Appendix 5.1.2.6C). Fish salvage and translocation will also mitigate the potential loss of fish.

The potential changes in the availability of harvested fish resources for LDN is quantified through spatial analysis of fish habitat losses in the LDN traditional territory. The loss of fish and habitat type is presented in Table 15.2-4.

<table>
<thead>
<tr>
<th>Fish Species</th>
<th>Habitat Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow Trout</td>
<td>144,207</td>
</tr>
<tr>
<td>Kokanee</td>
<td>0</td>
</tr>
<tr>
<td>Food &amp; Nutrient Production</td>
<td>80,438</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>224,645 (HU)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>161,218 (m²)</strong></td>
</tr>
</tbody>
</table>

There will also be small reductions in flow of lower Chedakuz Creek during operations, closure and post-closure compared to baseline flows. Those small reductions in flow will result in small reductions in the quantity and quality of fish habitat in the stream during summer and winter. For some life-stages such as rainbow trout spawners and kokanee spawners the amount of habitat...
will decrease as a result of flow reduction, but only by 4% to 6%. For other life-stages such as rainbow trout fry the amount of habitat will increase slightly during spring as a result of flow reduction. It is unlikely that these small changes in habitat quantity and quality will result in measurable changes in fish numbers in lower Chedakuz Creek. This is particularly applicable to those species that are components of Aboriginal fisheries such as kokanee, suckers, mountain whitefish and burbot that spend most of their lives in Tatelkuz Lake and use Chedakuz Creek only for spawning and embryo incubation.

Five separate projects (fish habitat enhancement projects) are proposed by the Proponent to offset the residual effects to fish caused by the Project. These include three “on-site” projects within the Davidson and Creek 661 watersheds (enlargement of Lake 01682LNRS; construction of two overwintering and summer rearing ponds near the middle reaches of Davidson Creek; and construction of an overwintering and summer rearing pond near the middle of Creek 661). In addition, two “off-site” projects are proposed including the restoration of fish habitat in the Mathews Creek watershed (which is in LDN’s traditional territory).

After mitigation and compensation measures, it is expected that there will be gains in fish habitat of 386,785 (HU) or 153,699 (m2). As a result of mitigation, no significant residual effects to fish availability in LDN traditional territory are predicted.

In summary, the right to fish by LDN members is not predicted to change in any of the areas identified for fishing. However, the upper reaches of Davidson Creek will be permanently altered from the commencement of Project construction. There will be a permanent loss of fish and fish habitat in the upper reaches of Davidson Creek. The Project affects a very small area (relative to the overall number and size of other nearby waterbodies used for fishing) and will not impede fishing in the other nearby and popular fishing areas such as Tatelkuz Lake, Kuyakuz Lake and Chedakuz Creek.

15.2.4.3 Right to Harvest Traditional Plants

The LDN noted they harvest a wide range of plants for food, medicine, and building materials. Plant gathering occurs “all over,” and is particularly plentiful around Tatelkuz Lake, and along trails—the Messue Wagon Trail, specifically. According to the ecosystem effects assessment (Section 5.4.5), activities during the Project phases may result in changes to the abundance and distribution to plant resources within LDN territory. The potential changes in the availability of harvested traditional plants for LDN is quantified through spatial analysis of habitat losses in the LDN traditional territory (Table 15.2-5). Habitat losses are largely due to the clearing of the mine site. There are no effects on LDN traditional plant gathering along the Kluskus FSR since there was no significant effect on traditionally used plants from dust deposition along the Kluskus FSR and this road was not noted as an area that was used for plant gathering.
Table 15.2-5: Potential Changes in the Availability of Traditional Plant Habitat for LDN

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Changes in the Availability of Traditional Plant Habitat (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine (mine site, mine access road, airstrip and FSS)</td>
<td>3,709</td>
</tr>
<tr>
<td>Transmission</td>
<td>178</td>
</tr>
<tr>
<td>Kluskus FSR</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>3,921 ha</td>
</tr>
</tbody>
</table>

As expected, the majority of the changes in traditional plant habitat occurs as a result of the clearing of the mine site. In total, 3,921 (18%) of the traditional plant habitat that is present in the vegetation RSA portion that is located within LDN traditional territory will be lost during construction and operations. During closure the mine site and other linear components will be re-vegetated using native species, including the ones harvested for traditional purposes. It should be noted that terrain in higher elevations, such as the area where the mine site is located, are not conducive to high yields of berries, despite the presence of the plants, because of lower temperatures. During interviews, LDN elders noted they pick traditional plants at lower elevations around lakes such as Kuyakuz Lake and Tatelkuz Lake. An abundance of berries and medicinal plants exist on the south and south-east sides of Tatelkuz Lake.

Based on interviews conducted with the family residing at Tatelkus Lake IR#28, nearby trapline holder and the TK/TLU data provided, preferred locations for gathering occurs around Tatelkuz Lake, particularly on the south and north east sides. An abundance of berries and traditional medicines are available in these areas. Project related activities will not reduce accessibility or use to these areas nor will it affect access to the Messue Wagon Trail or the Alexander Mackenzie Trail.

LDN representatives have expressed concern about potential changes to the quality of resources-in this case, contamination of berries and plants for human consumption. The Project will generate air and liquid effluent emissions. A HHERA was conducted to assess the effects of exposures to COPC on the health of people living in the vicinity of the Project. The HHERA model used worst-case conservative exposure scenarios, including for those Aboriginal peoples residing in the area (Tatelkus Lake Indian Reserve #28) and practicing traditional harvesting of country foods (i.e. gathering). The HHERA also considered all possible exposure pathways at the different phases of the Project from Construction to Post-Closure. Based on the HHERA results, the residual health effects were determined to be not significant (negligible) during all phases of the Project.

Given that the potential contamination of country foods has been raised as a serious concern by LDN, the Proponent has committed to engaging LDN in ongoing environmental monitoring, and this includes the Country Foods Monitoring Program.

Overall the effect on plant gathering for traditional purposes by the LDN is considered negative, since there is a loss of areas used for plant gathering (due to clearing for the transmission line...
ROW). The effects are moderated by the relative abundance of similar plant species elsewhere in LDN’s traditional territory and in other areas of the Jimmie keyoh. The family members residing at IR #28, harvest the majority of their berries on the far eastern side of Tatelkuz Lake (near the South East Tatelkuz Lake Recreation site where no Project effects are anticipated) while medicinal and other food plant harvesting is noted to be preferable around Tatelkuz Lake, particularly on the eastern portion near stream crossings. Effects on plant species are also reversible during post-closure.

15.2.4.4 Right to Use of Spiritual/Traditional Sites

The LDN identified some sacred or culturally significant sites and no effects are anticipated. During interviews with LDN elders (2013) and in consultation activities two sites of cultural importance were identified including Kuyakuz Mountain and Tatelkuz Lake (north shore). Both sites are sacred and areas where ceremonial activities may occur.

The fresh water pipeline will cross the Messue Wagon Trail but they it will cross the trail in an area where a roadbed exists to limit additional disturbance. The trail may be temporarily affected during the construction of the freshwater pipeline. After construction, the pipeline will be buried. The construction of the transmission line could also temporarily disrupt the use of the trail. After construction, the use of the trail will not be affected. The residual effect on the use of the Messue Wagon Trail results from the Project components overlapping with very small portions of the trail and will not impede the use of the trail. The effect is short-term and reversible since it is only experienced during construction (Section 7.2.7).

It is not expected that the Project activities will affect users from accessing or using any of the other sites identified above for ceremonial, sacred or navigation purposes.

However, there will be some sensory disturbances in these sacred areas. Construction, operations and closure phases of the Project may produce a change in the experience of using lands and resources for ceremonial or other purposes. No noticeable changes to baseline daytime and night time noise levels from the mine site are expected to be heard from the sites identified above (Kuyakuz Mountain, Tatelkuz Lake, and the trails). Noise from the FSS will only be detectable at the pumphouse on the southeast side of Tatelkuz Lake where there may be some low noise associated with the structure. Any maintenance associated with the pumphouse may also produce minor noise disturbances but it will be infrequent. With respect to visual changes, the freshwater pipeline will be buried to reduce visual disturbances around Tatelkuz Lake and the Messue Wagon Trail.

The mine site’s largest components such as the TSF, the open pit and the waste rock dumps will be visible from the peak and western slopes of Kuyakuz Mountain during construction, operations and closure phases. Because the top of Kuyakuz Mountain is approximately 20km east of the mine site, it is not expected that construction or operational noise will be perceived. During closure, decommissioning, reclamation and re-vegetation activities will be conducted and a large portion of the mine site will be covered in vegetation, therefore the view of the mine site would blend with the surrounding environment.
From certain vantage points of the Messue Wagon Trail, some infrastructure related to the mine will be visible. With respect to visual changes to Tatelkuz Lake (north shore), there will be some visual disturbances. The mine site will be visible for the construction, operations and closure phases from certain vantage points. In addition, the pumphouse will be visible.

The residual effect on the ceremonial use of the north shore of Tatelkuz Lake is negative since some Project components are visible, but will not impede ceremonial use.

15.2.4.5 Aboriginal Title

The proposed mine site, proposed access road, a portion of the proposed transmission line, and the (already existing) Kluskus FSR are located within LDN traditional territory. Should LDN establish title through treaty negotiations, the Project holds the potential to affect LDN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components and activities. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.2.4.6 Summary

Given the analysis above and the commitments made with respect to mitigation, the overall effect on LDN fishing, hunting, and gathering rights is expected to be low. It is not anticipated that the Project will affect the ability of present and future generations to exercise their Aboriginal rights, nor is it expected that the Project would require LDN to modify its practices related to fishing, hunting, and gathering.

15.3 Nadleh Whut’en First Nation

15.3.1 Past, Current, and Anticipated Future Land Uses

The NWFN often moved throughout the traditional territory depending on the seasons and as dictated by the movement of primary food sources such as salmon, moose, caribou, deer, small game, nuts and berries (School District 91: Nechako Lakes). As is typical amongst Carrier groups, the NWFN practice a Keyoh system.

NWFN land ownership, use and access is managed under the clan-based keyoh system (see Section 14 for more information). Each clan owns and controls a distinct keyoh (or traditional area) (CSTC, 2006). Boundaries of keyohs typically correlate to physical landscape features such as mountains, rivers, creeks, lakes, and other natural features. The five clans of the NWFN are: Frog (Lhtseh yoo); Grouse/Owl (Ulstah mus yoo); Bear (Dumdehm yoo); Caribou (Luk sil yoo); and Beaver (Tsah yoo). NWFN noted that portions of the proposed transmission line and Kluskus FSR traverse areas belonging to the Frog Clan where members engage in harvesting practices (NWFN Meeting, 2014).

Secondary data sources indicate the main traditional activity of the NWFN continues to be fishing (Carrier Sekani Tribal Council, 2006). Secondary data sources indicate the NWFN harvest salmon,
steelhead trout, Dolly Varden trout and rainbow trout (this fishing activity is noted to occur in the Sutherland River). The Nautley River is identified as an important salmon fishing area for NWFN people (although the River also contains trout, kokanee, and White Sturgeon) whereas the Nechako River is an important site for sockeye production. Secondary research demonstrates the NWFN are concerned about the existing population of white sturgeon in the Nechako River (Carrier Sekani Tribal Council, 2006).

The NWFN used trails within their traditional territory for travel and to engage in hunting and trapping. The NWFN continue to harvest bears, moose and deer as well as engage in trapping activity (Carrier Sekani Tribal Council, 2006).

NWFN has indicated that its members trap throughout its traditional territory; however, the Proponent’s consultations with the NWFN to date has not identified specific trapping areas within NWFN traditional territory.

In addition to general trapping activities undertaken throughout NWFN traditional territory, one NWFN member holds a provincially-registered trapline (TR0712T036) that overlaps the transmission line by 0.52%. During interviews with the son of the trapline holder on 29 November 2012, and the daughter of the trapline holder on 30 April 2013, both noted the trapline is dormant and not currently used (however the trapline may be in use by other NWFN members). At the time of writing, the Proponent had no information on trapping within the Project vicinity. The NWFN has advised that the information collected by the Proponent with respect to TR0712T036 does not represent Nadleh use of their traditional territory for trapping purposes.

15.3.2 Asserted Nadleh Whut'en First Nation Aboriginal Rights

The Proponent engaged with NWFN representatives in September 2012 to introduce the Project. Since that time, six additional meetings were held to discuss capacity funding, proposed agreements, Project updates, and the proposed transmission line. In July 2014, a meeting was held to provide an overview of the studies underway with respect to water resources. NWFN continues to raise concerns about potential effects to the Nechako River where salmon are harvested by NWFN members.

The Proponent has discussed with the NWFN capacity funding to participate in the EA process, including provision of TK/TLU information. Negotiations started between the parties, but at the time of writing an agreement was not finalized. Detailed information on consultation activities is provided in Section 17.

Table 15.3-1 provides a summary of asserted rights raised by NWFN in the pre-Application period, the manner in which these rights were identified, and whether they are potentially affected by the Project.
Table 15.3-1: Summary of Nadleh Whut’en First Nation Rights and Concerns Raised in Relation to the Project

<table>
<thead>
<tr>
<th>Concern</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects on spring salmon as a food fish in Nechako River</td>
<td>Fishing</td>
<td>Meeting</td>
<td>18 Apr 2013</td>
</tr>
<tr>
<td>Potential effects (including cumulative effects) on the Nechako watershed from the transmission line crossing and potential discharge from the mine, which may affect fish and water quality</td>
<td>Fishing</td>
<td>Meeting</td>
<td>13 Feb 2013, 9 June 2014, 16 June 2014, 18 June 2014, 4 July 2014</td>
</tr>
<tr>
<td>Potential effects to fish species of cultural importance to NWFN (Nechako White Sturgeon and Sockeye salmon)</td>
<td>Fishing</td>
<td>Letter</td>
<td>11 July 2014</td>
</tr>
<tr>
<td>Potential effects to fisheries in Davidson Creek</td>
<td>Fishing</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Cumulative effects from linear projects and forestry activities on wildlife and Aboriginal fisheries</td>
<td>Traditional land use</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Potential effects to wetlands and the ecological function that wetlands provide to species such as birds, amphibians etc.</td>
<td>Traditional land use</td>
<td>Meeting</td>
<td>27 Oct 2014</td>
</tr>
<tr>
<td>Potential habitat fragmentation effects on wildlife, particularly caribou and moose</td>
<td>Hunting</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Potential effects as a result of increased access and increased hunting pressures on moose, ungulate harvesting, and other wildlife</td>
<td>Hunting</td>
<td>Letter</td>
<td>11 July 2014</td>
</tr>
<tr>
<td>Effects on medicinal plant harvesting (due to increased access from cattle and grazing activities)</td>
<td>Gathering</td>
<td>Meeting</td>
<td>27 Oct 2014</td>
</tr>
</tbody>
</table>

At this point, the nature and extent of any asserted Aboriginal claim by NWFN with respect to lands affected by the project footprint remain uncertain.

In addition to the rights identified by NWFN (Table 15.3-1), there could be other Aboriginal rights potentially affected by the Project. This section addresses all potential effects expected from the Project on the NWFN rights based on information collected to date through consultation and other secondary sources.

15.3.3 Nadleh Whut’en First Nation Rights Effects Assessment and Mitigation

The Proponent will continue efforts to consult the NWFN and gather TK/TLU information. The Proponent is committed to meaningful consideration of the rights of the NWFN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential effects identified during the EA process. The final section in this document describes design changes made as a result of Aboriginal groups consultation, including consultation with NWFN (Section 15.11). The Proponent will continue to consider information on rights as it becomes available and will incorporate it in...
Project design, execution, management plan development, permitting and monitoring to the extent practical. The Proponent welcomes additional recommendations from NWFN on project design features, mitigation measures and other initiatives to better address effects on Aboriginal rights.

NWFN has identified concerns with respect to water quality on the Nechako River—at the transmission line crossing—and how that may affect salmon and White Sturgeon in the River. No effects to the Nechako River system are anticipated. The drainage from the mine site to the Nechako Reservoir is approximately 50 km long and it receives contributions from a large number of streams. It is not anticipated that effects to fish and fish habitat will occur in the Nechako Reservoir as a consequence of the Project. The Project will operate as a zero surface discharge during operations and closure with extremely limited seepage bypassing the water management system (2 L/s), and the expectation that when water is discharged from the TSF at post closure it will meet applicable federal and provincial guidelines to protect fish or the water will be treated. Surface and groundwater monitoring will continue for the life of the Project, and results of all water quality sampling will continue to be posted for working group and Aboriginal groups review. Information on water flow and quality can be found in Section 5.3.2 and Section 5.3.3.

Potential Project effects of construction and maintenance of the transmission line where it crosses the Nechako River will be mitigated. Mitigation measures are described in Table 15.3-2 and include silt fencing to limit sediments reaching fish-bearing streams and implementation of a range of erosion and sediment control measures.

The only scenario in which the Nechako Reservoir could be affected would be in the event of an uncontrolled release or failure of the TSF. The Project has been designed to minimize the risks of accidents and malfunctions and also incorporates geotechnical monitoring measures to ensure that facilities are stable.

TSF failures are considered to be extremely unlikely and the environmental risks associated with this are discussed in Section 10 of the Application, Accidents and Malfunctions. The TSF dam is designed to meet applicable Canadian industry standards. TSF geotechnical design parameters were developed from an extensive geotechnical database, which incorporates geological and geotechnical data from the 2012 and 2013 site investigations to support tailings facility dam and disposal area design.

Geotechnical instrumentation will be installed along the tailings and water dams to monitor the stability of these structures. The instrumentation will be installed during construction and over the life of the Project. Instrumentation monitoring will be carried out routinely during construction and operations.

NWFN raised additional concerns related to the Project Access Road (Kluskus and Kluskus-Ootsa FSR) on NWFN’s asserted right to harvest moose and other ungulates. The NWFN noted moose populations are declining and additional truck traffic along the Kluskus FSR has the potential to affect moose populations further. The Proponent presents measures to mitigate effects from increased traffic along the Kluskus FSR in the Traffic Control and Management Strategy (Section 12). Key aspects include speed limit restrictions to prevent collisions. In addition, employees are
prohibited from hunting. To mitigate these effects in NWFN traditional territory, the Proponent is establishing an access management working group (of which NWFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with NWFN will occur with respect to design and implementation of the final TAMP.

The Access Management Working Group will also assist the Proponent in understanding NWFN concerns related to moose populations around the Kluskus FSR and will assist in the mitigation of project related effects to access concerns. A caribou sub-working group was established to better understand cumulative effects on ungulates and establish best management practices and mitigation strategies. Effects on ungulates are assessed in the Application in Section 5.4 and mitigation strategies are developed and presented in Section 5.4.11 and in the WLMP. In 2014, a draft WLMP was provided to the NWFN for input.

The Proponent is committed to ongoing dialogue about Project effects with NWFN throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the NWFN. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas.

Table 15.3-2 provides a summary of rights raised by the NWFN during pre-Application consultations to date, how the issues were addressed, and the identified residual effects.
### Table 15.3-2: Nadleh Whut'en First Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
| Aquatic Environment    | Effects on salmon and White Sturgeon                                                | Fish; Fish Habitat; Surface Water Flow; Surface Water Quality; Current Land Use and Resource Use for Traditional Purposes. | Effects on the Nechako River from the transmission line crossing, including effects to salmon and water quality. | C; O; D/C     | - Additional surface and groundwater monitoring stations were established as part of the baseline program.  
- Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review.  
- Water will be monitored on an ongoing basis throughout the life of the Project and post-closure.  
- Surface water and sediment quality will meet applicable provincial and federal standards to avoid effects on fish, fur-bearers, or animals that use those waters.  
- Establish a group including affected Aboriginal group representatives to discuss access management for the transmission line corridor and the mine site.  
- Erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding, will be used to protect erodible soils from entering the water.  
- Silt fencing will be used to limit sediments reaching fish-bearing streams.  
- Grader operations will follow guidelines to prevent sediment deposition.  
- Instream works will be avoided or minimized.  
- Clear-span bridges or open bottom culverts will be installed at all new fish-bearing stream crossings.  
- Implementing design and operational procedures to limit risks associated with malfunctions and accidents, including catchment, spill protection, and emergency response.  
- Machinery will not be allowed to ford the stream at any time. Temporary single span bridges will be used for all temporary crossings.  
- An emergency spill response kit will be kept on-site during construction and closure.  
- Fuels will be stored, and re-fuelling will be conducted outside of riparian areas at all times.  
- Measures will be taken to ensure that machinery arrives on-site in a clean condition and is maintained free of fluid leaks.  
- Open-bottom structures will be installed at all new stream crossings.  
- Correctly sized and installed closed bottom culverts will be used to replace any existing culverts on non-fish-bearing streams as necessary.  
- Disturbance to riparian vegetation will be minimized within a 15 m wide buffer strip around fish-bearing streams.  
- Trees growing near the transmission line cable will be pruned or topped, while leaving the stumps and root wads in place.  
- Disturbed areas will be stabilized, vegetated, and/or seeded with native species as soon as possible after disturbance.  
- Implementation of the Project Environmental Management Plans addressing mine water management; water quality and liquid discharges management; transportation and access management; emergency and spill preparedness and response; landscape, soils, and vegetation management and restoration; erosion and sediment control; aquatic resources management; fish habitat compensation; and wetlands management.  
- Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. | Not expected  | 5.3.1 Surface Water Flow; 5.3.2 Surface Water Quality; 5.3.7 Fish; 5.3.8 Fish Habitat; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans. |

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**Note:** The table continues with similar mitigation measures for various environmental effects and tracked issues related to the project's impacts on aquatic environments.
## Terrestrial Environment

**Moose and Ungulate Hunting**

Moose; Current Land and Resource Use for Traditional Purposes

**Potential Environmental Effect**

Effects on moose and ungulate hunting that will reduce numbers.

**Mitigation**

- Participating in regional wildlife and resource management initiatives (specifically for ungulates).
- Prohibiting mine employees from hunting on mine site property.
- Implementing the respective Environmental Management Plans, addressing wildlife management; landscape, soils, and vegetation management and restoration; and transportation and access management. Issues such as road kill, displacement, and an increase in mortality due to increased predator access will be addressed in these Management Plans.
- Implementing a TKTLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TKTLU are being complied with.
- Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.
- Minimizing the Project footprint.
- Developing mitigation and avoidance strategies through ongoing discussions with the Caribou Sub-working Group.
- Participating in regional wildlife and resource management initiatives (specifically for ungulates).
- Setting reclamation goals to re-establish later winter habitat.
- Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats.
- Redesigning the TSF and mine access road to avoid UWR.
- Setting reclamation goals to re-establish later winter habitat.

### Note

- C = construction; D/C = decommissioning/closure; O = operations; PC = post-closure; VC = Valued Component
15.3.4 Summary of Residual Effects on Nadleh Whut’en First Nation Rights

15.3.4.1 Rights to Hunt and Trap

Potential Project effects could be experienced in the northern portion of the transmission line, where 47.90 km of the transmission line overlaps NWFN traditional territory. Project effects may be experienced along the north end of the existing Kluskus FSR, where 8.47 km of the road overlaps NWFN traditional territory (Table 15.3-3). Mitigation has been identified to address potential effects on wildlife, including moose. The wildlife study areas (unique to caribou and to moose) were used to describe losses of habitat for those portions that overlap with NWFN’s traditional territory. The habitat suitability modeling results obtained for moose and grizzly bear can be used as surrogates for deer and black bear species respectively in order to estimate habitat losses affecting deer and black bear. The majority of any predicted effects to NWFN are in relation to the portion of the transmission line that intersects with NWFN traditional territory.

Table 15.3-3: Potential Changes in the Availability of Harvested Resources for NWFN

<table>
<thead>
<tr>
<th>Species</th>
<th>Changes in the Availability of Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou</td>
<td>No moderate to high caribou habitat is found in the portions of the transmission line and Kluskus FSR that overlaps NWFN traditional territory</td>
</tr>
<tr>
<td>Moose</td>
<td>Very little (2%) of moderate to high moose habitat is being lost in the wildlife RSA portion that overlaps NWFN’s traditional territory both for winter and growing habitat.</td>
</tr>
<tr>
<td>Bear</td>
<td>Very little (2%) of moderate to high grizzly bear summer habitat is being lost in the wildlife RSA portion that overlaps NWFN’s traditional territory</td>
</tr>
</tbody>
</table>

Where possible, the transmission line ROW follows areas of existing disturbance (i.e. forestry roads) to avoid effects. Loss or alteration of habitat as a result of the transmission line will occur during the construction phase but will be reversible during the closure phase.

Where possible, the transmission line ROW follows areas of existing disturbance (i.e. forestry roads) to avoid effects. Loss or alteration of habitat as a result of the transmission line will occur during the construction phase but will be reversible during the operations and closure phases. To reduce effects on moose and bear habitat, the Landscape, Soils and Vegetation Management and Restoration Plan (LSVMRP) (Section 12.2.1.18.4.4) proposes reclamation of preferred moose and bear habitat through silviculture methods to promote restoration to pre-disturbance condition along the transmission line ROW. In addition, clearing of berry growing areas and riparian stands along the transmission line ROW will be avoided, where possible. The Proponent will aim to maintain mature and old growth coniferous forest with high canopy closure and vegetation, where ever possible. Other measures to reduce effects on bears and moose include a strict no hunting policy for Project workers.

Noise from transmission line construction may affect wildlife along the transmission line ROW, but this disturbance will be limited to the construction phase (apart from any necessary maintenance
during operations). The construction phase is expected to last 12 months, construction work at any particular location should be temporary (i.e. weeks) as the construction crews will advance at a speed of approximately 2.5 km per week. The Proponent will follow wildlife timing windows to avoid disturbing wildlife during sensitive periods. The sensitive periods for wildlife and fish are presented in Section 12.2- Construction and Operations Management Plan. The Proponent provided a draft WLMP to NWFN and looks forward to further input from NWFN. The development of the transmission line may indirectly increase outside competition for resources with non-NWFN hunters due to greater accessibility. To mitigate these effects in NWFN traditional territory, the Proponent is establishing an access management working group (of which NWFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with First Nations will occur with respect to design and implementation of the final TAMP.

Risks associated with the increased ease of access to moose habitat by predators may occur along the transmission line ROW. Linear corridors through habitat that was previously difficult to travel through may allow wolves and other predators to access areas that previously had low predation rates for moose. Wolves frequently use linear corridors to facilitate travel instead of forested areas. In addition, recreational users (e.g., all-terrain-vehicle or snowmobile users) may create access with machines that further create pathways through these areas and an increasing ease of travel for predators. Effects have the potential to occur from the start of construction to the end of post-closure. To mitigate these effects, the WLMP proposes the use of vegetation and Coarse Woody Debris (CWD) to form visual barriers on cutlines, trails or other linear features to reduce predator access and efficiency.

Wildlife mortality also has the potential to affect changes in the availability of harvested resources for NWFN hunters. To mitigate these effects, the Proponent is enforcing speed limits along the mine access road and will implement best management practices for road maintenance to reduce potential wildlife collisions. The TAMP (further details provided in Section 12.2.18.4.14) identifies strategies such as providing wildlife the ROW along all roads associated with the mine; reporting wildlife sightings to supervisory personnel as soon as possible; and reporting wildlife incidents (e.g., traffic accidents) to supervisory personnel immediately. With mitigation, residual effects to direct mortality for wildlife are not anticipated to affect current hunting practices in the NWFN traditional territory.

The construction of the transmission line ROW will last approximately 12 months and disturbance at a certain location will be temporary (i.e., weeks). The additional traffic generated by the Project along the FSR will be generated during the construction and operations phase of the project, but noise and air quality disturbances will be confined to areas immediately adjacent to the FSR, where no human receptors have been identified.

The risk of accidents along the Kluskus FSR that could generate contamination (i.e. spills of chemicals or fuels) will be mitigated through traffic control described in the TAM (e.g. speed limits) and health and safety measures as described in the Accidents and Malfunctions Section 10 of the Application.
There is no site specific trapping information for the NWFN; however, one trapline (TR0712T036) believed to be specific to NWFN intersects with the transmission line ROW by 0.52%. Very little habitat for furbearers (see Section 7.2.7 for additional detail) is predicted to be lost near the trapline as a result of the Project. It is expected that Project activities will not affect users in accessing this trapline as no road access will be impeded. No residual effects are anticipated for the trapline.

15.3.4.2 Right to Fish

There is limited site specific information about locations where NWFN members fish, however, the NWFN traditional territory overlaps with the proposed transmission line. Secondary research indicates that NWFN members currently fish all over their traditional territory; in particular the Nechako River which is an important site for sockeye production (and an area of importance to NWFN). Secondary research demonstrates the NWFN are also concerned about the existing population of white sturgeon in the Nechako River (Carrier Sekani Tribal Council, 2006). Consultation with NWFN also indicates concerns related to effects on fishing (for salmon and white sturgeon) in the Nechako River.

Erosion and sediment control measures (e.g., erosion control matting and hydro seeding) will be used to protect erodible soils around stream crossings. Riprap and other erosion and sediment control measures will be incorporated into all new temporary stream crossing designs where required. Silt fencing will be used to limit sediment from reaching fish-bearing watercourses where required.

Access to the Nechako River by NWFN members will not be impeded from the presence of the transmission line ROW. The introduction of workers potentially fishing in these rivers will be mitigated through no fishing policies for workers during their shifts. The development of the transmission line ROW may indirectly increase outside competition for resources due to greater accessibility. To mitigate these effects in NWFN traditional territory, the Proponent is establishing an access management working group (of which NWFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with NWFN will occur with respect to design and implementation of the final TAMP.

After mitigation measures, there are no predicted effects to fish, including availability, expected in the Nechako River. Opportunities to practice the right to fish are not predicted to change in any of these areas.

After mitigation no residual effects on the NWFN right to fish are anticipated.

15.3.4.3 Right to Harvest Traditional Plants

There is no information available about current plant gathering conducted by the NWFN within the Project footprint although the Proponent understands that medicinal and food plant gathering is important to NWFN people.
The NWFN Traditional Territory overlaps with the northern portion of the transmission line ROW. Effects on plants as a result of construction, operation, and closure of the transmission line (including loss of traditional use plants, dust and nitrogen deposition, and invasive species) are considered minor. Given the territorial overlap, the effects to plant gathering in the traditional territory may be similar, which is described below (Table 15.3-4). When site-specific TK/TLU information about plant harvesting is shared with the Proponent, the information will be considered in the Project design, execution, management plans, permitting and monitoring.

Table 15.3-4: Potential Changes in the Availability of Traditional Plant Habitat for NWFN

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Changes in the Availability of Traditional Plant Habitat (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine (mine site, mine access road, airstrip and FSS)</td>
<td>0</td>
</tr>
<tr>
<td>Transmission</td>
<td>189</td>
</tr>
<tr>
<td>Kluskus FSR</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
</tr>
</tbody>
</table>

As expected, the majority of the changes in traditional plant habitat occurs as a result of the transmission line. In total, 197 ha (4%) of the traditional plant habitat that is present in the RSA and NWFN traditional territory for vegetation will be lost during construction. There is a potential loss of 197 ha of traditional use plants but the Proponent will make reasonable efforts not to remove traditional plants when constructing the transmission line within NWFN traditional territory (where feasible). After mitigation, no residual effects on NWFN plant gathering are expected (Section 7.2.7).

15.3.4.4 Aboriginal Title

A portion of the proposed transmission line and the (already existing) Kluskus FSR are located within NWFN traditional territory. Should NWFN establish title through treaty negotiations, the Project holds the potential to affect NWFN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components and activities. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.3.4.5 Summary

The overall effect on NWFN fishing, hunting, and gathering rights is expected to be low. It is not anticipated that the Project will affect the ability of present and future generations to exercise their Aboriginal rights, nor is it expected that the Project would require NWFN to modify its practises related to fishing, hunting, trapping and gathering.
15.4  **Saik’uz First Nation**

15.4.1  **Past, Current, and Anticipated Land Uses**

The Upper Fraser Fisheries Conservation Alliance prepared a report that discusses SFN use of resources in their traditional territory (2009). The report identified the primary food sources as salmon, moose, caribou, deer, small game, and nuts and berries. White sturgeon in the Nechako River is also an important food fish. Elders provided information on specific waterbodies where fishing has occurred. The lakes identified in the report will not be affected by the Project.

Interviews were conducted with two of the trapline holders and traditional owners of the Joseph Keyoh. Trapline TR0711T007 and its associated Keyoh will be affected by a portion of the proposed transmission line. One of the trapline holders is the current steward of the Keyoh and depends on it for resources. The information provided on use is largely dependent on interviews with this trapline holder and Keyoh steward. The Keyoh steward explained that the trapline represents a smaller proportion of the Keyoh and that activities in the keyoh are not limited to trapping. For the purpose of analysis, the trapline and Keyoh are assumed to be the same. The use of the Keyoh is as described below.

During the interview, the multi-purposed nature of the Keyoh was emphasized. The SFN keyoh holder noted the use of cultural ceremonies in the Keyoh. This includes *smudging* one's body to remove negative energies before harvesting, utilizing areas for prayer, and using private spaces to take traditional medicines. Sometimes the spaces become areas to “sweat” using lava rocks to heat the space.

Food plant harvesting practices include berry picking, most commonly huckleberries, soapberries, bearberries, strawberries, raspberries, and blueberries. Plankton grows in the wet areas of the Keyoh, along with wild onions and wild celery, which are also part of the SFN diet.

The Keyoh holder also harvests medicinal plants in the keyoh. She gathers willow, balsam, spruce, pine, pitch, elderberry, kinnikinnick, juniper, and spruce roots (used to make baskets and tan hides). Saskatoon bush is harvested and used to make baby baskets. Black moss is used to make bannock. Poplar bark is gathered and its ashes are used to tan hides. Other medicines gathered in the Keyoh include strawberry runners for treating fevers and soapberry for making Labrador tea.

Trout is the major lake fish species consumed, but there are other food fish species as well.

Animals trapped in the Keyoh include marten, squirrel, lynx, black bear, muskrat, rabbit, fisher, wolf, coyote, and weasel. Rabbit and weasel fur are used to make rugs. Animals harvested in the Keyoh include moose, deer, and squirrel.

The current Keyoh holder continues to harvest resources within the area although specific locations are yet to be identified. The SFN indicated that community members have an interest in continuing these practices and that for many people participating in the traditional economy, is critical for survival. It is anticipated that hunting, fishing, and gathering will continue into the future.
During discussions with SFN Chief and Council representatives, the importance of harvesting resources for food, social, and ceremonial use was described. SFN members hunt, fish, and gather as a necessity. They harvest moose, bear, deer, elk, and fish. Community members fish Tatuk Lake, Lavoy Lake, and Finger Lake, as well as other places (not specified). SFN members were described as having a deep understanding about the location, availability and seasonal factors of fish harvesting in the traditional territory. Sockeye salmon are important and kokanee are available at Tatuk Lake in autumn.

The existing FSR traverses one additional SFN Keyoh and trapline (TR0712T009). The Keyoh holder noted that clear-cut logging had greatly affected trapping and other traditional activities undertaken in the Keyoh. He noted that berry patches are no longer available and that the area might only be ready to trap for his grandchildren (SFN Elders pers. comm.). However, he did note that trapping is an important part of the SFN culture, but that it is not economically feasible anymore; trapping activities follow fur prices and when prices are low, trapping is economically disadvantaged.

15.4.2 Asserted Saik’uz First Nation Aboriginal Rights

The Proponent first engaged the SFN in February 2012. The Proponent held numerous meetings with SFN, including a community meeting to present the Project. Information was gathered from participants on their concerns about the effects of the Project, including effects on surrounding waterways and consultation with traditional landowners.

The Proponent further hosted a site tour of the Project for the SFN Chief and the trapline holder and current Keyoh steward. Section 17 includes details of consultation activities.

On 26 February 2014, the SFN and the Proponent signed a Capacity Agreement describing how the two parties will cooperate throughout the EA process, including how the SFN will provide input into the Project through the provision of TK/TLU-related information. On 16 July 2014 a Traditional Knowledge Protocol Agreement was signed with SFN.

At this point, the nature and extent of any asserted Aboriginal claim by SFN with respect to lands affected by the project footprint remain uncertain.

Table 15.4-1 provides a summary of asserted rights raised in the pre-application period, the manner in which these rights were identified, and whether they are potentially affected by the Project.
Table 15.4-1: Summary of Saik’uz First Nation Rights Raised in Relation to the Project

<table>
<thead>
<tr>
<th>Concern</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
<th>Potentially Affected by the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential effects to traplines or Keyohs by the transmission line through increased access¹</td>
<td>Trapping; Use of traditional resources</td>
<td>Meetings</td>
<td>13 Aug 2012, 14 Nov 2012, 16 Jan 2013, 23 Jan 2013, 28 May 2013</td>
<td>Yes</td>
</tr>
<tr>
<td>Potential exacerbation of hunting pressures on moose as a result of increased access</td>
<td>Hunting</td>
<td>Meeting</td>
<td>23 Jan 2013</td>
<td>Yes</td>
</tr>
<tr>
<td>Fishing and access to fishing camp</td>
<td>Fishing</td>
<td>Meeting</td>
<td>22 Jan 2013, 16 Oct 2013</td>
<td>No</td>
</tr>
<tr>
<td>Potential effects on bears (in particular black bears)</td>
<td>Hunting</td>
<td>Meetings</td>
<td>23 Jan 2013, 28 May 2013, 7 November 2013</td>
<td>Yes</td>
</tr>
<tr>
<td>Potential contamination of food and medicinal plant gathering areas downstream of the Project</td>
<td>Plant harvesting</td>
<td>Letter</td>
<td>24 May 2013, 7 November 2013</td>
<td>Yes</td>
</tr>
<tr>
<td>Spruce, pine, alder, Labrador tea²</td>
<td>Plant harvesting</td>
<td>Meeting</td>
<td>23 Jan 2013, 28 May 2013</td>
<td>Yes</td>
</tr>
</tbody>
</table>

15.4.3 Saik’uz First Nation Rights Effects Assessment and Mitigation

The Proponent is committed to meaningful consideration of the rights and interests of the SFN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential effects identified during the EA process. The final section in this document describes design changes made as a result of Aboriginal groups consultation, including consultation with SFN (Section 15.11). The Proponent has provided funding to SFN to complete a TK/TLU study. The Proponent will continue to consider information on rights and other interests as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.

As noted earlier the Project overlaps with two family Keyohs and traplines that are registered to members of the SFN. The Proponent met with the registered trapline holders to discuss potential effects on their traplines and Keyohs. The Proponent will continue to work with trapline holders to discuss management of any effects identified. Effects on trapping for traditional purposes are assessed in Section 7.2.7. The Proponent will provide compensation for affected trapline holders in accordance with industry and provincial protocols.

During a tour of the transmission line with SFN in October 2013, an SFN keyoh holder raised concerns about potential effects to an existing fish camp where the transmission line crosses Greer Creek. The Proponent continues to meet with the keyoh holder to identify ways to avoid...
disturbance to the fish camp. Although no loss of fish or fish habitat are expected in SFN traditional territory, the Proponent is considering off-site locations for the Fisheries Mitigation and Offsetting Plan to compensate for fish lost in the mine site. One of the options under consideration includes enhancing fish habitat in Greer Creek. This option is being discussed with SFN and other nearby tenure holders.

SFN raised concerns with respect to effects on black bear populations such as mortality from collisions and increased hunter access. The Proponent developed policies related to garbage management and reclamation. In addition, a WLMP was developed restricting hunting by employees on mine property. A draft of the WLMP was provided to SFN in 2014. In addition, the Proponent is establishing an Access Management Working Group comprised of key stakeholders and Aboriginal groups to discuss access management for the transmission line corridor and the mine site.

The Proponent developed a TAMP for the transmission line corridor and access roads and will continue to discuss potential Project effects on affected land users throughout the life of the Project.

SFN raised concerns about effects on medicinal plants that may be downstream of the Project, although specific sites of concern were not identified. Mitigation strategies to address effects of the Project on plant gathering are presented in Section 7.2.7 and in the Project Environmental Management Plans including the LSVMRP; TAMP; and Air Quality and Emissions Management Plan (AQEMP) (Section 12.2.1.18.4.9). Consultation with SFN helped to identify traditional use plants to be assessed. A total of 19 upland berry-producing species were chosen to represent traditional use and were confirmed to occur in the Project area by the baseline field program. There are no residual effects on plants gathered for traditional purposes. Mitigation plans and measures will be implemented to reduce or eliminate effects. The effects to gathering are considered low, since the Project overlaps with a very small portion of the SFN traditional territory and will not impede the gathering activity.

The Proponent provided funding to SFN to complete a TLU study. The Proponent will integrate this information into the Project design, execution, management plans, permitting and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases.

The Proponent is committed to ongoing dialogue about potential Project effects with SFN throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the Aboriginal groups on which territory the Project is located. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas.

Table 15.4-2 provides a summary of asserted rights raised by the SFN during pre-Application consultations to date, how the issues were addressed, and the identified residual effects.
### Table 15.4-2: Saik’uz First Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Assisted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| Aquatic Environment | Fishing              | Fish; Fish Habitat                  | Effects on waterbodies from the transmission line crossings that could affect water quality and access to fishing. | C; D; D/C.    | • Additional surface and groundwater monitoring stations were established as part of the baseline program.  
  • Ongoing surface and groundwater monitoring for the life of the Project.  
  • Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review.  
  • Surface water and sediment quality will meet applicable provincial and federal standards.  
  • Implementing erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding, to protect erodible soils from entering waterbodies.  
  • Implementing design and operational procedures to limit risks associated with malfunctions and accidents.  
  • Establishing a group including affected Aboriginal group representatives to discuss access management for the transmission line corridor and the mine site.  
  • Implementing Environmental Management Plans addressing mine water management; water quality and liquid discharges management; transportation and access management; emergency and spill preparedness and response; landscape, soils, and vegetation management and restoration; erosion and sediment control; aquatic resources management; and wetlands management.  
  • Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.  
  • No fishing activities by SFN members have been identified within the areas potentially affected by the Project.  
  | Not expected        | 5.3.2 Surface Water Flow; 5.3.3 Surface Water Quality; 5.3.4 Sediment Quality; 5.3.8 Fish; 5.3.9 Fish Habitat; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans 10 Accidents or Malfunctions |
| Terrestrial Environment | Moose hunting       | Moose; Current Land and Resource Use for Traditional Purposes | Effects on moose population that will reduce numbers. | C; D/C.        | • Effects on moose and proposed mitigation strategies are assessed in the Moose VC.  
  • No moose hunting by NFN members has been identified as occurring within the Project area.  
  • Redesigning the TSF and mine access road to avoid UWR.  
  • Setting reclamation goals to re-establish later winter habitat.  
  • Participating in regional wildlife and resource management initiatives (specifically for ungulates).  
  • Prohibiting mine employees from hunting on mine site property.  
  • Implementing the respective Environmental Management Plans, addressing wildlife management; landscape, soils, and vegetation management and restoration; and transportation and access management. Issues such as road kill, displacement, and an increase in mortality due to increased predator access will be addressed in these Management Plans.  
  • Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.  
  | Not expected        | 5.4.10 Moose; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans (Wildlife Management Plan; Landscape, Soils, and Vegetation Management and Restoration Plan; Transportation and Access Management Plan) |
| Social: Terrestrial Environment | Effects on traplines and Keyohs | Non-traditional Land Use; Current Land and Resource Use for Traditional Purposes | Effects on animal species trapped and/or effects that may disrupt traplines and Keyohs or access to them. | C; D/C.        | • The Proponent will continue to discuss potential Project effects on trapping and other traditional uses with affected Aboriginal communities throughout the life the Project.  
  • Project site design that minimizes total footprint area.  
  | Not expected        | 7.1.2 Non-traditional Land Use; 7.2.7 Current Land Use for Traditional Purposes; 5.4 Terrestrial Environment Effects Assessment; 12.2 Environmental Management Plans |
### Social; Terrestrial Environment

<table>
<thead>
<tr>
<th>Assumed Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berry Plants</td>
<td>Nitrogen Deposition</td>
<td>Potential effects on black bear populations.</td>
<td>C; O; D/C;</td>
<td>Prohibiting mine employees from hunting on mine site property.</td>
<td>Not expected</td>
<td>5.4.13 Furbearers; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans.</td>
</tr>
</tbody>
</table>

### Terrestrial Environment

| Berry Plants       | Nitrogen Deposition | Potential effects on black bear populations. | C; O; D/C; | Prohibiting mine employees from hunting on mine site property. | Not expected | 5.4.13 Furbearers; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans. |

### Vegetation

| Berry Plants       | Nitrogen Deposition | Potential effects on black bear populations. | C; O; D/C; | Prohibiting mine employees from hunting on mine site property. | Not expected | 5.4.13 Furbearers; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans. |

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**Note:** C = construction; O = operations; PC = post-closure; VC = Valued Component; NFN = Nazko First Nation; TLU = Traditional Land Use; TSF = Tailings Storage Facility; UWR = Ungulate Winter Range; VC = Valued Component.
15.4.4 Summary of Residual Effects on Saik’uz First Nation Rights

15.4.4.1 Rights to Hunt and Trap

Moose, deer, bear, and elk are the species most often hunted. Site specific hunting information for the SFN was not available at the time of writing. Potential Project effects could be experienced along 112.03 km of the existing FSR and 71.98 km of the transmission line where these Project components overlap SFN traditional territory. It should be noted that the Kluskus FSR is an existing disturbance and permanent feature on the landscape.

The potential changes in the availability of harvested resources (moose and bear) for SFN is quantified through spatial analysis of moderate to high rated habitat losses in the SFN traditional territory. Additionally, the effect of noise on wildlife, which can affect the availability of resources, is assessed. Potential habitat losses for species harvested by SFN are described in the table. The wildlife study areas were used to describe losses of habitat for those portions that overlap with SFN’s traditional territory. The habitat suitability modeling results obtained for moose and grizzly bear can be used as surrogates for deer and black bear species respectively in order to estimate habitat losses affecting deer and black bear. Although caribou was not mentioned as a species currently harvested by SFN members, it is included in Table 15.4-3 for illustrative purposes.

Table 15.4-3: Potential Changes in the Availability of Harvested Resources for SFN

<table>
<thead>
<tr>
<th>Species</th>
<th>Changes in the Availability of Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou</td>
<td>No moderate to high caribou summer, fall, or winter habitat is found in the portions of the transmission line and Kluskus FSR that overlaps SFN traditional territory</td>
</tr>
<tr>
<td>Moose</td>
<td>No (less than .001%) moderate to high moose habitat is found in the portions of the transmission line and Kluskus FSR that overlaps SFN traditional territory for both winter and growing habitat</td>
</tr>
<tr>
<td>Bear</td>
<td>No (less than .001%) moderate to high bear habitat (summer habitat) is found in the portions of the transmission line and Kluskus FSR that overlaps SFN traditional territory</td>
</tr>
</tbody>
</table>

As indicated, no moderate to high rated habitat for caribou, moose or bear is found within the portions of the Kluskus FSR and the transmission line ROW that overlap with SFN traditional territory. Noise from transmission line construction may affect wildlife along the transmission line ROW, but will be largely limited to the construction phase (apart from any necessary maintenance during operations) of the transmission line is short term and during operations The construction phase is expected to last 12 months, construction work at any particular location should be temporary (i.e. weeks) as the construction crews will advance at a speed of approximately 2.5 km per week. The Proponent will follow wildlife timing windows to avoid disturbing wildlife during sensitive periods (Section 12.2.1 Construction and Operations Management Plan). The Proponent provided a draft WLMP to SFN and looks forward to further discussion.

The development of the transmission line may indirectly increase outside competition for resources with non-SFN hunters due to greater accessibility. This was raised as a concern by trapline/keyoh holders with tralines that intersect with Project components. To mitigate these effects in both SFN
traditional territory and for the tralines, the Proponent is establishing an access management working group (of which SFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with First Nations will occur with respect to design and implementation of the final TAMP.

Risks associated with the increased ease of access to moose habitat by predators may occur along the transmission line ROW. Linear corridors through habitat that was previously difficult to travel through may allow wolves and other predators to access areas that previously had low predation rates for moose. Wolves frequently use linear corridors to facilitate travel instead of forested areas. In addition, recreational users (e.g., all-terrain-vehicle or snowmobile users) may create access with machines that further create pathways through these areas and an increasing ease of travel for predators. Effects have the potential to occur from the start of construction to the end of post-closure. The WLMP proposes the use of vegetation and CWD to form visual barriers on cutlines, trails or other linear features to reduce predator access and efficiency.

Although the Kluskus FSR is an existing forestry road and permanent feature on the landscape; increases to traffic will occur as a result of the Project. During the peak of Project-related traffic (construction phase) there are estimated to be a total of two additional large trucks per hour, with a total of 22 round trips per day during the Kluskus FSR. To reduce effects related to increased traffic on the Kluskus FSR, the Proponent will implement a no hunting policy during work hours for New Gold employees and will enforce speed limits for trucks (those trucks related to the Project) along the FSR, as described in the TAMP (Section 12.2.1.18.4.14). Wildlife mortality also has the potential to affect changes in the availability of harvested resources for SFN hunters. To mitigate these effects, the Proponent is enforcing speed limits and will implement best management practices for road maintenance to reduce potential wildlife collisions. The TAMP (further details provided in Section 12.2.1.18.4.14) identifies strategies such as providing wildlife the ROW along all roads associated with the mine; reporting wildlife sightings to supervisory personnel as soon as possible; and reporting wildlife incidents (e.g., traffic accidents) to supervisory personnel immediately. With mitigation, residual effects to direct mortality for wildlife are not anticipated to affect current hunting practices in the SFN traditional territory.

The construction and operation of the transmission line, the upgrades proposed for the Kluskus FSR and the transportation of workers and materials along the Kluskus FSR to the mine site, do not have the potential to generate COPCs in quantities that could affect the health of hunted animals that would be in the SFN traditional territory.

The construction of the transmission line ROW will last approximately 12 months and disturbance at a certain location will be temporary (i.e., weeks). The additional traffic generated by the Project along the FSR will be generated during the construction and operations phase of the project, but noise and air quality disturbances will be confined to areas immediately adjacent to the FSR, where no human receptors have been identified.

The risk of accidents along the Kluskus FSR that could generate contamination (i.e. spills of chemicals or fuels) will be mitigated through traffic control (e.g. speed limits) and health and safety measures as described in the Accidents and Malfunctions section 10 of the Application.
The potential effects for SFN trapping will result from changes related to the Kluskus FSR and transmission line corridor that overlaps the SFN Traditional Territory. Two traplines (TR711T007 and TR0712T009) are known to be overlapped by portions of the Project and both traplines belong to SFN members. The existing Kluskus FSR overlaps these traplines by 0.53% and 0.05% respectively. Trapline TR0712T009 has been greatly affected by clear-cut logging. The trapline holder noted that the area might only be ready to trap for his grandchildren and that trapping is not economically feasible anymore. However, he did note that trapping is an important part of the SFN culture. Although the trapline is no longer used for trapping, it is used for hunting and gathering.

Very little habitat for furbearers will be lost in the portions of the Project that overlaps with trapline TR711T007 or the wider keyoh within which it is located (See Section 7.2.7 for more information). The effects from noise to furbearers near the transmission line ROW are expected to be short term and negligible. It is not expected that the Project activities will affect users in accessing their traplines. The Proponent will work with the trapline and keyoh holders to reduce any disruption, as required. The Proponent will also facilitate access to trapping trails during clearing, as appropriate.

The Proponent will continue to discuss potential effects on trapping and provide compensation to affected provincially-registered trapline holders in accordance with industry and provincial protocols. The project overlaps with a very small portion of trapline TR711T007 and the wider keyoh within which it is located and the use of trapline TR0712T009 appears to be limited due to forestry effects. Therefore, there are no expected residual adverse effects on trapping on the SFN-held traplines. When TK/TLU information about trapping is shared with the Proponent, the information will be considered into the Project design, execution, management plans, and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases.

15.4.4.2 Right to Fish

The SFN fish “all around the region” including in the Nechako River and Greer Creek for salmon and in a variety of lakes for kokanee. The Nechako River is crossed by the Project’s proposed transmission line, but no residual effects are anticipated.

Section 5.3.8 provides a detailed discussion on potential effects to fish, and does not anticipate any effects to the availability of fish in the Nechako River nor Greer Creek. Erosion and sediment control measures (e.g., erosion control matting and hydro seeding) will be used to protect erodible soils around stream crossings. Riprap and other erosion and sediment control measures will be incorporated into all new temporary stream crossing designs where required. Silt fencing will be used to limit sediment from reaching fish-bearing watercourses where required.

The Project was designed to avoid effects to fish. After mitigation measures; there are no predicted effects to fish expected in the Nechako River or Greer Creek. The availability of fish resources for SFN members is not predicted to change in any of these areas as a result of the transmission line. Access to the Nechako River and Greer Creek will not be impeded from the presence of the transmission line ROW, however it may be facilitated by the Project. The introduction of workers
potentially fishing in these waterbodies will be mitigated through no fishing policies for workers during their shifts. The Proponent is establishing an access management working group (of which SFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with SFN will occur with respect to design and implementation of the final TAMP. There will be a security station and gate to prevent public use of the mine access road. With respect to the Greer Creek transmission line crossing, the surrounding area is already accessible via the Kenney Dam Road and the Greer Creek Recreation Site. Two lodges (the Nechako Retreat and Crystal Lake Cabins) also operate in the area.

The transmission line alignment has been designed to take advantage of existing rights-of-way, existing shared access, and other infrastructure to the extent feasible to avoid additional surface disturbance. Approximately 70% of the transmission line follows existing disturbance. With respect to noise, noticeable changes may occur during construction of the transmission line and interact with the experience of fishing. Noise from transmission line construction will be limited to the construction phase only (apart from any necessary maintenance during operations). The construction phase is expected to last 12 months, so construction work at any particular location should be temporary (i.e. weeks) as the construction crews will advance at a speed of approximately 2.5 km per week.

Although no loss of fish or fish habitat are expected in SFN traditional territory, the Proponent is considering off-site locations for the FMOP to compensate for fish lost in the mine site. One of the options under consideration includes enhancing fish habitat in Greer Creek. This option is being discussed with SFN and other nearby tenure holders.

As described, the SFN traditional territory is in an area where no residual effects on the right to fish are expected. The upper reaches of Davidson Creek are the only areas where fishing for traditional purposes will be adversely affected and these areas are outside SFN traditional territory. In 2014, the Proponent and SFN met to discuss SFN’s current efforts to protect fish habitat in its territory and opportunities for collaboration on related projects in the future. Although fish habitat losses are not expected within the traditional territory of the SFN, the Proponent is exploring opportunities to support fish habitat compensation measures and related initiatives within SFN territory.

15.4.4.3 Right to Harvest Traditional Plants

The SFN traditional territory overlaps with a portion of the transmission line ROW and the majority of the Kluskus FSR. According to the ecosystem effects assessment (Section 5.4.5), activities during the Project phases may result in changes to the abundance and distribution to plant resources within SFN territory. The potential changes in the availability of harvested traditional plants for SFN is quantified through spatial analysis of habitat losses in the SFN traditional territory (Table 15.4-4).
Table 15.4-4: Potential Changes in the Availability of Traditional Plant Habitat for SFN

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Changes in the Availability of Traditional Plant Habitat (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine (mine site, mine access road, airstrip and FSS)</td>
<td>0</td>
</tr>
<tr>
<td>Transmission</td>
<td>294</td>
</tr>
<tr>
<td>Kluskus FSR</td>
<td>141</td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
</tr>
</tbody>
</table>

There is a potential loss of 435 ha of traditional use plants but the Proponent will make reasonable efforts not to remove traditional plants when constructing the transmission line within SFN traditional territory (where feasible). During the closure phase, the transmission line will be revegetated with native traditional use plants.

The Kluskus FSR is an existing road and is currently in use (except for an area where the road will be re-routed and widened as a result of the Project). The Project’s use of the Kluskus FSR is not expected to affect the ability of SFN people to harvest berries in these areas. At its peak, traffic will only increase by two trucks per hour. After the construction phase, Project related traffic will reduce further. Most (70%) of the transmission line, follows areas of existing disturbance. Where clearing is required, effects to plant communities may occur. Ongoing vegetation management during operations and closure may also result in effects to plants. As indicated in the table, there will be a loss of plant habitat as a result of the transmission line and Kluskus FSR. The transmission line may facilitate access to gathering sites for SFN members but may also increase access by outside users. To mitigate any effects, the Proponent is establishing an access management working group to discuss access management issues.

The construction and operation of the transmission line, the upgrades proposed for the Kluskus FSR and the transportation of workers and materials along the Kluskus FSR to the mine site, do not have the potential to generate COPCs in quantities that could affect the health of traditional plants within the vicinity of these traplines. The construction of the transmission line ROW will last approximately 12 months and disturbance at a certain location will be temporary (i.e., weeks). Therefore, no changes to the quality of resources for gathering purposes are anticipated in these locations.

Effects on plants as a result of construction, operation, and closure of the transmission line and dust from the traffic using the Kluskus FSR (including loss of traditional use plants, dust and nitrogen deposition, and invasive species) are minor.

No residual effects on plant gathering for traditional purposes are expected (Section 7.2.7).

15.4.4.4 Aboriginal Title

The proposed transmission line and a portion of the (already existing) Kluskus FSR are located within SFN traditional territory. Should SFN establish title through treaty negotiations, the Project holds the potential to affect SFN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components and activities.
These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.4.4.5 Summary

The overall effect on SFN fishing, hunting, and gathering rights is expected to be low. It is not anticipated that the Project will affect the ability of present and future generations to exercise their Aboriginal rights, nor is it expected that the Project would require SFN to modify its practices related to fishing, hunting, and gathering.

15.5 Stellat’en First Nation

15.5.1 Past, Current, and Anticipated Land Uses

Traditionally, the economic mainstay for StFN was fish, especially the several varieties of salmon, which were smoked and stored for the winter in large numbers. Some key waterbodies used by StFN people for fish harvesting include the Endako River, Binta Lake, the Stuart River, Fraser Lake, Nadleh River and the Stellako River. The Stellako River contains a late run sockeye as well as Chinook. Other fish harvested in the Stellako include rainbow trout, bull trout, burbot and mountain whitefish (Carrier Sekani Tribal Council, 2006). The Stellako River is one of a number of rivers in the Fraser and Nechako basins which is involved in an Aboriginal Fisheries Strategy management by the Carrier Sekani Tribal Council. The Aboriginal Fisheries Strategy is engaged in stream temperature monitoring, sockeye restoration, white sturgeon recovery and other activities (Carrier Sekani Tribal Council, 2006). StFN members use a variety of fishing practices (e.g., hook and line fishing, netting, traps, barricades). They harvest many different species. Salmon, char, whitefish and trout – with salmon being the most important – were most referenced during interviews in relation to subsistence fisheries. However, other species (e.g., suckers and minnows) are also harvested and used (e.g., for bait or food for domestic animals). StFN communities use rivers (e.g., the Endako and the Stellako Rivers) and lakes (e.g., Fraser and Francois Lakes) as important habitat to support their fishing practices (Triton, 2014). The StFN LRUS (Proponent Version) does not identify specific fishing locations. StFN members hunt throughout their traditional territory and hunting trips are used to both “optimally and opportunistically” harvest species (e.g., grouse or rabbit may be harvested on a moose hunting trip (Triton, 2014:46). There are many species currently targeted by the StFN hunters; some of the most important include moose, deer, and black bear (Triton, 2014). Despite arriving relatively recently to the area, “moose is predominant and is the most sought after animal” (Triton, 2014:46). Additionally, various species of birds – used for both subsistence and ceremonial purposes – are culturally valued and sought (Triton, 2014). Interview respondents noted that hunting has been adversely affected by forestry practices and other activities, such as the development of roads (Triton, 2014). Some respondents were concerned that pipelines may negatively affect prime areas by destroying habitat or facilitating access (Triton, 2014). The StFN LRUS (Proponent Version) does not identify specific hunting locations.

Although many Stellat’en people participate in the non-traditional economy, fish, game, and berries still constitute a major portion of their diet.
A number of sacred sites are identified on the StFN website (StFN, 2014), including trails that connect to the coastal Grease Trail. Camp spots suitable for catching salmon, char, and whitefish are located along the trail systems. Both men and women of the StFN have places where they acquire spiritual powers, including Binta Lake located along a network of lakes and rivers used for hunting and fishing. The StFN LRUS also identifies culturally modified trees (CMTs) within the StFN traditional territory. Traditionally, the StFN harvested cambium as a food and nutrient source mostly from lodge pole pine. Their harvesting methods marked the tree but allowed it to continue growing. These trees and their marks remain visible today and constitute one form of CMT. There are many such trees – possibly tens of thousands – still present within StFN traditional territory (Triton 2014). Interviews conducted with the registered holder of Trapline TR0712T039 indicate the trapline is still used today. StFN leadership has noted that members continue to pursue trapping. Economic benefits from trapping may be low, but representatives noted that it provides opportunities to engage in cultural activities (Trapline TR0712T039, 2012-2013, pers. comm.).

### 15.5.2 Asserted Stellat’en First Nation Aboriginal Rights

Engagement and consultation activities with the StFN began in August 2012. Since that time, the Proponent held meetings with StFN to discuss potential Project effects and opportunities for participation in the EA. Concerns about potential effects to the Stellako River transmission line crossing and on berry patches were raised in meetings held with the StFN. The Stellako River crossing was adjusted to reduce effects on sensitive wildlife habitat subsequent to this concern being identified in the 10 April 2013 meeting with community representatives. During an additional meeting held in October 2013, StFN raised concerns regarding potential effects on caribou and their winter range, as well as compensation for trappers whose traplines may be affected by the Project. The Proponent has provided StFN financial support to gather and present information related to TLU. A TK/TLU study was completed in September 2014, although at the time of writing permission to incorporate the study into the Application had not yet been granted. When the information from the study is reviewed by the Proponent, it will be integrated into the Project design, execution, management plans, and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases. In June 2014, the Proponent met with Stellat’en leadership and key elders to discuss the Project and its potential effects including effects to Aboriginal rights. The meeting was also an opportunity to gain StFN input into the proposed mitigation and monitoring measures.

At this point, the nature and extent of any asserted Aboriginal claim by StFN with respect to lands affected by the project footprint remain uncertain.

#### Table 15.5-1

<table>
<thead>
<tr>
<th>Asserted Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Rights</td>
</tr>
<tr>
<td>Identified</td>
</tr>
<tr>
<td>Affected by</td>
</tr>
</tbody>
</table>

Table 15.5-1 provides a summary of asserted rights raised in the pre-Application period, the manner in which these rights were identified, and whether they are potentially affected by the Project.
Table 15.5-1 Summary of Stellat’en First Nation Rights and Concerns Raised in Relation to the Project

<table>
<thead>
<tr>
<th>Concern</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential effects on traplines and keyohs</td>
<td>Trapping</td>
<td>Meeting</td>
<td>16 Apr 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28 May 2013</td>
</tr>
<tr>
<td>Potential effects to the Stellako River from the transmission line crossing</td>
<td>Hunting and fishing</td>
<td>Meeting</td>
<td>10 Apr 2013</td>
</tr>
<tr>
<td>Potential effects to berry patches surrounding the areas of the proposed transmission line crossing</td>
<td>Traditional plant harvesting</td>
<td>Meeting</td>
<td>10 Apr 2013</td>
</tr>
<tr>
<td>Potential effects on caribou herds and their winter range</td>
<td>Hunting</td>
<td>Meeting</td>
<td>22 Oct 2013</td>
</tr>
<tr>
<td>Potential effects to salmon in the Stellako River and other waterbodies within StFN traditional territory as a result of the transmission line crossing</td>
<td>Fishing</td>
<td>Meeting</td>
<td>26 June 2014</td>
</tr>
</tbody>
</table>

15.5.3 Stellat’en First Nation Rights Effects Assessment and Mitigation

The Proponent is committed to meaningful consideration of the rights and interests of the StFN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential effects identified during the EA process. The final section in this document describes design changes made as a result of Aboriginal groups consultation, including consultation with StFN (Section 15.11). The Proponent has provided funding to StFN to complete a TLU study and will continue to consider information on rights as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.

With respect to concerns about effects to trapping, the Proponent met with trapline holder TR0712T039, whose trapline is overlapped by the proposed transmission line, and discussed alternative routes for the transmission line. The Proponent followed up with an update on the proposed transmission line route and no concerns were raised by the trapline holder. Effects on wildlife, including animals that are trapped, are assessed in Section 5.4. This section discusses mitigation measures to avoid or minimize potential negative effects. Mitigation strategies are also discussed in the WLMP. Effects on trapping and mitigation strategies are assessed in Section 7.2.6 and Section 7.2.7.

With respect to concerns raised about caribou herds and the UWR, the Proponent redesigned the proposed mine site to avoid the UWR by modifying the TSF to be located completely outside of the UWR. In addition, the existing mine access road will be moved out of the UWR. Access to the proposed mine site will not be from the west but from the north starting at KM 124 of the Kluskus FSR.
A caribou sub-working group was established to better understand cumulative effects on caribou and establish best management practices and mitigation strategies. Effects on caribou are assessed in the Application in Section 5.4.11 and mitigation strategies are developed and presented in the WLMP.

StFN raised concerns about effects on berry patches. Mitigation strategies to address effects of the Project on plant gathering are presented in Section 7.2.7 and in the Project Environmental Management Plans including the LSVRMP; ISMP; TAMP; and AQEMP. The Proponent has provided funding to StFN to undertake a TLU study and will continue to provide opportunities for StFN to identify sensitive berry-picking sites along the proposed transmission line (where appropriate). The Proponent will integrate TLU/TK information into the Project design, execution, management plans, permitting and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases. The majority of the changes in traditional plant habitat occurs as a result of the transmission line with respect. Most (70%) of the transmission line, follows areas of existing disturbance. Where clearing is required, effects to plant communities may occur. Ongoing vegetation management during operations and closure may also result in effects to plants. During discussions with StFN, it was suggested that removal of traditional use plants be avoided during construction and that the Proponent plant additional berry shrubs to augment available gathering areas for members. This is under consideration and a matter of ongoing discussion. During the closure phase, the transmission line will be revegetated with native traditional use plants.

As discussed, the StFN identified gathering activity near the Stellako River transmission line crossing although specific harvesting sites were not provided. The StFN proposed that mitigation include restricting access along the transmission line. To mitigate these effects in StFN traditional territory, the Proponent is establishing an access management working group (of which StFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation will occur with respect to design and implementation of the final TAMP.

The Proponent is also committed to continue discussing potential Project effects with StFN throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the Aboriginal groups on which territories the Project is located. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas.

Table 15.5-2 provides a summary of asserted rights raised by the StFN during pre-Application consultations to date, how the issues were addressed, and the identified residual effects.
## Table 15.5-2: Stellat’en First Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation Measure</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Trapping</td>
<td>Non-traditional Land Use; Current Land and Resource Use for Traditional Purposes</td>
<td>Potential reduction in access or availability of land for trapping.</td>
<td>C; D; D/C.</td>
<td>● Project site design that minimizes total footprint area.</td>
<td>Not expected</td>
<td>5.4 Terrestrial Environment Effects Assessment; 7.1.2 Non-traditional Land Use; 7.2.7 Current Land Use for Traditional Purposes; 10 Accidents or Malfunctions 12.2 Environmental Management Plans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● The Proponent will continue to discuss potential Project effects on trapping with affected Aboriginal communities throughout the life the Project.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Compensating affected trapline holders in accordance with industry and provincial protocols with associated proof of lost revenue.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Informing holders of affected trapline areas of Project activities, schedules, and locations.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Locating and maintaining breaks in the rollback to facilitate access to trapping trails during clearing.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Disposing of wastes generated on-site to limit the attraction of wildlife to the mine site (Industrial and Domestic Waste Management Plan).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Implementing design and operational procedures to limit risks associated with malfunctions and accidents.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Prohibiting mine employees from trapping on mine site property</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Implementing Environmental Management Plans addressing air quality and emissions management; transportation and access management; landscape, soils, and vegetation management and restoration; and wildlife management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>● Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Aquatic Environment

| Fishing; hunting | Surface Water; Sediment Quality; Fish; Fish Habitat; Current Land and Resource Use for Traditional Purposes | Potential effect on water quality and salmon (siltation) from RGW clearing Stellako River | C; D; D/C. | ● Water flow and water quality in the Stellako River will not be affected by the mine site or transmission line. | Not expected | 5.3.3 Surface Water Quality; 5.3.4 Sediment Quality; 5.3.8 Fish; 5.3.9 Fish Habitat; 5.4.13 Furbearers; 7.2.7 Current Land Use for Traditional Purposes; 10 Accidents or Malfunctions 12.2 Environmental Management Plans |
|                 |                                                   |                                                |               | ● Additional surface and groundwater monitoring stations were established as part of the baseline program. |            | |
|                 |                                                   |                                                |               | ● Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review. |            | |
|                 |                                                   |                                                |               | ● Water will be monitored on an ongoing basis throughout the life of the Project and post-closure. |            | |
|                 |                                                   |                                                |               | ● Surface water and sediment quality will meet applicable provincial and federal standards to avoid effects on fish, furbearers, or animals that use those waters. |            | |
|                 |                                                   |                                                |               | ● The proposed mine site will aim to operate as a zero discharge facility. |            | |
|                 |                                                   |                                                |               | ● Erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding, will be implemented to protect erodible soils from entering waterbodies. |            | |
|                 |                                                   |                                                |               | ● Implementing design and operational procedures to limit risks associated with malfunctions and accidents |            | |
|                 |                                                   |                                                |               | ● Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site. |            | |
|                 |                                                   |                                                |               | ● Implementation of Environmental Management Plans, addressing mine water management; water quality and liquid discharges management; transportation and access management; emergency and spill preparedness and response; landscape, soils, and vegetation management and restoration; erosion and sediment control; aquatic resources management; and wetlands management. |            | |
|                 |                                                   |                                                |               | ● Mitigation for access to fishing areas is not required as there are no changes to access to areas known to be used for fishing for traditional purposes. |            | |
|                 |                                                   |                                                |               | ● Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. |            | |

### Terrestrial Environment

<p>| Hunting | Current Land and Resource Use for Traditional Purposes | Potential effects on wildlife habitat around the Stellako River transmission line crossing. | C; D; D/C. | ● The Proponent re-routed transmission line to avoid sensitive wildlife habitat adjacent to the Stellako River. | Not expected | 2. Proposed Project Overview; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans |
|         |                                                       |                                            |               | ● Participating in regional wildlife and resource management initiatives (specifically for ungulates). |            | |
|         |                                                       |                                            |               | ● Implementing Environmental Management Plans addressing air quality and emissions management; transportation and access management; landscape, soils, and vegetation management and restoration; and wildlife management. |            | |
|         |                                                       |                                            |               | ● Informing holders of affected trapline areas of Project activities, schedules, and locations. |            | |
|         |                                                       |                                            |               | ● Establishing erosion control matting, rip rap, and hydro seeding, will be implemented to protect erodible soils from entering waterbodies. |            | |
|         |                                                       |                                            |               | ● Implementing design and operational procedures to limit risks associated with malfunctions and accidents. |            | |
|         |                                                       |                                            |               | ● Establishing an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site. |            | |
|         |                                                       |                                            |               | ● Implementation of Environmental Management Plans, addressing mine water management; water quality and liquid discharges management; transportation and access management; emergency and spill preparedness and response; landscape, soils, and vegetation management and restoration; erosion and sediment control; aquatic resources management; and wetlands management. |            | |
|         |                                                       |                                            |               | ● Mitigation for access to fishing areas is not required as there are no changes to access to areas known to be used for fishing for traditional purposes. |            | |
|         |                                                       |                                            |               | ● Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with. |            | |</p>
<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation Measure</th>
<th>Potential Residual Effect</th>
<th>EA Section</th>
<th>Full Response</th>
</tr>
</thead>
</table>
| Terrestrial Environment  | Effect on caribou herds that may be hunted | Caribou; Current Land and Resource Use for Traditional Purposes | Changes in migration patterns or habitat that may reduce caribou populations.                    | C; O; D/C; PC; PC | SIFN traditional territory is outside the caribou LSA and RSA  
Tailing facility and access road to mine redesigned to avoid UWR. The Caribou Sub-working Group met to review baseline and assessment methods.  
Developing mitigation and avoidance strategies through ongoing discussions with the Caribou Sub-working Group.  
Participating in regional wildlife and resource management initiatives (specifically for ungulates).  
Setting reclamation goals to re-establish winter habitat.  
Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats.  
Modifying the timing of clearing trees in lichen conifer forest habitat where caribou may feed.  
Implementing progressive reclamation using local native vegetation wherever possible.  
Restoring disturbed habitats at mine development of habitats capable of supporting caribou.  
Implementing caribou awareness and protocols in regular safety and environmental orientations performed by the Project.  
Implementing invasive plant management techniques as defined in the Invasive Species Management Plan.  
Implementing dust control measures as defined in the Air Quality and Emissions Management Plan.  
Enforcing speed limits along mine access roads and implement best management practices for road maintenance to reduce potential wildlife collisions.  
Prohibiting mine employees from hunting on mine site property.  
Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.  
Implementation of the Environmental Management Plans addressing wildlife management; transportation and access management; landscape, soils, and vegetation management and restoration, and invasive species management. | Not expected      | 5.4.11 Caribou; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans |
| Vegetation               | Traditional Plant Harvesting | Ecosystem Composition; Plant species and ecosystems at risk; Current Land and Resource Use for Traditional Purposes | Potential effects on berry patches.                                                             | C; O; D/C; PC  | Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.  
The Proponent will continue to discuss potential Project affects with SIFN throughout the life of the Project.  
Minimizing the Project footprint.  
Implementing Environmental Management Plans to reduce dust deposition, nitrogen deposition, and invasive species proliferation (Air Quality and Emissions Management Plan; Transportation and Access Management Plan; Landscape, Soils, and Vegetation Management and Restoration Plan; and Invasive Species Management Plan).  
Including traditional use plant species habitat in reclamation prescriptions.  
Implementing a no plant harvesting policy for all workers while resident at the work site.  
Implementing design and operational procedures to limit risks associated with malfunctions and accidents.  
Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.  
Information from the TLU study, when provided, will be integrated into the Project design, execution, management plans, and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases. | Not expected      | 5.4.5 Ecosystem Composition; 5.4.6 Plant Species and Ecosystems at Risk; 7.2.7 Current Land Use for Traditional Purposes; 10 Accidents or Malfunctions 12.2 Environmental Management Plans |

Note:  
C = construction; D/C = decommissioning/closure; O = operations; PC = post-closure; TLU = Traditional Land Use.
15.5.4 Summary of Residual Effects on Stellat’en First Nation Rights

15.5.4.1 Rights to Hunt and Trap

At the time of writing, no specific areas where hunting occurs were identified for StFN members. However, potential Project effects could be experienced in the northern portion of the transmission line where 47 km of the transmission line overlaps with StFN traditional territory.

The potential changes in the availability of harvested resources (caribou, moose and bear) for StFN is quantified through spatial analysis of moderate to high rated habitat losses in the StFN traditional territory. Additionally, the effect of noise on wildlife, which can affect the availability of resources, is assessed. Potential effects on species harvested by StFN are described in Table 15.5-3. The wildlife study areas were used to describe losses of habitat for those portions that overlap with StFN’s traditional territory. The habitat suitability modeling results obtained for moose and grizzly bear can be used as surrogates for deer and black bear species respectively in order to estimate habitat losses affecting deer and black bear. The majority of any predicted effects to StFN are in relation to the portion of the transmission line that intersects with StFN traditional territory.

Table 15.5-3: Potential Changes in the Availability of Harvested Resources for StFN

<table>
<thead>
<tr>
<th>Species</th>
<th>Changes in the Availability of Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou</td>
<td>No moderate to high caribou habitat is found in the portions of the transmission line that overlaps StFN traditional territory</td>
</tr>
<tr>
<td>Moose</td>
<td>Very little (2%) of moderate to high moose habitat is being lost in the wildlife RSA portion that overlaps StFN’s traditional territory both for winter and growing habitat</td>
</tr>
<tr>
<td>Bear</td>
<td>Very little (2%) of moderate to high grizzly bear summer habitat is being lost in the wildlife RSA portion that overlaps StFN’s traditional territory</td>
</tr>
</tbody>
</table>

Where possible, the transmission line ROW follows areas of existing disturbance (i.e. forestry roads) to avoid effects. Loss or alteration of habitat as a result of the transmission line will occur during the construction phase but will be reversible during the operations and closure phases.

To reduce effects on moose and bear habitat, the LSVRMP (Section 12.2.1.18.4.4) proposes reclamation of preferred moose and bear habitat through silviculture methods to promote restoration to pre-disturbance condition along the transmission line ROW. In addition, clearing of berry growing areas and riparian stands along the transmission line ROW will be avoided, where possible. The Proponent will aim to maintain mature and old growth coniferous forest with high canopy closure and vegetation, where ever possible. Measures to reduce effects on bears and moose include a strict no hunting policy for Project workers.

Noise from transmission line construction may affect wildlife along the transmission line ROW, but this disturbance will be limited to the construction phase (apart from any necessary maintenance during operations). The construction phase is expected to last 12 months, construction work at
any particular location should be temporary (i.e., weeks) as the construction crews will advance at a speed of approximately 2.5 km per week.

The development of the transmission line may indirectly increase outside competition for resources with non-StFN hunters due to greater accessibility. To mitigate these effects in StFN traditional territory, the Proponent is establishing an access management working group (of which StFN representatives will be invited to participate in) to discuss access management issues. No specific hunting sites along the transmission line ROW were identified for StFN members but the Proponent will work with StFN to facilitate access to desired hunting areas, as appropriate.

Risks associated with the increased ease of access to moose habitat by predators may occur along the transmission line ROW. Linear corridors through habitat that was previously difficult to travel through may allow wolves and other predators to access areas that previously had low predation rates for moose. Wolves frequently use linear corridors to facilitate travel instead of forested areas. In addition, recreational users (e.g., all-terrain-vehicle or snowmobile users) may create access with machines that further create pathways through these areas and an increasing ease of travel for predators. Effects have the potential to occur from the start of construction to the end of post-closure. To mitigate these effects, the WLMP proposes the use of vegetation and CWD to form visual barriers on cutlines, trails or other linear features to reduce predator access and efficiency.

At the time of writing, no specific information on trapline harvests for the StFN was available. The transmission line overlaps with two traplines held by StFN members, TR712T039 and TR0712T040, by 0.4% and 0.92%, respectively. Very little habitat for furbearers will be lost in the portions of the Project that overlaps with StFN's traditional Territory (See Section 7.2.7 for more information). The effects from noise to furbearers near the transmission line ROW are expected to be short term and negligible. It is not expected that the Project activities will affect users in accessing their traplines. The Proponent will work with the trapline holder to reduce any disruption, as required. The Proponent will also facilitate access to trapping trails during clearing, as appropriate. Therefore, there are no expected residual adverse effects on trapping on the StFN-held traplines.

When additional TK/TLU information about trapping is shared with the Proponent, the information will be considered in management plans.

15.5.4.2 Right to Fish

The StFN traditional territory overlaps with the northern portion of where the transmission line is proposed and crosses the Stellako River. This crossing has been identified as a concern for fishing practices, particularly any potential effects to salmon. Secondary data sources indicate that StFN members harvest a variety of fish in the Stellako including rainbow trout, bull trout, burbot, mountain whitefish and salmon (Carrier Sekani Tribal Council, 2006). Erosion and sediment control measures (e.g., erosion control matting and hydro seeding) will be used to protect erodible soils around stream crossings. Riprap and other erosion and sediment control measures will be
incorporated into all new temporary stream crossing designs where required. Silt fencing will be used to limit sediment from reaching fish-bearing watercourses where required.

Access to the Stellako River by StFN members will not be impeded from the presence of the transmission line ROW. The introduction of workers potentially fishing in these rivers will be mitigated through no fishing policies for workers during their shifts. The development of the transmission line ROW may indirectly increase outside competition for resources due to greater accessibility. To mitigate these effects in StFN traditional territory, the Proponent is establishing an access management working group (of which StFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with StFN will occur with respect to design and implementation of the final TAMP. To reduce visual changes, grass and brush will be allowed to colonize the ROW where possible. Ongoing communication with StFN on this issue is anticipated. The transmission line alignment has been designed to take advantage of existing rights-of-way, existing shared access, and other infrastructure to the extent feasible to avoid additional surface disturbance. Approximately 70% of the transmission line follows existing disturbance.

The Project was designed to avoid effects to fish. After mitigation measures; there are no predicted effects to fish, including availability, expected in the Stellako River nor in the Nechako River. The availability of fish resources for harvesting by StFN members is not predicted to change in any of these areas as a result of the transmission line.

Given the discussion above, no residual effects on fishing for StFN’s traditional purposes are expected (Section 7.2.7).

15.5.4.3 Right to Harvest Traditional Plants

At the time of writing, no specific sites where plant harvesting occurs was identified for StFN members. The StFN traditional territory overlaps with the northern portion of the transmission line and ROW. There may be limited effects on plants as a result of construction, operation, and closure of the transmission line (including loss of traditional use plants, dust and nitrogen deposition, and invasive species) (Table 15.5-4). According to the ecosystem effects assessment (Section 5.4.5), activities during the Project phases may result in changes to the abundance and distribution to plant resources within StFN territory. The potential changes in the availability of harvested traditional plants for StFN is quantified through spatial analysis of habitat losses in the StFN traditional territory.
Table 15.5-4: Potential Changes in the Availability of Traditional Plant Habitat for StFN

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Changes in the Availability of Traditional Plant Habitat (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine (mine site, mine access road, airstrip and FSS)</td>
<td>0</td>
</tr>
<tr>
<td>Transmission</td>
<td>188</td>
</tr>
<tr>
<td>Kluskus FSR</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>188</strong></td>
</tr>
</tbody>
</table>

As expected, the majority of the changes in traditional plant habitat occurs as a result of the transmission line. In total, 188 ha (4%) of the traditional plant habitat that is present in the Vegetation RSA portion located within StFN traditional territory will be lost during construction and operations. There is a potential loss of 188 ha of traditional use plants but the Proponent will make reasonable efforts not to remove traditional plants when constructing the transmission line within StFN traditional territory (where feasible). During discussions with StFN, it was suggested that removal of traditional use plants be avoided during construction and that the Proponent plant additional berry shrubs to augment available gathering areas for members. This is under consideration and a matter of ongoing discussion. During the closure phase, the transmission line will be re-vegetated with native traditional use plants.

Most (70%) of the transmission line, follows areas of existing disturbance. Where clearing is required, effects to plant communities may occur. Ongoing vegetation management during operations and closure may also result in effects to plants.

Access to the Stellako River crossing (where some berry gathering is assumed to take place) will not be impeded from the presence of the transmission line ROW, however it may be facilitated by the Project. The development of the transmission line ROW may indirectly increase outside competition for resources due to greater accessibility. To mitigate these effects in StFN traditional territory, the Proponent is establishing an access management working group (of which StFN representatives will be invited to participate in) to discuss access management issues.

To reduce visual changes, grass and brush will be allowed to colonize the ROW where possible. Ongoing communication with StFN on this issue is anticipated. The transmission line alignment has been designed to take advantage of existing rights-of-way, existing shared access, and other infrastructure to the extent feasible to avoid additional surface disturbance.

No noticeable changes to baseline daytime and night time noise levels are expected to occur around the transmission line, apart from the short-term construction time. Noticeable changes may occur during construction of the transmission line and interact with the experience of plant gathering. Noise from transmission line construction will be limited to the construction phase only (apart from any necessary maintenance during operations). The construction phase is expected to last 12 months, so construction work at any particular location should be temporary (i.e. weeks) as the construction crews will advance at a speed of approximately 2.5 km per week.
From gathering areas, the transmission line will likely be visible from some vantage points for the construction, operations and closure phases.

15.5.4 Aboriginal Title

A portion of the proposed transmission line is located within StFN traditional territory. Should StFN establish title through treaty negotiations, the Project holds the potential to affect StFN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.5.4.5 Summary

The overall effect on StFN fishing, hunting, and gathering rights is expected to be low. It is not anticipated that the Project will affect the ability of present and future generations to exercise their Aboriginal rights, nor is it expected that the Project would require StFN to modify its practices related to fishing, hunting, and gathering.

15.6 Ulkatcho First Nation

15.6.1 Past, Current, and Anticipated Land Uses

UFN people continue to participate in fishing, trapping, hunting, berry and mushroom picking, as well as plant gathering. These activities have continued for generations, as evidenced in the Ulkatcho First Nation Traditional Land Use and Ecological Knowledge of the proposed New Gold Inc. Blackwater Project (herein referred to as the UFN TK/TLU study). The UFN TK/TLU study comprises an important data source for understanding those UFN rights which have the potential to be affected by the Project. In 2011, the Proponent provided the UFN with financial support to complete the UFN TK/TLU study. Agreements to undertake the studies were signed on 20 November 2012 and the TLU study was completed in October 2013.

Hunting large caribou herds was a critical activity that historically was the main driver of subsistence for UFN and other Athapaskan bands (DM Cultural Services, 2013). However, development of the trade relationship between Carrier groups and coastal groups exposed the Ulkatcho Carrier to new elements of socio-political structures including potlatching and clan organization. Aspects of these structures were incorporated into Ulkatcho organization prior to first contact with non-Aboriginal people (DM Cultural Services, 2013) and these influences continued with the development of the fur trade. Ulkatcho people adopted many coastal cultural influences, such as the bilateral descent kinship system and crest groups. The UFN became organized around the sadeku or extended family who occupied semi-permanent winter villages. The sadeku is under the jurisdiction of the detsa, or headman, who manages the hunting territory and trapline (DM Cultural Services, 2013).

Hunting and trapping were important methods for obtaining species for food and the fur trade. Historically important food animals included caribou, grizzly and black bears, beaver, rabbits,
mountain goats, groundhogs, swans, geese, ducks, grouse and loons (DM Cultural Services, 2013). The UFN TK/TLU study indicates the hunting and trapping activity continues today with some intensity near Kuyakuz Lake, Mount Davidson, and Moose Lake. The UFN TK/TLU study identifies ongoing harvesting of lynx, squirrel, timber wolf, beaver, moose, caribou, and deer as mammals. UFN members continue to trap lynx, rabbit, beaver, and squirrel.

Fish comprised an important part of the Ulkatcho diet. The Ulkatcho Carrier historically fished at Salmon House on the Dean River and at Tanya Lakes for spring and summer salmon runs. Salmon were dried or smoked while other fish species consumed included trout, whitefish, sturgeon, and suckers. The UFN TK/TLU study identified Kuyakuz Lake, Moose Lake, and Johnny Lake as areas of intensive use near the Project area. Species fished include suckers, lingcod, salmon, and trout. Steelhead is also taken, likely from the Blackwater River.

Like many Carrier groups, berries made up a significant portion of the non-animal diet with Saskatoon berries being the most common. Other important berry species included bog bill-berry, soapberries, cranberries, viburnum berries, kinnikinnik berries, strawberries, black currants, and a variety of blueberries (DM Cultural Services, 2013). Berry-picking (especially raspberries and blueberries), mushrooms and food plant gathering (wild celery) continues today, particularly around Moose Lake, Johnny Lake, Tatelkuz Lake, Kuyakuz Lake and Tsacha Lake. The UFN specifically identified wild celery and blueberries as gathered around the Project area, although specific locations where species are collected were not provided.

Widespread use of medicinal plants also occurred. Examples include Devil's Club (the bark is boiled and used to treat arthritis or swollen limbs while the stems and roots are used to treat diabetes, colds, and stomach or digestive tract ailments) and Labrador Tea (used to treat sore throats or lung ailments). Medicinal plant harvesting continues today in areas around Tatelkuz Lake, Kuyakuz Lake, Tsacha Lake, Moose Lake and Johnny Lake.

15.6.2 Asserted Ulkatcho First Nation Aboriginal Rights

The Proponent engaged in a number of consultation activities with UFN members and leadership to identify asserted rights that may be potentially affected by the Project. The Proponent initiated contact with the UFN in 2011. The Proponent provided presentations and met with community leadership to discuss concerns regarding the Project. In February 2012, the UFN and the Proponent signed an Exploration Agreement outlining how the two parties would cooperate on matters such as consultation protocols, the EA process, use of confidential information, and joint implementation committee meetings. The Proponent held community meetings on 15 March 2013 and 11 December 2013 to present Project information, the results of environmental studies, and to obtain concerns or issues with respect to Aboriginal interests and rights. The Proponent also provided site visits for UFN representatives and maps and information about the Project to community members when potential concerns about effects to traditional areas were raised. Community members participated in archaeological and heritage resources studies at the overview stage and participated in archaeological impact assessment field studies that allowed them to identify culturally sensitive areas.

Section 17 includes detailed information on consultation activities.
The Proponent is in ongoing communication with a UFN trapline holder (the trapline is part of a larger family-owned Keyoh) whose trapline and Keyoh are located to the south of the Project area. In this case, the location of the trapline in question is outside the Project area; however, the Proponent remains committed to addressing the concerns of UFN members and continues working with the family to ensure that any concerns are well understood and any potential effects are identified.

At this point, the nature and extent of any asserted Aboriginal claim by UFN with respect to lands affected by the project footprint remain uncertain. **Table 15.6-1** provides a summary of asserted rights raised in the pre-Application period, the manner in which these rights were identified, and whether they are potentially affected by the Project.

**Table 15.6-1: Summary of Ulkatcho First Nation Rights and Concerns Raised in Relation to the Project**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects on caribou</td>
<td>Hunting</td>
<td>Meeting Site Visit Meeting Meeting Meeting E-mail TK/TLU Report</td>
<td>23 Aug 2011/30 Sep 2011/6 Jan 2012/7 Sep 2012/6 Feb 2012/12 Sept 2013/08 Nov 2013</td>
</tr>
<tr>
<td>Traditional or historic site and burial sites</td>
<td>Spiritual site use Traditional land use</td>
<td>Letter</td>
<td>31 Jan 2012</td>
</tr>
<tr>
<td>Effects on traplines and Keyohs</td>
<td>Trapping; Use of traditional resources</td>
<td>Email</td>
<td>8 Feb 2012</td>
</tr>
<tr>
<td>Increased access for non-Aboriginal hunters; Increased traffic</td>
<td>Hunting</td>
<td>TK/TLU Report</td>
<td>08 Nov 2013</td>
</tr>
<tr>
<td>Damage to fish stocks and spawning areas due to contaminants, sediment, turbidity, and temperature changes</td>
<td>Fishing</td>
<td>TK/TLU Report</td>
<td>08 Nov 2013</td>
</tr>
<tr>
<td>Introduction of invasive species; damage to rare and endangered species; and loss of understory vegetation such as berries, mushrooms, and other food and medicinal plants and materials</td>
<td>Plant harvesting</td>
<td>TK/TLU Report</td>
<td>08 Nov 2013</td>
</tr>
</tbody>
</table>

**Note:** TK/TLU = Traditional Knowledge/Traditional Land Use; BC EAO = British Columbia Environmental Assessment Office.
15.6.3 Ulkatcho First Nation Rights Effects Assessment and Mitigation

The Proponent is committed to meaningful consideration of the rights of the UFN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential effects identified during the EA process. The final section in this document describes design changes made as a result of Aboriginal groups consultation, including consultation with UFN (Section 15.11). The Proponent will continue to consider information on rights and interests as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.

The primary concern identified to date through consultation activities and the UFN TK/TLU study relates to protection and preservation of caribou herds. Initial concerns raised about caribou herds related to the UWR, and in response to this concern the Proponent redesigned the mine site to avoid the UWR by modifying the TSF to be located completely outside of the UWR. In addition, the existing mine access road will be moved out of the UWR. Access to the mine site will not be from the west but from the north starting at KM 124 of the Kluskus FSR. The redesign changes are addressed in Section 2.

The UFN TK/TLU study (DM Cultural Services Ltd., 2013) also identifies a range of potential effects on caribou with respect to the proposed Project. For example, cumulative effects (e.g. Mountain Pine Beetle Epidemic and the destruction of lichen habitat), potential exacerbation of predator-prey relationships by providing predators (wolves and grizzly bears) with facilitated access and the potential for the Project to affect caribou migration and habitat due to noise and vibration effects. As a result of these concerns, the Proponent provided capacity funding to support UFN participation in relevant meetings with wildlife environmental teams, provincial representatives, and related experts. UFN representatives provided valuable input into the baseline study, the Habitat Supply Analysis and other aspects used to assess effects on caribou. The proponent conducted lichen surveys in the vicinity of the mine site to better define potential caribou habitat. In addition to this, caribou habitat suitability modelling was used to identify potential high value lichen habitat and was used for the effects assessment. Analysis of cumulative effects to caribou habitat from MPB was conducted by the UFN. Data from recent calf surveys conducted on behalf of the UFN were also considered and included in the caribou effects assessment for the project and Cumulative Effects Assessment (CEA). (Appendix 5.4.11C).

BC EAO established a caribou sub-working group (of which the Proponent participates in) to better understand cumulative effects on caribou and establish best management practices and mitigation strategies. Effects on caribou are assessed in the Application in Section 5.4 and mitigation strategies are developed and presented in Section 5.4.11 and in the WLMP (Section 12.2.1.18.4.6). Concerns raised by UFN about potential effects to caribou (and other ungulates such as moose or deer), influenced the writing of the WLMP which now includes mitigation and management strategies specific to caribou. In 2014, a draft Wildlife Management Plan was provided to the UFN for input. The Proponent is working with UFN, the Proposed Southern Mountain Caribou Recovery Plan, and the Province to understand and protect caribou and their habitat. The Proponent is actively participating and supporting caribou and wolf related studies on a regional basis, involving the Tweedsmuir Itcha - Ilgachuz metapopulation.
Noise from Project construction, operations, and the temporary camp may displace wildlife (caribou and moose) from using habitats up to 250 metres of these features. However, habituation to routine disturbances (particularly for caribou) over the length of the Project may reduce these Project effects. Wildlife such as caribou and moose, may also be sensitive to aircraft related noise disturbances. Noise modelling was conducted for aircraft, but the results are overly conservative as the scenario modelled was for a Boeing 737 – and the aircraft that will be used is a Dash 8. Aircraft noise may be perceived by animals and residents during take-off and landing, but the frequency of flights is very low (two flights a week during construction) and discontinued during operations (unless there is an emergency).

The development of the mine access road may indirectly increase outside competition for resources with non-UFN hunters due to greater accessibility. To mitigate these effects in UFN traditional territory, the Proponent is establishing an access management working group (of which UFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with First Nations will occur with respect to design and implementation of the final TAMP. There will be a security station and gate to prevent public use of the mine access road.

Concerns were also raised about other ungulates such as deer and moose. The Proponent will implement a no hunting policy on mine site property for employees. In addition, Proponent is committed to continue discussing potential Project effects with UFN throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the Aboriginal groups on which territories the Project is located. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas. In addition, the Proponent will implement a Country Food Monitoring Program (CFMP) to ensure that baseline levels of contaminants in country foods are understood, and that possible changes in these levels are monitored and reported over the life of the Project. Results of the CFMP will help prevent any Project-related human health risks from consumption of country foods obtained from the study area. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures will be undertaken with regulators and Aboriginal groups (Appendix 9.2.2B).

The Proponent is establishing a group including affected Aboriginal groups to discuss access management for the transmission line corridor and the mine site. Ongoing consultation will occur with respect to design and implementation of the final TAMP. One access management strategy (further details provided in Section 12.2.1.18.4.14) includes installation of a security station and gate to prevent public use of the mine access road.

UFN raised concerns about effects on medicinal and other plants. Locations of sites where collection takes place were identified and appropriate avoidance and mitigation measures were developed (Section 7.2.7). In regards to the control of invasive species, the Proponent will implement and invasive species management plan, which involve the use of mechanical or biological control strategies.
Concerns raised regarding damage to fish stocks and spawning areas due to contaminants, turbidity, and temperature changes are addressed in Section 5.3.8 and Section 5.3.9, and in the Aquatic Resources Management Plan (ARMP) (Section 12.2.1.18.4.2), Sediment and Erosion Control Plan (SECP) (Section 12.2.1.18.4.1), and Water Quality and Liquid Discharges Management Plan (WQLDMP) (Section 12.2.1.18.4.10).

A community member expressed concern about known burial sites that may be affected by the Project. The Proponent obtained the coordinates of the burial sites and overlaid them with the Project designs. The burial sites are outside the Project area and no potential effects are anticipated.

The UFN report trapping in the area but as yet, no trapline registered to a UFN member has been identified in the Project footprint. Under the current Wildlife Act, First Nations may trap for food, social or ceremonial reasons on Crown land even though they may not be the registered holder of a trapline for an area and do not require a permit (MFNRO, 2014). Effects on trapping for traditional purposes are assessed in Section 7.2.7.

As noted earlier, the Proponent has met with a trapline holder whose trapline and Keyoh are located south of the Project area. The Proponent has provided Project information and maps illustrating the location of the trapline/Keyoh and the boundaries of the Project, which confirmed that the Keyoh is outside the Project area. No potential effects are anticipated in this trapline/Keyoh.

Table 15.6-2 provides a summary of rights raised by the UFN during pre-Application consultations to date, how the issues were addressed, the proposed mitigation and the identified residual effect.
### Table 15.6-2: Ulkatcho First Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Project Environmental Effect</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
</table>
| Terrestrial Environment     | Caribou hunting      | Caribou; Current Land and Resource Use for Traditional Purposes | Potential effects on caribou herds and the UWR, and effects on caribou habitat and forage (e.g., loss of UWR from direct and indirect effects, as well as effects related to wildlife mortality and caribou health). | C; O; D/C; PC.  
  - TSF and access road to mine redesigned to avoid UWR.  
  - The Caribou Sub-working Group met to review baseline and assessment methods.  
  - Developing mitigation and avoidance strategies through ongoing discussions with the Caribou Sub-working Group.  
  - Participating in regional wildlife and resource management initiatives (specifically for ungulates).  
  - Setting reclamation goals to re-establish later winter habitat.  
  - Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats.  
  - Modifying the timing of clearing trees in lichen conifer forest habitat where caribou may feed.  
  - Implementing progressive reclamation using local native vegetation wherever possible.  
  - Restoring disturbed habitats at mine closure or development of habitats capable of supporting caribou.  
  - Implementing caribou awareness and protocols in regular safety and environmental orientations performed by the Project.  
  - Implementing invasive plant management techniques as defined in the Invasive Species Management Plan.  
  - Enforcing speed limits along mine access roads and implement best management practices for road maintenance to reduce potential wildlife collisions.  
  - Prohibiting mine employees from hunting on mine site property.  
  - Implementation of the Environmental Management Plans addressing wildlife management; transportation and access management; and landscape, soils, and vegetation management and restoration.  
  - Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.  
  - Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site. | Yes  
 5.4.11 Caribou;  
7.2.7 Current Land Use for Traditional Purposes;  
12.2 Environmental Management Plans |
| Terrestrial Environment     | Ungulates hunting (other than caribou) | Moose; Furbearers; Current Land and Resource Use for Traditional Purposes | Reduction in habitat or changes in herds and ranges and increased access for non-Aboriginal hunters. | C; O.  
  - Ongoing – The Proponent will work with UFN to avoid/minimize effects on traditional hunting locations.  
  - Prohibiting mine employees from hunting on mine site property.  
  - Redesigning the TSF and mine access road to avoid UWR.  
  - Setting reclamation goals to re-establish later winter habitat.  
  - Participating in regional wildlife and resource management initiatives (specifically for ungulates).  
  - Disposing of wastes generated on site to limit the attraction of wildlife to the mine site.  
  - Implementing Environmental Management Plans, addressing Wildlife Management; Landscape, Soils, and Vegetation Management and Restoration; Industrial and Domestic Waste Management; and Transportation and Access Management.  
  - Issues such as road kill, displacement, and an increase in mortality due to increased predator access will be addressed in these Management Plans.  
  - Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor commitments made by the Proponent in regards to TK/TLU are being complied with.  
  - Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site. | Yes  
 5.4.10 Moose;  
5.4.13 Furbearers;  
7.2.7 Current Land Use for Traditional Purposes;  
12.2 Environmental Management Plans |
| Vegetation                  | Mushroom, berries and other plants collection | Ecosystem Composition; Plant Species and Ecosystems at Risk; Current Land and Resource Use for Traditional Purposes | Potential loss or change in access to areas for mushroom and plant harvesting. | C; O; D/C.  
  - Ongoing – The Proponent will continue to discuss potential Project effects with UFN throughout the life of the Project.  
  - Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.  
  - Minimizing the Project footprint.  
  - Including traditional use plant species habitat in reclamation prescriptions.  
  - Implementing design and operational procedures to limit risks associated with malfunctions and accidents.  
  - Implementing a no plant harvesting policy for all workers while resident at the work site.  
  - Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor commitments made by the Proponent in regards to TK/TLU are being complied with. | Not Expected  
 4.5 Ecosystem Composition;  
5.4.6 Plant Species and Species at Risk;  
7.2.7 Current Land Use for Traditional Purposes;  
12.2 Environmental Management Plans  
10 Accidents or Malfunctions |
### Aquatic Environment

**Fishing**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Asserted Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surface Water and Sediment Quality; Fish; Fish Habitat; Current Land and Resource Use for Traditional Purposes.</td>
<td>Damage to fish stocks and spawning areas due to contaminants, turbidity, and temperature changes</td>
<td>C; O; D/C; PC</td>
<td>Additional surface and groundwater monitoring stations were established as part of the baseline program.</td>
</tr>
</tbody>
</table>

- Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review.
- Water will be monitored on an ongoing basis throughout the life of the Project and post-closure.
- Surface water and sediment quality will meet applicable provincial and federal standards downstream of the proposed mine site to avoid effects on fish, fur-bearers, or animals that use those waters.
- The proposed mine site will aim to operate as a zero discharge facility.
- Erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding, will be implemented to protect erodible soils from entering waterbodies.
- Implementing design and operational procedures to limit risks associated with malfunctions and accidents.
- Implementing design and operational procedures to avoid effects on fish, fur-bearers, or animals that use those waters.
- The proposed mine site will be analyzed to assess levels against existing baseline levels. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures would be undertaken with regulators and First Nations.
- Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.
- Implementing a Country Food Monitoring Plan around the Project mine site to monitor species that represent potential pathways for metals concentrations in country foods. Metal concentrations in a set of indicator plants, mammals, and fish will be analyzed to assess levels against existing baseline levels. If metal concentrations increase to levels of concern, further consultation and planning to address necessary mitigation measures would be undertaken with regulators and First Nations.
- Implementing a TK/TLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TK/TLU are being complied with.

**Not expected**

- 5.3.3 Surface Water Quality; 5.3.4 Sediment Quality; 5.3.8 Fish; 5.3.9 Fish Habitat; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans; 10 Accidents or Malfunctions
- Appendix 9.2.2.B County Food Monitoring Plan
15.6.4 Summary of Residual Effects on Ulkatcho First Nation Rights

15.6.4.1 Rights to Hunt and Trap

The UFN identify hunting as an activity occurring in the mine site area and along the transmission line ROW and the Mills Ranch Re-route, near Tatelkuz Lake, along Chedakuz Creek, and at Kuyakuz Lake. The potential effects for the right to hunt for UFN current hunting practices will be specific to the mine site area and mine access road as well as the 4.45 km of the Kluskus FSR and 14.02 km of the transmission line where these Project components overlap their Traditional Territory.

The UFN TLU study indicates that furbearers are also trapped within the traditional territory. The TLU study identifies a range of species trapped by UFN members such as muskrat, black bear, coyote, fisher, fox, mink, and marten. The UFN identify three general trapping locations within the area of the mine site while trapping is also noted to occur in proximity to the transmission line ROW near Tatelkuz Lake, along Chedakuz Creek, and Kuyakuz Lake. Trapping also occurs at Moose Lake and Johnny Lake to the west of the Project. The TLU study specifically identifies beaver trapping along Chedakuz Creek and at Kuyakuz Lake. It should be noted that the UFN TLU study identifies general areas where trapping occurs but does not provide specific trapping sites.

The potential changes in the availability of wildlife for hunting or trapping for UFN is quantified through spatial analysis of habitat losses in the UFN traditional territory. Additionally, the effect of noise on wildlife, which can affect the availability of resources, is assessed. Potential effects on species harvested by UFN are described in Table 15.6-3. The wildlife study areas were used to describe losses of habitat for those portions that overlap with UFN’s traditional territory.

<table>
<thead>
<tr>
<th>Species</th>
<th>Changes in the Availability of Wildlife Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribou</td>
<td>Very little (3%) of moderate to high caribou habitat is being lost in the caribou RSA portion that overlaps UFN’s traditional territory both for summer/fall habitat and winter habitat.</td>
</tr>
<tr>
<td>Moose</td>
<td>Very little (2%) of moderate to high moose habitat is being lost in the wildlife RSA portion that overlaps UFN’s traditional territory both for winter and growing habitat.</td>
</tr>
<tr>
<td>Bear</td>
<td>Very little (1%) of moderate to high grizzly bear summer habitat is being lost in the wildlife RSA portion that overlaps UFN’s traditional territory. Additionally, very little (0.5%) of moderate to high grizzly bear summer habitat is being lost in the wildlife RSA portion outside of UFN’s traditional territory, but in areas where UFN has indicated they trap.</td>
</tr>
<tr>
<td>Beaver</td>
<td>Very little (0% or 5.76 ha) beaver habitat will be lost in the wildlife RSA portion that overlaps UFN’s traditional territory. Additionally, almost no (0% or 1 ha) beaver habitat is being lost in the wildlife RSA portion outside of UFN’s traditional territory, but in areas where UFN has indicated they trap.</td>
</tr>
<tr>
<td>Marten</td>
<td>Very little (0.5%) of moderate to high marten habitat is being lost in the wildlife RSA portion that overlaps UFN’s traditional territory. Additionally, very little (0.5% or 720 ha) of moderate to high marten habitat is being lost in the wildlife RSA portion outside of UFN’s traditional territory, but in areas where UFN has indicated they trap.</td>
</tr>
</tbody>
</table>
There is an unavoidable loss of caribou habitat that will occur during the construction phase and will be reversible through to the closure and post-closure phases due to slow anticipated recovery of lichens. This effect will be limited to the mine site footprint and is not expected to affect the viability of caribou or their habitat in the caribou RSA, due to the extent of caribou and their habitat within subpopulation areas outside of the caribou RSA (Section 5.4.11). Noise from Project construction, operations, and the temporary camp may displace wildlife (caribou and moose) from using habitats up to 250m of these features. However, habituation to routine disturbances (particularly for caribou) over the length of the Project may reduce these Project effects. Wildlife such as caribou and moose, may also be sensitive to aircraft related noise disturbances. Aircraft noise may be perceived by animals and residents during take-off and landing, but the frequency of flights is very low (two flights a week during construction) and discontinued during operations (unless there is an emergency).

The development of the mine access road may indirectly increase outside competition for resources with non-UFN hunters due to greater accessibility. To mitigate these effects in UFN traditional territory, the Proponent is establishing an access management working group (of which UFN representatives will be invited to participate in) to discuss access management issues. Ongoing consultation with UFN will occur with respect to design and implementation of the final TAMP. There will be a security station and gate to prevent public use of the mine access road.

Linear corridors through habitat that was previously difficult to travel through may allow wolves and other predators to access areas that previously had low predation rates for moose. Wolves frequently use linear corridors to facilitate travel instead of forested areas. In addition, recreational users (e.g., all-terrain-vehicle or snowmobile users) may create access with machines that further create pathways through these areas and an increasing ease of travel for predators. Effects have the potential to occur from the start of construction to the end of post-closure. To mitigate these effects, the WLMP proposes the use of vegetation and CWD to form visual barriers on cutlines, trails or other linear features to reduce predator access and efficiency.

Wildlife mortality also has the potential to affect changes in the availability of harvested resources for UFN hunters. To mitigate these effects, the Proponent is enforcing speed limits along the mine access road and will implement best management practices for road maintenance to reduce potential wildlife collisions. The TAMP (further details provided in Section 12.2.1.18.4.14) identifies strategies such as providing wildlife the ROW along all roads associated with the mine; reporting wildlife sightings to supervisory personnel as soon as possible; and reporting wildlife incidents (e.g., traffic accidents) to supervisory personnel immediately. With mitigation, residual effects to direct mortality for wildlife are not anticipated to affect current hunting practices in the UFN traditional territory.

The areas used for hunting in the mine footprint will result in a minor loss of hunting areas for UFN. The traditional territory for UFN is over 3,000,000 ha, of which less than 0.11% (less than 3,000 ha) overlaps with portions of the mine site. Given the nature of Project activities and likely disturbances generated by the construction and operation phases, it is assumed that UFN will no longer be able to hunt in the mine site footprint. This loss of land represents a small proportion of UFN traditional territory. Furthermore, the UFN TLUS study identifies a range of hunting activities
occurring to the south west of the Project near Johnny Lake and Moose Lake. These areas are identified as having a much higher number of TLU and harvesting sites.

UFN representatives have expressed concern about potential changes to the quality of resources-in this case, contamination of wildlife for human consumption. The Project will generate air and liquid effluent emissions. However, the surface water quality assessment has indicated that the water quality in receiving streams (after mixing) downstream of the TSF is expected to meet BC Freshwater Guidelines or site-specific water quality objectives. Therefore, this is not expected to result in harmful accumulation and release of metals from downstream surface water which would be consumed by wildlife. As a result, the remaining significant source for the release of COPCs is through air emissions.

A HHERA was conducted to assess the effects of exposures to COPC on the health of people living in the vicinity of the Project. The HHERA model used worst-case conservative exposure scenarios, including for those Aboriginal peoples residing in the area (Tatelkus Lake Indian Reserve #28) and practicing traditional harvesting of country foods (i.e. hunting and fishing). The HHERA also considered all possible exposure pathways at the different phases of the Project from Construction to Post-Closure. Based on the HHERA results, the residual health effects were determined to be not significant (negligible) during all phases of the Project.

Given that the potential contamination of country foods has been raised as a serious concern by UFN, the Proponent has committed to engaging UFN in ongoing environmental monitoring, and this includes the Country Foods Monitoring Program.

With respect to trapping, the Project will restrict access to the area where the mine site will be developed. Trapping activities will no longer be permitted in the mine site and trapping will no longer be viable given the effects generated by the clearing of vegetation and soil removal to develop project facilities within the mine site. It is not expected that Project activities will affect UFN’s ability to access trapping sites along Kuyakuz Lake, Tatelkuz Lake, Tsacha Lake, Moose Lake, Johnny Lake, the Kluskus Lakes, Euchiniko Lake, and Kluskus IR#1.

The construction, operations and closure phases of the Project may produce a change in the experience of using lands and resources for trapping purposes. Noticeable changes to baseline daytime and night time noise levels are expected to occur in the immediate vicinity of the mine site. From sunset to dawn, lights from the mine site will be noticeable.

In summary, there will be a residual effect on hunting and trapping for the UFN since the Project will limit access to some areas that are used for hunting and trapping; however, it does not severely limit the ability to practice this activity within the UFN traditional territory. Hunting and trapping areas in the mine site will be unavailable to the UFN during construction and operations. It is expected that UFN members will continue to have the opportunity to exercise their rights to hunt and trap within their traditional territory.
15.6.4.2 Right to Fish

The UFN have identified fishing at Tatelkuz Lake, Chedakuz Creek, and Kuyakuz Lake. The UFN TK/TLU study also identified Moose Lake and Johnny Lake as areas of intensive use near the Project area. Species harvested include suckers, lingcod, salmon, and trout. Steelhead is also taken, likely from the Blackwater River. The Blackwater River and its tributaries (i.e. Tsacha Lake) were identified as critical fishing areas for UFN. The Proponent made substantive changes to the Project design, including on-site and off-site infrastructure, to avoid the Blackwater River drainage. The UFN have a fish camp at the north end of Kuyakuz Lake, although the specific location has not been identified. No effects from the Project are expected near Kuyakuz Lake.

The potential changes in the availability of harvested fish resources for UFN is quantified through spatial analysis of fish habitat losses in the UFN traditional territory (Table 15.6-4).

<table>
<thead>
<tr>
<th>Fish Species</th>
<th>Habitat Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rainbow Trout</td>
<td>128,534</td>
</tr>
<tr>
<td>Kokanee</td>
<td>0</td>
</tr>
<tr>
<td>Food &amp; Nutrient Production</td>
<td>71,119</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>199,653 (HU)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>135,487 (m^2)</strong></td>
</tr>
</tbody>
</table>

Five separate projects (fish habitat enhancement projects) are proposed by the Proponent to offset the residual effects to fish caused by the Project. These include three "on-site" projects within the Davidson and Creek 661 watersheds (enlargement of Lake 01682LNRS; construction of two overwintering and summer rearing ponds near the middle reaches of Davidson Creek; and construction of an overwintering and summer rearing pond near the middle of Creek 661). In addition, two "off-site" projects are proposed including the restoration of fish habitat in the Mathews Creek watershed (which is in UFN’s traditional territory).

After mitigation and compensation measures, it is expected that there will be gains in fish habitat of 386,785 (HU) or 153,699 (m^2). As a result of mitigation, no significant residual effects to fish availability in UFN traditional territory are predicted.

There are no expected significant changes to fish availability in Tatelkuz Lake, Chedakuz Creek nor in the middle and lower reaches of Davidson Creek. Based on input by Aboriginal groups, the Proponent designed the Project to avoid the lower reaches of Davidson Creek. It was found that Aboriginal fisheries values were higher in the lower reaches of Davidson Creek where Kokanee salmon spawning occurs and the Project was designed to avoid effects in this area. No effects to availability of kokanee, trout, suckers, mountain whitefish, ling cod and burbot are predicted in Tatelkuz Lake.

No changes to fish or fish habitat will occur in Moose Lake and Johnny Lake. However, the upper reaches of Davidson Creek will be permanently altered from the commencement of Project
construction. There will be a permanent loss of fish and fish habitat in the upper reaches of Davidson Creek, however no data sources to date have identified current fish harvesting in the upper reaches of Davidson Creek.

The Project will not affect access to any of the preferred waterbodies described above where UFN practice the right to fish. It will not facilitate access by outside users as the transmission line and Kluskus FSR are not located near these lakes. How UFN members access Tatelkuz Lake, Chedakuz Creek and Kuyakuz Lake is unknown at the time of writing but access to these water bodies using historic trails (Alexander Mackenzie Trail, Messue Wagon Trail) will not be impeded by the Project, nor will road access using the Kluskus Ootsa FSR.

The introduction of workers potentially fishing in nearby creeks and lakes will be mitigated through no fishing policies for workers resident at site during their shifts. The development of the mine access road may indirectly increase outside competition for resources due to greater accessibility. To mitigate these effects in UFN traditional territory, the Proponent is establishing an access management working group (of which UFN representatives will be invited to participate in) to discuss access management issues. There will also be a security station and gate to prevent public use of the mine access road.

UFN representatives expressed concern about potential changes to the quality of resources- in this case, contamination of fish for human consumption. The Project will generate air and liquid effluent emissions. However, the surface water quality assessment has indicated that the water quality in receiving streams (after mixing) downstream of the TSF is expected to meet BC Freshwater Guidelines or site-specific water quality objectives. Therefore, this is not expected to result in harmful accumulation and release of metals from downstream surface water.

The residual effect on UFN’s right to hunt is negative since there is a loss of fish and fish habitat in the upper reaches of Davidson Creek and fish are an important source of food, however, all of the preferred fishing locations will be unaffected by the Project. UFN members would continue to have the opportunity to exercise their right to fish in these locations.

15.6.4.3 Right to Harvest Traditional Plants

The UFN gather many plants for food and medicinal purposes, and pick berries. They also harvest mushrooms. Locations of plant gathering sites where collection takes place were identified and appropriate avoidance and mitigation measures were developed (Section 7.2.7).

The TLUS study notes that the areas within the Blackwater Project site are important to UFN for berry picking and collecting food and medicinal plants although specific locations were not identified. The study identifies other important plant harvesting areas (east of Tsacha Lake, Moose Lake and Johnny Lake). According to the ecosystem effects assessment (Section 5.4.5), activities during the Project phases may result in changes to the abundance and distribution to plant resources within UFN territory (Table 15.6-5). The potential changes in the availability of traditional plants for UFN is quantified through spatial analysis of habitat losses in the UFN traditional territory. Habitat losses are largely due to the clearing of the mine site.
Table 15.6-5: Potential Changes in the Availability of Traditional Plant Habitat for UFN

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Changes in the Availability of Traditional Plant Habitat (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mine (mine site, mine access road, airstrip and FSS)</td>
<td>2,691</td>
</tr>
<tr>
<td>Transmission</td>
<td>39</td>
</tr>
<tr>
<td>Kluskus FSR</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2,732</td>
</tr>
</tbody>
</table>

As expected, the majority of the changes in traditional plant habitat occurs as a result of the mine site. In total, 2,732 ha (27%) of the traditional plant habitat that is present in the Vegetation RSA portion that is located within UFN traditional territory will be lost during construction and operations. Most of the habitat lost at the mine site occurs in higher elevation terrain that is less conducive to high berry yields. During the closure phase, mine site and other linear components will be re-vegetated with native traditional use plants. No losses to important plant harvesting areas will occur in the other areas for harvesting identified by UFN including east Tsacha Lake, Moose Lake and Johnny Lake. The only habitat loss will be in the mine site, where the extent of plant harvesting appears to be less intensive than other nearby areas.

The mine site will no longer be accessible for use by UFN members with respect to plant gathering during construction and operations. The TLUS study did not identify specific access routes to gathering in the mine site area but did note a historic use of trails. Project related activities will not reduce accessibility or use of historic trails such as the Messue Wagon Trail or the Alexander Mackenzie Trail. Project related activities will not disturb access to the key plant harvesting areas identified (Tsacha Lake, Moose Lake and Johnny Lake). The construction, operations and closure phases of the Project is not expected to have sensory disturbances on gathering locations around Tsacha Lakes, Johnny Lake and Moose Lake. No visual or auditory effects are anticipated from the mine site in these locations.

UFN has expressed concerns about the potential contamination of country foods, including medicinal and food plants. The Project will generate air and liquid effluent emissions. The Project will generate air and liquid effluent emissions. A HHERA was conducted to assess the effects of exposures to COPC on the health of people living in the vicinity of the Project. The HHERA model used worst-case conservative exposure scenarios, including for those Aboriginal peoples residing in the area. The model included human receptors at Tatelkus Lake IR #28 (near UFN Tatelkuz Lake gathering sites) and Laidman Lake Lodge (near Moose and Johnny Lake UFN gathering sites) and practicing traditional harvesting of country foods (i.e. gathering). The HHERA also considered all possible exposure pathways at the different phases of the Project from Construction to Post-Closure. Based on the HHERA results, the residual health effects were determined to be not significant (negligible) during all phases of the Project.

The residual effect on current UFN gathering practices is negative since there is a loss of plant habitat in the mine site however, all of the preferred gathering locations will be unaffected by the Project. UFN members would continue to have the opportunity to exercise their right to gather in these locations.
15.6.4.4 Right to Use of Spiritual/Traditional Sites

The UFN have identified a trail, campsite, and a place name near the proposed mine site. The precise locations of the trail and campsite have not been determined. In the heritage effects assessment of the mine site, a trail and a number of culturally modified trees (CMTs) associated with the trail have been recorded; however, CMT samples do not indicate current use. The mine site area was identified in the TK/TLU study as an area used with less intensity.

The Messue Wagon Trail has been identified as being of importance for UFN. This trail will intersect the freshwater pipeline and the transmission line ROW (both the proposed and Mills Ranch Re-route options). The trail will be temporarily disturbed to construct the freshwater pipeline and the transmission line (either route). After construction, the use of the trail should not be affected. The Project components overlap with very small portions of the trail; disturbances will be experienced only in the intersection of the trail with these components, but this will not impede the use of the trail. A trail on the east side of Tatelkuz Lake that connects with the Messue Wagon Trail has also been identified. There are no residual effects on this trail.

15.6.4.5 Aboriginal Title

A portion of the proposed mine site and proposed transmission line and (already existing) Kluskus FSR are located within UFN traditional territory. Should UFN establish title through treaty negotiations, the Project holds the potential to affect UFN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components and activities. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.6.4.6 Summary

Given the analysis above and the commitments made with respect to mitigation, the overall effect on UFN fishing, hunting, and gathering rights is expected to be low. It is not anticipated that the Project will affect the ability of present and future generations to exercise their Aboriginal rights, nor is it expected that the Project would require UFN to modify its practices related to fishing, hunting, and gathering.
15.7 Nazko First Nation

15.7.1 Past, Current, and Anticipated Land Uses

There is no specific information in the ethnographic record on past land use for the NFN. No specific past, current, or anticipated land uses in Nazko territory have been identified as yet except in a general manner through letters submitted to the Proponent and the BC EAO.

The Euchiniko and Blackwater Watersheds are areas used by NFN people, as noted in a letter to the BC EAO in 2013 (NFN, 2013b). The letter notes that Nazko people have a long-standing history of use in the northwest corner of their traditional territory.

Members of NFN identified that moose were actively hunted, but there has been a decline in their populations. NFN members also actively fish within their Traditional Territory, and members identified that kokanee is a sustenance resource.

15.7.2 Asserted Nazko First Nation Aboriginal Rights

The Proponent first met with NFN representatives in February 2012 to introduce the Project. The Proponent provided information about the Project and continued to seek to discuss NFN’s interests and concerns. Discussions focused on capacity building, training and employment, and Cooperation Agreements. The Proponent is discussing with the NFN a Capacity Funding Agreement which would include a TK/TLU study; at the time of writing negotiations are ongoing. Detailed information on consultation activities can be found in Section 17.

NFN members identified concerns about the Project in the early stages, prior to developing a full understanding of the location and the potential for effects. These concerns included effects on Chinook salmon, fishing by the Trout Lake community, trapping, and hunting. These activities occur outside the Project area will not be affected by the Project.

More recently, the NFN raised some issues with respect to asserted rights. In a letter to the BC EAO, dated 19 September 2013, the NFN asserted title and rights over components of the Project based on archaeological resources and historic documentation of the occupancy of the land. The NFN asserts that it should be consulted on the potential effects from the Project that could affect the resources that are critically important for NFN traditional practices.

The NFN expressed concerns about effects from dust on the watershed and more specifically on kokanee—a sustenance resource—and on medicinal plants. The group also expressed concern about moose mortality and declining populations as a further decline may compromise their availability for hunting (Table 15.7-1).

Currently, the NFN is in Stage 4 of the Treaty Process, and signed their Agreement in Principle in 2008. Stage 4 includes land selection, and may be the most significant component of negotiations. Completion of Stage 4 is noted to be an important step for the Nation, as it will set the foundation for self-governance (NFN website, 2011).
The BC government recently signed an Incremental Treaty Agreement with the NFN, under which the Band will receive more than 275 ha of Crown land (Ministry of Aboriginal Relations and Reconciliation, 2012). The first transfer will include two parcels totalling more than 103 ha. The province stated that the land includes an industrial site that the First Nation will apply to have rezoned “to take advantage of economic opportunities” (Ministry of Aboriginal Relations and Reconciliation, 2012).

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Asserted Right</th>
<th>Manner Raised</th>
<th>Date</th>
<th>Potentially Affected by the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinook salmon fishing</td>
<td>Fishing</td>
<td>Meeting</td>
<td>13 Nov 2012</td>
<td>No</td>
</tr>
<tr>
<td>Hunting generally within the Nazko territory</td>
<td>Hunting</td>
<td>Meeting</td>
<td>13 Nov 2012</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Letter</td>
<td>26 Nov 2012</td>
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<td></td>
<td></td>
<td></td>
<td>19 Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Project footprint effects on caribou movement corridors</td>
<td>Hunting</td>
<td>Meeting</td>
<td>13 Nov 2012</td>
<td>Yes</td>
</tr>
<tr>
<td>Fishing by the Trout Lake community</td>
<td>Fishing</td>
<td>Letter</td>
<td>26 Nov 2012</td>
<td>No</td>
</tr>
<tr>
<td>Trapping generally within the Nazko territory</td>
<td>Trapping</td>
<td>Letter</td>
<td>26 Nov 2012</td>
<td>No</td>
</tr>
<tr>
<td>Fishing generally within Nazko territory</td>
<td>Fishing</td>
<td>Letter</td>
<td>26 Nov 2012</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19 Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Effects of dust and contaminants on kokanee</td>
<td>Fishing</td>
<td>Meeting</td>
<td>07 Sep 2013</td>
<td>No</td>
</tr>
<tr>
<td>Consideration of wildlife movement, effects, and mortality as the moose population is decreasing</td>
<td>Hunting</td>
<td>Meeting</td>
<td>09 July 2013</td>
<td>Yes</td>
</tr>
<tr>
<td>Effects of dust from both road and mine operations on medicinal plants</td>
<td>Hunting</td>
<td>Meeting</td>
<td>09 July 2013</td>
<td>Yes</td>
</tr>
</tbody>
</table>

15.7.3 Nazko First Nation Rights Effects Assessment and Mitigation

The Proponent is committed to meaningful consideration of the rights and interests of the NFN and will seek ways to address (i.e., avoid, reduce, and/or mitigate) any potential effects identified during the EA process. The Proponent will continue to consider information on rights and interests as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.

NFN identified concerns about salmon and other fish species used as food, with the primary concern being the effects on water. Surface and groundwater will be monitored for the life of the Project. Surface water and sediment quality will meet applicable provincial and federal standards downstream of the proposed mine site to avoid effects on fish, furbearers, or animals that use those waters. The proposed mine site will aim to operate as a zero discharge facility. During
construction, sediment ponds will be used to contain site run-off and treat site run-off and reduce concentration of suspended solids. Information on water quality can be found in Section 5.3.3.

NFN is concerned about the effects of dust on kokanee. No effects from dust are predicted for the watersheds within Nazko territory and no effects on kokanee are expected. Dust will be managed in accordance with the applicable provincial and federal standards of the proposed mine site to avoid effects on water and fish-bearing waterbodies. Dust control will be managed in accordance with procedures in the AQEMP and will meet air quality objectives. Section 5.2.4 provides more information on air quality and dust control.

In response to concerns identified by NFN and other Aboriginal groups on caribou herds and UWR, effects to caribou habitat, and forage, the Proponent has undertaken a number of actions. The Proponent redesigned the proposed mine site to avoid the UWR by modifying the TSF to be located completely outside of the UWR. In addition, the existing mine access road will be moved out of the UWR. Access to the proposed mine site will not be from the west but from the north starting at KM 124 of the Kluskus FSR. Details on caribou management can be found in Section 5.4.11.

A Caribou Sub-working Group was established to better understand cumulative effects on caribou and establish best management practices and mitigation strategies. Effects on caribou are assessed in the Application and can be found in Section 5.4.11. Mitigation strategies were developed and are presented in the WLMP.

With respect to concerns identified by NFN on moose, effects on moose are assessed in the Application in Section 5.4.10. Mitigation and management strategies are developed and presented in the WLMP and in the LSVRMP. Issues such as road kill, displacement, and an increase in mortality due to increased predator access will be addressed in these management plans. The WLMP will provide mitigation through enforcement of speed and access, and the LSVRMP will help reduce the risk of increased predation by removing access routes once they are no longer needed and by enhancing habitat for alternative prey.

NFN also raised concerns about effects on medicinal plants, although no specific gathering sites were identified. Environmental Management Plans (Section 12.2.1) will be implemented to reduce dust deposition, nitrogen deposition, and invasive species proliferation, including an AQEMP; TAMP; LSVRMP; and ISMP. In addition, traditional use plant species habitat will be introduced in reclamation prescriptions.

The Proponent is committed to continue discussing potential Project effects with NFN throughout the life of the Project. The Proponent proposes to establish a TK/TLU Committee with participation of the Aboriginal groups on which territories the Project is located. The main goal of this committee will be to monitor Project development to ensure that the commitments made by the Proponent in regards to TK/TLU are being complied with. Some of these commitments involve but are not limited to facilitating access to areas of the mine site and reviewing the project design and permits to avoid or minimize effects on sensitive areas.
Table 15.7-2 provides a summary of asserted rights raised by the NFN during pre-Application consultations to date, how the issues were addressed, and the identified residual effects.

### 15.7.4 Summary of Residual Effects on Nazko First Nation Rights

#### 15.7.4.1 Rights to Hunt and Trap

Potential Project effects could be experienced along two portions of the existing FSR, where a total of 27.72 km overlaps NFN’s traditional territory. Potential effects on hunted game species are related to increased traffics and associated emissions (noise and dust); these effects will be mitigated and are considered not significant. Given that there are no significant effects of the Project on hunted game species, and their traditional territory overlap with relatively short sections of the existing FSR, there is no expected residual adverse effect on hunting for the NFN (Section 7.2.7).

There is no specific trapping information for the NFN. Since there are no significant Project effects on furbearers, there are no expected adverse residual effects on NFN trapping.

#### 15.7.4.2 Right to Fish

While there is no specific information about locations where the NFN fish for traditional purposes, kokanee are noted as a sustenance resource. NFN traditional territory overlap with a portion of Kluskus FSR northeast of the mine site. None of the fish or fish habitat in this portion of the Project area will be adversely affected. Therefore, no residual effects on fishing for traditional purposes are expected.

#### 15.7.4.3 Right to Harvest Traditional Plants

The NFN Traditional Territory overlaps with a small portion of the Kluskus FSR. Effects on plants from dust generated by traffic using the Kluskus FSR are considered minor and not significant. Given that traditionally used plants are widespread in the NFN Traditional Territory, no residual effects on plant gathering for traditional purposes are expected.

#### 15.7.4.4 Aboriginal Title

A portion of the Kluskus FSR overlaps with NFN traditional territory. The Kluskus FSR is already a permanent feature of the landscape; however, the Project will increase activity on the FSR. Should NFN prove establish title through treaty negotiations, the Project holds the potential to affect NFN’s right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project activities. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.
### Table 15.7-2: Nazko First Nation – Rights Effects and Mitigation Tracking Table

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Assumed Right/Issue</th>
<th>Valued Component</th>
<th>Potential Environmental Effect</th>
<th>Project Phase</th>
<th>Mitigation</th>
<th>Potential Residual Effect</th>
<th>EA Section Full Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial Environment</td>
<td>Caribou hunting</td>
<td>Caribou; Current Land and Resource Use for Traditional Purposes</td>
<td>Effects to caribou habitat and forage; Changes in range patterns.</td>
<td>C; O; D/C; PC.</td>
<td>• TSF and access road to mine redesigned to avoid UWR.</td>
<td>Not expected</td>
<td>5.4.11 Caribou; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• The Caribou Sub-working Group has met to review the baseline and assessment methods.</td>
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<td></td>
<td>• Developing mitigation and avoidance strategies through ongoing discussions with the Caribou Sub-working Group.</td>
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<td></td>
<td>• Participating in regional wildlife and resource management initiatives (specifically for ungulates).</td>
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<td></td>
<td>• Setting relocation goals to re-establish later winter habitat.</td>
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<td></td>
<td>• Minimizing ground disturbance and damage to vegetation in areas adjacent to footprints by flagging or fencing of sensitive habitats.</td>
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<td></td>
<td>• Modifying the timing of clearing trees in lichen conifer forest habitat where caribou may feed.</td>
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<td></td>
<td>• Implementing progressive reclamation using local native vegetation wherever possible.</td>
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<td></td>
<td>• Restoring disturbed habitats at mine closure or development of habitats capable of supporting caribou.</td>
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<td></td>
<td>• Implementing caribou awareness and protocols in regular safety and environmental orientations performed by the Project.</td>
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<td></td>
<td>• Implementing invasive plant management techniques as defined in the Invasive Species Management Plan.</td>
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<td></td>
<td>• Implementing dust control measures as defined in the Air Quality and Emissions Management Plan.</td>
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<td></td>
<td>• Enforcing speed limits along mine access roads and implement best management practices for road maintenance to reduce potential wildlife collisions.</td>
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<td></td>
<td>• Prohibiting mine employees from hunting on mine site property.</td>
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<td></td>
<td></td>
<td>• Implementing a TKTLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TKTLU are being complied with.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• NFN traditional territory is outside the caribou USA.</td>
<td></td>
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</tr>
<tr>
<td>Terrestrial Environment</td>
<td>Moose hunting</td>
<td>Moose; Current Land and Resource Use for Traditional Purposes</td>
<td>Reduction in habitat of changes in herds and ranges.</td>
<td>C; O; D/C</td>
<td>• Redesigning the TSF and mine access road to avoid UWR.</td>
<td>Not expected</td>
<td>5.4.10 Moose; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• Setting relocation goals to re-establish later winter habitat.</td>
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<td></td>
<td>• Participating in regional wildlife and resource management initiatives (specifically for ungulates).</td>
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<td>• Prohibiting mine employees from hunting on mine site property.</td>
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<td></td>
<td>• Disposing of wastes generated on site to limit the attraction of wildlife to the mine site.</td>
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<td></td>
<td>• Implementing Environmental Management Plans addressing Wildlife Management; Landscape, Soils, and Vegetation Management and Restoration; and Transportation and Access Management.</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>• Implementing a TKTLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TKTLU are being complied with.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td>Plant harvesting</td>
<td>Ecosystem Composition; Plant Species and Ecosystems at Risk; Current Land and Resource Use for Traditional Purposes</td>
<td>Dust contamination of medicinal plants.</td>
<td>C; O; D/C</td>
<td>• Project site design that minimizes total footprint area.</td>
<td>Not expected</td>
<td>5.4.5 Ecosystem Composition; 5.4.9 Plant Species and Ecosystems at Risk; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>• Establish an Access Management Working Group with key stakeholders and potentially affected Aboriginal representatives to discuss access management for the transmission line corridor and the mine site.</td>
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<td></td>
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<td></td>
<td>• Implement Environmental Management Plans to reduce dust deposition, nitrogen deposition, and invasive species proliferation (Air Quality and Emissions Management Plan; Transportation and Access Management Plan; Landscape, Soils, and Vegetation Management and Restoration Plan; Invasive Species Management Plan).</td>
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<td></td>
<td>• Include traditional use plant species habitat in reclamation prescriptions.</td>
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<td></td>
<td>• Implement design and operational procedures to limit risks associated with malfunctions and accidents.</td>
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<td></td>
<td>• Implementing TKTLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TKTLU are being complied with.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Environment</td>
<td>Effects on fish (Dorsines, Chinook salmon)</td>
<td>Surface Water and Sediment Quality; Fish; Fish habitat; Current Land and Resource Use for Traditional Purposes</td>
<td>Changes in water quality or sediment that may affect fish populations.</td>
<td>C; O; D/C; PC.</td>
<td>• Surface water and sediment quality will meet provincial and federal standards so as not to affect fish.</td>
<td>Not expected</td>
<td>5.3.3 Surface Water Quality; 5.3.8 Fish; 5.3.9 Fish Habitat; 7.2.7 Current Land Use for Traditional Purposes; 12.2 Environmental Management Plans</td>
</tr>
<tr>
<td></td>
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<td>• Water will be further monitored on an ongoing basis throughout the life of the Project and post-closure.</td>
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<td>• Results of all water quality sampling will continue to be posted for working group and Aboriginal groups review.</td>
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<td></td>
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<td></td>
<td>• Implement erosion and sediment control measures, including erosion control matting, rip rap, and hydro seeding to protect erodible soils from entering waterbodies.</td>
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<td></td>
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<td>• The proposed mine site will aim to operate as a zero discharge facility.</td>
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<td></td>
<td></td>
<td>• Implementing design and operational procedures to limit risks associated with malfunctions and accidents.</td>
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<td>• Implement Environmental Management Plans, addressing Mine Water Management; Water Quality and Liquid Discharges Management; Transportation and Access Management; Emergency and Spill Preparedness and Response; Landscape, Soils, and Vegetation Management and Restoration; Erosion and Sediment Control; Aquatic Resources Management; and Wetlands Management.</td>
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<td></td>
<td>• Implementing a TKTLU Committee with participation of the Aboriginal Groups on which territories the Project is located to monitor that commitments made by the Proponent in regards to TKTLU are being complied with.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• No effects are expected on Trout Lake.</td>
<td></td>
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</tr>
</tbody>
</table>

**Note:** C = construction; D/C = decommissioning/closure; O = operations; PC = post-closure; TSF = Tailings Storage Facility; UWR = Ungulate Winter Range.
15.8 **Skin Tyee Nation**

15.8.1 **Past, Current, and Anticipated Land Uses**

Traditional foods play a critical role in STN life as sources of food, medicine, and cultural practices (Enbridge, 20103).

Fish are important to the culture and sustenance of the STN people, and members use the Morice River and its tributaries for fishing (Enbridge, 2010). Interviews with STN representatives revealed that community members fish for spring salmon and trout in the Morice River and for char at Uncha Lake. STN representatives also noted the importance of moose.

Gathering is noted to be important to the STN people, who rely on a wide variety of plants for traditional purposes. Commonly used food plants include soapberry, huckleberry, silkberry, blueberry, raspberry, strawberry, gooseberry, high bush cranberry, wild rice, wild onion, cow parsnip, black tree lichen, and rosehips (interviews with STN representatives, 2013; Enbridge, 2010). Some members pick the berries and sell them at various gatherings.

Plants used for medicinal purposes include birch, Labrador tea, juniper, kinnikinnick, chokecherries, devil’s club, spruce gum/pitch, pine, bulrushes, Sitka alder, red alder or mountain alder, yarrow, bearberry or black twinberry, tamarack, fireweed, strawberry, spruce, moss, and Indian hellebore (Enbridge, 2010). Plants used for other cultural purposes include cottonwood, red willow, spruce, poplar, birch, and moss.

It has been noted that trapping is no longer a viable livelihood due to the decline of furbearers (Enbridge, 2010). Similarly, interviews with STN representatives revealed that trapping was a traditional way of life but that this activity has decreased substantially.

Hunting is important to the STN. Typical animals harvested are moose and elk. Some people distribute the meat from their hunt to other community members.

The Proponent interviewed community members about their traditional activities during the socioeconomic data collection. Traditional activities are important to the STN, as is consuming traditional foods and medicinal plants. Community members also use animal hides to create moccasins and other crafts. Given that employment rates are low in the STN, it is expected that these traditional resources will be important in economically sustaining the community into the future.

15.8.2 **Asserted Skin Tyee Nation Aboriginal Rights**

The Proponent introduced the Project to the STN in June 2011. The Proponent’s consultation approach is tailored to meet the STN’s interests as agreed upon in the Cooperation Agreement negotiated between the STN and the Proponent. The Agreement commits to regular meetings between the Proponent and the community, including an annual presentation to the community as well as meetings between leadership. It also describes how information will be shared between leaders.

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3 Information supplied by STN to Enbridge as part of the Enbridge Northern Gateway Project EA.
The Proponent and the STN engaged in a number of discussions to determine a process for collecting TLU information for the Project. The Cooperation Agreement addresses this and provides a framework to guide the collection and use of confidential information provided by STN. In addition, the Proponent provided STN financial support to gather and present information related to TK/TLU.

At this point, the nature and extent of any asserted Aboriginal claim by STN with respect to lands affected by the project footprint remain uncertain.

By the time of writing this report, no specific rights or resources were identified as being potentially impacted by the Project. The Proponent continues to work with the STN to better understand potential effects on rights.

15.8.3 Skin Tyee Nation Rights Effects Assessment and Mitigation

15.8.3.1 Rights to Hunt and Trap

There is no specific hunting information for the STN. Potential Project effects could be experienced where 118.29 km of the existing FSR, 112.32 km of the transmission line, and the entire mine site and mine site access road overlap the STN traditional territory. When TK/TLU information is shared with the Proponent, the information will be considered into the Project design, execution, management plans, permitting and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases. Given that there are no significant effects of the Project on hunted game species, there is no expected residual adverse effect on hunting for the STN.

There is no specific trapping information for the STN. Since there are no significant Project effects on furbearers, there are no expected adverse residual effects on STN trapping. When TK/TLU information about trapping is shared with the Proponent, the information will be integrated into the Project design, execution, management plans, permitting and monitoring in subsequent stages of the Project development.

15.8.3.2 Right to Fish

The STN fish for traditional purposes in the Morice River and its tributaries and at Uncha Lake, none of which are near the Project footprint. There is no information about fishing areas within these study areas, although the STN traditional territory overlaps with most Project components.

Potential Project effects on fish and fish habitat will be mitigated as noted in Section 5.3.8 and Section 5.3.9 and are considered not significant. However, the upper reaches of Davidson Creek

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4 As outlined in publicly available sources.
will be inaccessible for fishing for 37 years from the beginning of Project construction. Given the very large size of their territory relative to the small affected area and the presence of many other waterbodies for fishing, the probability that STN rely heavily on Davidson Creek to fish for traditional purposes is considered low. Therefore, no residual effects on fishing for traditional purposes are expected (Section 7.2.7).

15.8.3.3 Right to Harvest Traditional Plants

There is no information available about current STN plant gathering sites within the Project area. The STN traditional territory overlaps with the Project footprint. Given the mitigation proposed and that traditional plants are widespread in the Fraser Plateau ecoregion no residual effects on plant gathering for traditional purposes are expected (Section 7.2.7).

15.8.3.4 Aboriginal Title

The proposed mine site, access road, transmission line, and (already existing) Kluskus FSR are located within STN traditional territory. Should STN establish title through treaty negotiations, the Project holds the potential to affect STN right to occupy, manage, govern, enjoy economic benefits from, and otherwise use title lands that are overlapped by Project components and activities. These effects would occur during the Construction, Operations, and Closure phase. Effects related to maintenance and monitoring activities would occur during the post-closure phase.

15.9 Tsilhqot’in National Government

15.9.1 Past, Current, and Anticipated Land Uses

Ethnographers wrote about the Tsilhqot’in at the end of the 19th Century and the beginning of the 20th Century and documented elements of social organization and culture. They noted that the centre of Tsilhqot’in territory was at Anahim Lake but that this group covered considerable territory. They gathered at major lakes such as Chilco, Tatla, Puntzi, and Chedakuz. They travelled to the Chilcotin River for salmon fishing but returned to their homes when the fishing was over. They led a semi-nomadic life in pursuit of seasonally available resources.

Traditionally, the basic unit of social organization was at the family or encampment level rather than at the band or nation level. A loosely associated group of families wintered at the lakes. This group was named after the lake with which it was most intimately associated. There was a high degree of mobility between the groups, and families might have stayed with a group for a season or a lifetime (Turkel, 2004).

In winter, bands concentrated around lakes to hunt and fish. They hunted deer, sheep, elk, hare, and grouse, as weather permitted, to supplement caches of stored food. At times, they were able to ice fish for whitefish, trout, and suckers but they relied heavily on stores of dried salmon, meat, roots, and berries (Turkel, 2004). Later in the winter season, the Tsilhqot’in trapped animals like mink, marten, weasel, fisher, rabbit lynx, coyote, and fox for their thick winter coats.
In the spring, families dispersed to pursue hunting and fishing. During the fish runs, families congregated at streams and lakes to fish for trout, whitefish, suckers, and other small fish. They also dug potatoes, wild onions, tiger-lily bulbs, and the shoots of balsamroot and cow-parsnip. They collected pine cambium that is sweet and pliable in the spring when the sap begins to flow. When they became ripe, strawberries, huckleberries, blueberries, soapberries, and saskatoons were gathered by rivers and lakes (Turkel, 2004; Tsilhqot’in Nation v. BC, 2007). Summer was also the time of the salmon runs and a time to hunt waterfowl, mountain goats, and other ungulates such as moose. The salmon runs continued into the autumn in some areas and kokanee spawned in the shallows of some lakes. Some Tsilhqot’in hunted marmots and bigger game such as bear and gathered white bark pine seeds near higher elevation base camps.

The Tsilhqot’in lived in a variety of dwellings designed for different purposes. In winter, they lived in underground lodges or pit houses or in rectangular, gable-roofed houses (Lane, 1981). In less inclement seasons, they built lean-tos; wind breaks with mats, boughs, or bark; and tents to protect them (Lane, 1981; Turkel, 2004).

While it is generally accepted that horses arrived in Canada with the arrival of Europeans and were not available to Aboriginal people prior to contact, the Tsilhqot’in had already acquired horses prior to earliest recorded contact (Tsilhqot’in Nation v BC, 2007). It is likely that the Tsilhqot’in acquired the horses through contact and trade with neighbouring Aboriginal groups. The Tsilhqot’in used horses and wagons in their traditional seasonal round well into the mid-20th Century.

The Tsilhqot’in were influenced by ranching that was established in the Chilcotin area. Men worked as cowboys and most families established cattle herds for themselves (Lane, 2004). However, the Tsilhqot’in continued to pursue their seasonal round using reserves as bases and travelling the country in wagons. Many Tsilhqot’in maintain reliance on traditional resources today. Some Tsilhqot’in, such as the Xeni Gwet’in, have maintained their traditional ways, have vigorously defended their rights to hunt and fish and live off the land, and have maintained their traditional cultural practices (Tsilhqot’in Nation v. BC, 2007).

15.9.2 Asserted and Proven Tsilhqot’in National Government Aboriginal Rights

Engagement and consultation activities with the TNG began in June 2011. The Proponent met with the TNG to discuss the engagement process. The Proponent provided maps and presentations to the TNG as requested and met with members in accordance with the TNG engagement process requirements. The TNG did not identify any rights that may be affected by the Project. The TNG are not extending claim into the Project area and do not wish to be consulted on an ongoing basis.

5 BC, TN and TNG has signed a Tsilhqot’in Framework Agreement (TFA) to streamline the referral process on natural resource applications within the TN traditional territory communities (TFA 2011). The proposed Project falls within the Engagement Zone A, as defined in the TFA. Activities in this area have none or low perceived impacts on TNG members’ aboriginal rights.
The Proponent will continue to notify the TNG about the Project and will address rights and potential impacts, if identified, at a later date.

During a meeting on 22 February 2013 and during a site tour (1 August 2014), TNG noted a general concern regarding potential effects on caribou. In response to these concerns identified by TNG and other Aboriginal groups, the Proponent has undertaken a number of actions. The Proponent redesigned the proposed mine site to avoid the UWR by modifying the TSF to be located completely outside of the UWR. In addition, the existing mine access road will be moved out of the UWR. Access to the proposed mine site will not be from the west but from the north starting at KM 124 of the Kluskus FSR.

A Caribou Sub-working Group was established to better understand cumulative effects on caribou and establish best management practices and mitigation strategies. Details on caribou assessment can be found in Section 5.4.11. Mitigation strategies were also developed and are presented in the WLMP.

TN have proven Aboriginal title over a portion of its traditional territory. The Project does not overlap with TN title lands.

15.9.3 Tsilhqot’in National Government Rights Effects Assessment and Mitigation

It is anticipated that the Project would have no impacts on the exercise of rights of the TN.

15.10 Métis Nation BC

15.10.1 Past, Current, and Anticipated Land Uses

The Métis Nation BC (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). The MNBC asserts Aboriginal rights over the entire province but has not provided any information on specific land uses in the Project area. Discussions with the MNBC are taking place to identify harvesting rights that may be affected by the Project.

15.10.2 Asserted Métis Nation BC Aboriginal Rights

Engagement and consultation activities with the MNBC began in October 2012. The Proponent has and continues to provide the MNBC with Project information including any updates. The MNBC asserted harvesting rights around the proposed Project area in letters to the Agency on 23 November 2012 and on 20 January 2013. The MNBC expressed concerns regarding current traditional harvesting activities (hunting, fishing, and plant harvesting) occurring in the proposed Project area that could be negatively affected by the Project (MNBC, 2012); however, no specific information was provided. The Proponent will continue to consider information on MNBC rights and interests as it becomes available and will incorporate it in Project design, permits, management plans and monitoring to the extent practical.
15.10.3 Métis Nation BC Rights Effects Assessment and Mitigation

15.10.3.1 Rights to Hunt and Trap

There is no specific hunting information for the MNBC. The Project will result in a loss of areas for hunting and wildlife habitat in areas that overlap with the mine site, which could potentially affect hunting in this area if used by MNBC members. Given that the MNBC assert Aboriginal rights over the entire province, the probability that MNBC relies heavily on this area to hunt for traditional purposes is considered low.

Since there are no significant Project effects on furbearers, there are no expected adverse residual effects on MNBC trapping.

When TK/TLU information is shared with the Proponent, the information will be considered into the Project design, execution, management plans, and monitoring in subsequent stages of the Project development including the Application review phase, the permitting phase, and the Project construction, operations, closure, and post-closure phases.

15.10.3.2 Right to Fish

There is no information about the locations where the MNBC fish for traditional purposes. Potential Project effects on fish and fish habitat will be mitigated as noted in Section 5.3.8 and Section 5.3.9 and are considered not significant. However, the upper reaches of Davidson Creek will be inaccessible for fishing for 37 years from the beginning of Project construction. Given the presence of many other waterbodies for fishing in the region, the probability that MNBC members rely heavily on Davidson Creek to fish for traditional purposes is considered low. Therefore, no residual effects on fishing for traditional purposes are expected (Section 7.2.7).

15.10.3.3 Right to Harvest Traditional Plants

There is no information available about current MNBC plant gathering sites. MNBC assert rights over the entire province. Given the mitigation proposed and that traditional plants are widespread in the Fraser Plateau ecoregion, no residual effects on plant gathering for traditional purposes are expected (Section 7.2.7).

There is no information about other current land and resource uses of the MNBC in the area surrounding the Project. Effects cannot be assessed.

15.11 Project Design Changes to Mitigate Effects on Aboriginal Concerns

Input from Aboriginal groups has informed the design of the Project. The proponent has made substantive changes to the Project to minimize potential environmental effects and effects on Aboriginal rights and interests including:

- Designing the Project, including on-site and off-site infrastructure, to avoid the Blackwater River drainage. The Blackwater River is a tributary of the Fraser River and is of importance.
to Aboriginal groups in the area. Historically, the Carrier and Tshilqot’in peoples used the area to transport goods for trade along the historic Grease Trails. The Blackwater River is also designated as a heritage river by the government of BC. Specifically, all project components were moved outside of the Blackwater River drainage;

- Designing the Project and its infrastructure to avoid the Ungulate Winter Range (UWR) which is the winter habitat for the Tweedsmuir-Entiako Caribou herd. Ulkatcho First Nation and other First Nations expressed concern about the potential for the Project to affect the caribou herds. Based on discussions, the proponent designed the Project to avoid the UWR. Specifically, the TSF was designed to have the western tailings dams placed outside of the UWR to prevent any drainage of the TSF into the UWR. The Proponent will discontinue the use of the existing exploration road, which passes through UWR, and a new access to the mine site is proposed. Access to the mine site will not be from the west but from the north starting at KM 124.5 of the Kluskus FSR;

- Designing the Project to avoid the lower reaches of Davidson Creek. Based on research and input from Aboriginal groups, the proponent understood that fisheries values were higher in the lower reaches of Davidson Creek where Kokanee salmon spawning occurs. Specifically, seepage collection systems (cut-off ditch and recovery wells) as well as other contingencies were built into the design to specifically avoid impacts to the lower reaches of Davidson creek; and

- Designing the Project to avoid historic trails and culturally important areas. Existing historic areas were identified in proximity to the Project, including the Alexander Mackenzie Heritage Trail, Messue Wagon Road, and Messue Horse Trail/Kluskus Bypass. Culturally important areas such as a fish camp were also identified nearby. Aboriginal groups in the area noted these are of historic and cultural importance and are still used by members today (particularly LDN people). Specifically, the access road and water pipeline from Tatelkuz Lake were moved to avoid these areas.