CEAA 003

Comment:

The EIS identifies Jacko Lake and the surrounding area as a preferred location for fishing, hunting, plant gathering, and ceremonial use, but does not identify alternative locations for these activities for SSN. Information on alternate use locations is required to support the assertion of low and moderate magnitude effects.

IR:

Identify alternative fishing, hunting, plant gathering, and ceremonial use sites for SSN, and present a comparative analysis of the quality of resource, quality of experience, and access between the preferred location and the alternate sites.

Response:

Section 8.5.2.3 Baseline Information of the Current Use of Lands and Resources for Traditional Purposes assessment includes Figure 8.5-3 SSN Identified Traditional Land Use Areas, which shows alternate fishing, hunting, plant gathering and ceremonial use areas identified by SSN in the Cultural Heritage Study (Ignace, 2014).

In addition, Section 13.6.4.1 Summary of Residual Effects on SSN Interests includes subsections describing Alternative Areas in the Traditional Territory to Practice Fishing Interests, Hunting Interests, Plant Gathering Interests and Ceremonial or Cultural Interests (**Table 1**). These were identified through consultation, as well as through review of information presented in the Cultural Heritage Study. These sites fall outside the Local Study Area (LSA) and Regional Study Area (RSA) for the Project, so it can be inferred that Project activities will not affect the availability, access to, experience of or quality of resources harvested from these alternative areas.

Table 1: Traditional Use Sites outside the LSA

Traditional Use	Alternative Areas
Fishing	North, South and Main Stem of the Thompson River
	Kamloops Lake
	Edith Lake (within the Peterson Creek watershed)
	Deadman River
	Lac Le Jeune
	Tunkwa Lake
	Leighton Lake
	Paul Lake
	Trapp Lake
Hunting and Trapping	Greenstone Mountain
	Chuwels Lake
	Sugarloaf Mountain

Traditional Use	Alternative Areas
	Schiedam Flatlands (Kum-gen-nat-kwa)
	Lac Le Jeune
	Six Mile
	Tranquille Watersheds
	Deadman's Creek Watershed
	Andy Lake area
	Heller Creek
	Wood Creek
	Burns Lake
	Marshy Lake
	Criss Creek Watershed
Plant Gathering	Greenstone Mountain
	Lac Le Jeune
	Mount Peter
	Mount Lolo
	Broken Top Mountain
	Mount Tod
	Tranquille Watershed
	Deadman's Creek Watershed
	Heller Creek Watershed
	Wood Creek
	Andy Lake
	Burns Lake
	Criss Creek Watershed
Other Cultural and Ceremonial Uses	Cultural and ceremonial uses are associated with a range of activities including the harvesting of resources such as fishing, hunting and plant gathering, community meetings, meals and other cultural events. These are typically not site-specific and can occur at a range of locations as identified under each traditional use above, throughout the traditional territory and within the communities and meeting places and community centres. KAM recognizes that Jacko Lake and the surrounding area, identified as Pípsell, is associated with the Trout Children Story and is of high cultural value to the SSN. Cultural and ceremonial uses associated with the Trout Children Story including ritual fasting, offerings, prayer, the Chickadee Song and root digging, are not site-specific. No alternative

Traditional Use	Alternative Areas
	sites of similar cultural value to Pípsell have been identified within the traditional territory and could therefore not be assessed.

According to the Preliminary Mitigation Report (SSN, 2014), the Jacko Lake area (Pípsell) should be considered a Cultural Keystone Place, defined in the report as follows:

""Cultural Keystone Place" can be defined as a site or location with high cultural salience for one or more groups of people and which plays, or has played in the past, an exceptional role in a people's cultural identity, as reflected in their day to day living, food production and other resource-based activities, land and resource management, language, stories, and social and ceremonial practices. The designation gives explicit recognition of culturally significant landscapes as critically important social-ecological systems, through which awareness and understanding of cultural knowledge and perspectives and associated ecological processes in a rapidly changing world can be emphasized. The concept has potential utility in land use planning and decision-making, and biocultural conservation and restoration" (ibid.)

The Preliminary Mitigation Report describes SSN's position on the ability for effects to Pípsell, as a Cultural Keystone Place, to be mitigated as well as alternative areas:

"With Secwepemc and SSN Aboriginal title unceded and unextinguished in that area, SSN sees it as its duty to protect our heritage sites, including sites with important spiritual values, and sites that speak to our identity as Secwepemc peoples, now and for future generations. Carrying out our cultural enjoyment and activities connected to the history of Jacko Lake in another place is not an option for SSN. Our connection to this place is not mitigatable. As SSN noted earlier regarding the question of whether "Secwepemc practices can be engaged in elsewhere?"

"This raises the fundamental question of severing and then "transporting" to another location our spiritual and religious connection to a sacred place. It is like trying to transport Lourdes, the Church of the Nativity in Bethlehem or the Marian shrine of Jasna Gora to a different locale. It is SSN's position that we neither can nor should engage in our activities and practices, nor our spiritual connections that rest on 10,000 years of physical connection to place, elsewhere.""

KAM made attempts to solicit SSN perspectives on the alternative fishing, hunting and trapping, and plant gathering areas identified by providing drafts of the Application (Part C and Section 8.5) in advance of submission, by requesting meetings, and by offering to provide presentations on the results of the assessments, as documented in Chapter 15 Procedural Aspects of Aboriginal Consultation. At the time of writing, no comments have been received with respect to the alternative harvesting locations identified.

Within the Current Use of Lands and Resources for Traditional Purposes (CULRTP) LSA, which measures 7,166 hectares (ha), 1,705 ha will be lost through Project activities, representing approximately 24% of the LSA. The majority of the CULRTP LSA and RSA overlap with the Peterson Creek watershed. The Peterson Creek watershed has been assessed by looking at individual sub-catchments, as shown in **Table 2**. The Middle Peterson Creek sub-catchment area, which represents 4,962 ha, is the catchment with the highest proportion of habitat losses. Losses within Middle Peterson Creek represent 34% of the sub-catchment area, while 66% of the habitats in the sub-catchment remain. Overall, 13% of the Peterson Creek watershed is affected by the Project, leaving 87% in conditions similar to current baseline.

Table 2: Peterson Creek Sub-catchments Affected by Project Activities

Peterson Creek Sub-catchment	LSA/RSA	Percent Affected by Project
West Upper Peterson Creek	RSA	0%
East Upper Peterson Creek	RSA	0%
Middle Peterson Creek	LSA	34%
Lower Peterson Creek	LSA	0%
Total Peterson Creek Watershed	RSA	13%

Table 3 presents a comparative analysis of the quality of resource, quality of experience and access between preferred traditional use sites for fishing, hunting and trapping, and plant gathering and alternative sites within the LSA.

Since the writing of the Application/EIS was completed, KAM has received additional information through on-going consultation activities, the SSN review process and research conducted as part of the writing of the three Addenda to the Application/EIS. The information received indicates that Jacko Creek at the inlet to Jacko Lake as well as the outlet of Jacko Lake at Peterson Creek are the current preferred traditional fishing locations, as well as the mouth of Peterson Creek at the Thompson River.

To reflect this update in information, the fisheries offsetting plan has been updated and revised (refer to *Memo 0706_KAM_Revised Conceptual Fish Habitat and Fishery Offsetting Plan*). Key components of this plan include the following:

- Expansion of the western arm of Jacko Lake by approximately 2.6 ha at 892 metres above sea level (masl) to increase fish habitat and Aboriginal and recreational fishing areas and opportunity. The expansion of the western arm includes improved access to Jacko Lake via a new road, boat launch, day-use area and shoreline trails for fisherman;
- Enhancement of fish habitat at the outlet of Jacko Lake to support continuation of the SSN spring fishery. Access to this area of Peterson Creek will be retained throughout mine construction, operations and post-closure;
- Flow augmentation in Jacko Creek (inlet to Jacko Lake) to improve spawning habitat for trout
 and an attractant flow for rainbow trout to re-establish an asserted spring trout fishery in this
 inlet stream that is not currently utilized by fish or Aboriginal fishers. The goal of the restoration
 works on Upper Peterson Creek is to restore adequate flow, fish passage and habitat to enable
 Aboriginal fishing; and
- Habitat improvements at the mouth of Peterson Creek to enhance rearing habitat for coho salmon as well as other salmonid and forage species in the South Thompson River system. The primary objective of this enhancement work is to benefit salmon productivity in the system, which has been stated to be a goal shared by SSN.

In terms of alternative sites for cultural and other ceremonial uses, KAM recognizes that there are a range of cultural and ceremonial uses that are practiced and occur throughout SSN's traditional territory. Other ceremonies, such as those associated with the harvest of traditional resources such as hunting, fishing and plant gathering, are not linked to a specific site. Other cultural/ceremonial uses associated with resource gathering would take place at each of the alternative sites within the traditional territory as identified through the CHS and as presented in **Table 1** above and can also be practiced throughout the traditional territory at any number of sites. There are also cultural uses and ceremonies associated with community meetings, meals, and community events. This includes prayers, participation in sweat

lodges, and welcoming and meeting opening ceremonies. These ceremonial activities are not linked to specific sites and take place throughout the traditional territory including sites with SSN communities such as community halls and gathering places. As stated above, these sites fall outside the LSA and RSA for the Project, so it can be inferred that Project activities will not affect the availability, access to, experience of or quality of resources harvested from these alternative areas.

KAM recognizes that Jacko Lake and the surrounding area, identified as Pípsell, is associated with the Trout Children Story and is of high cultural value to the SSN. Cultural and ceremonial uses associated with the Trout Children Story including ritual fasting, offerings, prayer, the Chickadee Song and root digging, are not site-specific. No alternative sites of similar cultural value to Pípsell have been identified within the traditional territory and could therefore not be assessed.

Table 3: Comparative Analysis of the Quality of Resource, Quality of Experience, and Access between Preferred Traditional Use Sites and Alternative Sites within the LSA

Traditional Use	Site	Availability	Access	Experience	Quality
Fishing	Jacko Lake	Construction and Operation of the Project will result in the removal of the northeastern arm of Jacko Lake, which comprises 6% of the total area of Jacko Lake at full pool and approximately 12% of the Jacko Lake littoral area. The Valued Component (VC) also predicts no effects or loss of productivity in Jacko Lake as a result of ground vibrations generated by blasting. During Operation, fish habitat in the northeastern arm of Jacko Lake will be lost. This portion of the lake, identified as a highly productive area for fishing, will no longer be available to SSN for fishing. As part of the revised fisheries offsetting plan, the western arm of Jacko Lake will be expanded by approximately 2.6 ha at 892 masl to increase fish habitat and Aboriginal and recreational fishing areas and opportunity. It is expected that availability of rainbow trout for the SSN fishery in Jacko Lake will not be affected.	During Construction and Operation, safety zones will be enforced around the open pit during blasting periods, resulting in temporarily restricted access to fishing areas. Blasting is expected to be undertaken once per day near 12:00 pm. This would create a window of approximately two hours during which SSN harvesters would be unable to engage in activities within the specified blasting buffer area. During Construction, Operation, and Decommissioning and Closure, roads within the Mine Site will be closed except to authorized Project vehicles. This will affect access to Jacko Lake. As part of the revised fisheries offsetting plan, the expansion of the western arm includes improved access to Jacko Lake via a new road, boat launch, day-use area and shoreline trails for fisherman.	Construction, Operation, and Decommissioning and Closure may diminish the experience. Project-related noise will be noticeable in the Jacko Lake area. Also, increased levels of traffic and related noise associated with the Project could potentially diminish the experience of fishing. Dust during Construction of the Project may result in a decrease in the quality of the experience of fishing. During Construction, Operation and Decommissioning and Closure, air quality deterioration particulate matter (i.e., dust) has the potential to affect the experience of fishing if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the Tailings Storage Facility (TSF) will be noticeable from locations such as Jacko Lake and Lower Peterson Creek.	The human health VC (Section 10.4) assumes Aboriginal Groups (including SSN) obtain 10% of their total fish intake from Jacko Lake, Jacko Creek and Peterson Creek. The Project will generate dust fall and will change the hydrological regime in the LSA. The risk to human health associated with the ingestion of country foods, including fish, has been assessed under the human health VC (Section 10.4).
	Middle Peterson Creek (preferred)	There is an SSN spring fishery for rainbow trout at the outlet of Jacko Lake into Peterson Creek (SSN, Record of Communication, 7 July 2015; SSN Record of Communication, 24 November 2015). The revised fisheries offsetting plan includes enhancement of fish habitat at the outlet of Jacko Lake to support the continuation of the SSN spring fishery.	Since 2015, KAM has re-established access to SSN members to areas around Jacko Lake, on the KAM property, for cultural and harvesting purposes. To accommodate SSN's use of Jacko Lake, Jacko Creek and Peterson Creek as an early spring trout fishery, KAM will avoid construction activities within Jacko Lake during spring. Included in the revised fisheries offsetting plan is the retention of access to this area of Peterson Creek throughout mine construction, operations and post closure. During Construction, Operation, and Decommissioning and Closure, roads	Project-related noise disturbances during Construction, Operation, and Decommissioning and Closure may diminish the experience of fishing. Project-related noise will be noticeable in the Jacko Lake area. Also, increased levels of traffic and related noise associated with the Project could potentially diminish the experience of fishing. Dust during Construction of the Project may result in a decrease in the quality of the experience of fishing. During Construction, Operation and Decommissioning and Closure, air quality deterioration particulate matter (i.e., dust) has the potential to affect the	The human health VC (Section 10.4) assumes Aboriginal Groups (including SSN) obtain 10% of their total fish intake from Jacko Lake, Jacko Creek and Peterson Creek. The Project will generate dust fall and will change the hydrological regime in the LSA. The risk to human health associated with the ingestion of country foods, including fish, has been assessed under the human health VC (Section 10.4).

Traditional Use	Site	Availability	Access	Experience	Quality
Traditional OSE			within the Mine Site will be closed except to authorized Project vehicles. This will affect access to Peterson Creek. Following mine closure and reclamation, access will be restored.	experience of fishing if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake and Lower Peterson Creek. The Peterson Creek water pond will be visible and may act as a barrier to users trying to access Middle Peterson Creek.	
	Lower Peterson Creek (preferred)	There will be flow reductions in the Lower Peterson Creek sub-catchment as a result of mining activities during the Construction and Operation phases, but this will be restored to similar to existing conditions during the Decommissioning and Closure phase. The revised fisheries offsetting plan includes habitat improvements at the mouth of Peterson Creek to enhance rearing habitat for coho salmon as well as other salmonid and forage species in the South Thompson River system. The primary objective of this enhancement work is to benefit salmon productivity in the system, which has been stated to be a goal shared by SSN.	During Construction, Operation, and Decommissioning and Closure, increased traffic generated by the Project could also affect access, as more time could be required to access fishing sites (e.g., Inks Lake interchange).	Dust during Construction of the Project may result in a decrease in the quality of the experience of fishing. During Construction, Operation and Decommissioning and Closure, air quality deterioration particulate matter (i.e., dust) has the potential to affect the experience of fishing if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake.	The Project will generate dust fall and will change the hydrological regime in the LSA. The risk to human health associated with the ingestion of country foods, including fish, has been assessed under the human health VC (Section 10.4).
	Jacko Creek (preferred)	There is an SSN spring fishery for rainbow trout at the inlet to Jacko Lake, known locally as Jacko Creek (SSN Record of Communication, 24 November 2015; SSN Record of Communication, 9 June 2015). It is expected that availability of rainbow trout for the SSN fishery in Jacko Creek will not be affected.	During Construction, Operation, and Decommissioning and Closure, increased traffic generated by the Project could also affect access, as more time could be required to access fishing sites (e.g., Inks Lake interchange).	Dust during Construction of the Project may result in a decrease in the quality of the experience. During Construction, Operation, and Decommissioning and Closure, dust has the potential to affect the experience of fishing if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect	

Traditional Use	Site	Availability	Access	Experience	Quality
				during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some changes to the visual landscape will be permanent.	
Hunting and Trapping	Jacko Lake (preferred)	There are 7,167 ha of sharp-tailed grouse habitat in the LSA. Of this, approximately 50% is moderate to high suitability growing habitat, while 18% is moderate to high suitability winter habitat. The majority of moderate to high suitability growing (45–70%) and winter habitats (42–68%) will remain available in the LSA. There are 7,167 ha of badger habitat in the LSA. Of this, approximately 59% is moderate to high suitability habitat. 51–72% of suitable badger habitats remain available in the LSA. There are 7,167 ha of deer habitat available in the LSA. Of this, approximately 12% is critical deer winter range habitats. 82–96% of the critical deer winter range habitats remain available in the LSA. As stated in the mammals VC, noise from Project Construction and Operation may affect 3–10% of suitable wildlife habitat (for deer, American badger and sharptailed grouse) within the LSA. However, habituation to routine disturbances over the length of the Project may reduce noise effects. Wildlife mortality, including mortality from collisions with Project-related vehicles, also has the potential to affect changes in the availability of harvested resources for SSN hunters. With mitigation, residual effects to direct mortality for wildlife are not anticipated	Since 2015, KAM has re-established access to SSN members to areas around Jacko Lake, on the KAM property, for cultural and harvesting purposes. During Construction, Operation, and Decommissioning and Closure, roads within the Mine Site will be closed, which will affect access for hunting and trapping in the Jacko Lake area. The majority of the mine footprint surrounding Jacko Lake will remain unavailable from Construction through to Decommissioning and Closure. Following mine closure and reclamation, access will be restored, with the exception of the open pit area, which will remain permanently closed.	Project-related noise disturbances during Construction, Operation, and Decommissioning and Closure may diminish the experience of hunting and trapping. Project-related noise will be noticeable in the Jacko Lake area. Increased levels of traffic and related noise associated with the Project could also potentially diminish the experience of hunting. The highest expected levels of noise at Jacko Lake and surrounding area will occur during sheet piling activities, which will take place during the Construction phase and represent the worst-case scenario. Lower levels of noise will continue to be noticeable during the remainder of the Construction phase, once sheet piling activities are completed. Dust during Construction of the Project may result in a decrease in the quality of the experience. During Construction, Operation, and Decommissioning and Closure, dust has the potential to affect the experience of hunting if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF,	The Project will generate dust fall and will change the hydrological regime in the LSA. Project activities are not expected to result in harmful accumulation and release of metals from downstream surface water that would be consumed by people. The source of potential harmful accumulation of metals and other contaminants of concern is air emissions and dust. The quality of country foods is assessed in Section 10.3. The assessment concludes that increases in trace metals tissue concentrations between Baseline and Future Cases are noted for mule deer, snowshoe hare, ruffed grouse and domestic cattle. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation and country foods). These changes in metal concentrations in soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health risk above the baseline human health risk are concluded to be negligible,

Traditional Use	Site	Availability	Access	Experience	Quality
		to affect wildlife availability for SSN harvesters.		will be noticeable from locations such as Jacko Lake. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some changes to the visual landscape will be permanent.	changes to human health are concluded to be not significant.
	Goose Lake (preferred)		Since 2015, KAM has re-established access to SSN members to areas around Jacko Lake, on the KAM property, for cultural and harvesting purposes. At the start of Construction, access to hunting locations via Goose Lake Road will no longer be available for those portions of Goose Lake Road that will be closed (6.8 kilometres [km] loss out of 12.8 km total length; Figure 8.5-10). Goose Lake will be removed entirely, and this area will no longer be available for hunting activities. Following mine closure and reclamation, access will be restored as a gathering place and hunting area; however, the topography of the area will be greatly transformed.	Dust during Construction of the Project may result in a decrease in the quality of the experience. During Construction, Operation, and Decommissioning and Closure, dust has the potential to affect the experience of hunting if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some changes to the visual landscape will be permanent.	The Project will generate dust fall and will change the hydrological regime in the LSA. Project activities are not expected to result in harmful accumulation and release of metals from downstream surface water that would be consumed by people. The source of potential harmful accumulation of metals and other contaminants of concern is air emissions and dust. The quality of country foods is assessed in Section 10.3. The assessment concludes that increases in trace metals tissue concentrations between Baseline and Future Cases are noted for mule deer, snowshoe hare, ruffed grouse and domestic cattle. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health risk are concluded to be negligible, changes to human health are concluded to be not significant.
	Upper Peterson Creek (preferred)		Since 2015, KAM has re-established access to SSN members to areas around Jacko Lake, on the KAM property, for cultural and harvesting purposes. Access to the portion of Peterson Creek, within	Dust during Construction of the Project may result in a decrease in the quality of the experience of hunting. During Construction, Operation, and Decommissioning and Closure, air quality	The Project will generate dust fall and will change the hydrological regime in the LSA. Project activities are not expected to result in harmful accumulation and release of metals from

Traditional Use	Site	Availability	Access	Experience	Quality
			the footprint of the mine will be inaccessible for hunting from Construction until the Post-Closure phase, during which KAM will support the permit system (which may include provisions to allow Aboriginal users to access ranch or grazing leases owned by KAM, though not within areas deemed unsafe [e.g., open pit]).	deterioration particulate matter (i.e., dust) has the potential to affect the experience if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake and Lower Peterson Creek. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some changes to the visual landscape will be permanent.	downstream surface water that would be consumed by people. The source of potential harmful accumulation of metals and other contaminants of concern is air emissions and dust. The quality of country foods is assessed in Section 10.3. The assessment concludes that increases in trace metals tissue concentrations between Baseline and Future Cases are noted for mule deer, snowshoe hare, ruffed grouse and domestic cattle. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation, and country foods). These changes in metal concentrations in soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health risk are concluded to be negligible, changes to human health are concluded to be not significant.
	Areas within the LSA not affected by the Project (alternative)	There are 7,167 ha of sharp-tailed grouse habitat in the LSA. Of this, approximately 50% is moderate to high suitability growing habitat, while 18% is moderate to high suitability winter habitat. The majority of moderate to high suitability growing (45–70%) and winter habitats (42–68%) will remain available in the LSA. There are 7,167 ha of badger habitat in the LSA. Of this, approximately 59% is moderate to high suitability habitat. 51–72% of suitable badger habitats remain available in the LSA.	During Construction, Operation, and Decommissioning and Closure, increased traffic generated by the Project could affect access, as more time could be required to access hunting areas.	Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some	The Project will generate dust fall and will change the hydrological regime in the LSA. Project activities are not expected to result in harmful accumulation and release of metals from downstream surface water that would be consumed by people. The source of potential harmful accumulation of metals and other contaminants of concern is air emissions and dust. The quality of country foods is assessed in Section 10.3. The assessment concludes that increases in trace metals tissue concentrations between Baseline

Traditional Use	Site	Availability	Access	Experience	Quality
		There are 7,167 ha of deer habitat available in the LSA. Of this, approximately 12% is critical deer winter range habitats. 82–96% of the critical deer winter range habitats remain available in the LSA. With mitigation, residual effects to direct mortality for wildlife are not anticipated to affect wildlife availability for SSN harvesters.		changes to the visual landscape will be permanent.	and Future Cases are noted for mule deer, snowshoe hare, ruffed grouse and domestic cattle. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation and country foods). These changes in metal concentrations in soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health risks. Because changes in human health risk are concluded to be negligible, changes to human health are concluded to be not significant.
Plant Gathering	No specific areas identified (preferred)	The rare plants study areas were used to describe losses of habitat for the LSA, particularly in those portions where the losses will likely occur, primarily in the Middle Peterson Creek sub-catchment. Of the 184 (56%) occurrences of Traditional Use plants within the LSA, 104 (56%) will be lost, while 45% of the Traditional Use plant occurrences will be lost from the RSA. With respect to grasslands, 15% (1,085 ha) of grassland habitat in the LSA will be lost to the Mine Site during the Construction and Operation phases of the Project; however, 1,125 ha will be reclaimed Post-Closure.	Access to plant gathering locations via Goose Lake Road will no longer be available for those portions of Goose Lake Road that will be closed. Goose Lake will be removed and will no longer be available for plant gathering activities. Access to Peterson Creek, within the footprint of the mine, will continue to be inaccessible for plant gathering, as will the areas of the proposed Mine Site. Since 2015, KAM has re-established access to SSN members to areas around Jacko Lake, on the KAM property, for cultural and harvesting purposes. During Construction, Operation, and Decommissioning and Closure, roads within the Mine Site will be closed, which will affect access to parts of Jacko Lake. However, KAM will aim to maintain access to Jacko Lake through construction of an alternative access road to Jacko Lake south of the proposed main access to the Project. KAM will also construct an additional parking lot area	Project-related noise disturbances during Construction, Operation, and Decommissioning and Closure may diminish the experience of plant gathering. Project-related noise will be noticeable in the Jacko Lake area. Increased levels of traffic and related noise associated with the Project could also potentially diminish the experience of plant gathering. The highest expected levels of noise at Jacko Lake and surrounding area will occur during sheet piling activities, which will take place during the Construction phase and represent the worst-case scenario. Lower levels of noise will continue to be noticeable during the remainder of the Construction phase, once sheet piling activities are completed. Dust during Construction of the Project may result in a decrease in the quality of the experience. During Construction, Operation, and Decommissioning and Closure, air quality deterioration	The quality of country foods is assessed in Section 10.3. The assessment concludes that for traditional plants, increases in trace metal concentrations between Baseline and Future Cases are smaller than those noted for animal and fish tissue and reflect the very small increases in metal concentrations in soil associated with the Project. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals

Traditional Use	Site	Availability	Access	Experience	Quality
			to facilitate continued access to the areas surrounding Jacko Lake. During Construction, Operation, and Decommissioning and Closure, increased traffic generated by the Project could affect access, as more time could be required to access plant gathering areas.	particulate matter (i.e., dust) has the potential to affect the experience of plant gathering if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks Lake, and Coal Hill. It is anticipated that main Project components, such as the mine rock storage facilities and the TSF, will be noticeable from locations such as Jacko Lake and Lower Peterson Creek. Visual disturbances will be reduced to slight in some areas during the Post-Closure phase. However, some changes to the visual landscape will be permanent.	above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health risks. Because changes in human health risk are concluded to be negligible, changes to human health are concluded to be not significant.
	Areas within the LSA not affected by the Project (alternative)	Plants located in the upper and lower portions of the Peterson Creek sub-catchment should remain available, as there are no losses of habitat anticipated in those areas. 85% of grassland habitats will remain available in the LSA.	During Construction, Operation, and Decommissioning and Closure, increased traffic generated by the Project could affect access, as more time could be required to access plant gathering areas.	Project-related noise disturbances during Construction, Operation, and Decommissioning and Closure may diminish the experience. The highest expected levels of noise will occur during sheet piling activities, which will take place during the Construction phase and represent the worst-case scenario. Lower levels of noise will continue to be noticeable during the remainder of the Construction phase, once sheet piling activities are completed. Dust during Construction of the Project may result in a decrease in the quality of the experience. During Construction, Operation, and Decommissioning and Closure, air quality deterioration particulate matter (i.e., dust) has the potential to affect the experience of plant gathering if dust generation by fugitive point sources is noticeable. Visual disturbances will be caused by Project infrastructure or activities. There will be a moderate degree of visual effect during Construction and Operation from Jacko Lake (including the boat launch), Goose Lake Road (East and West), the Lac Le Jeune Road #1 and Haul Road, Inks	The quality of country foods is assessed in Section 10.3. The assessment concludes that for traditional plants, increases in trace metal concentrations between Baseline and Future Cases are smaller than those noted for animal and fish tissue and reflect the very small increases in metal concentrations in soil associated with the Project. The Human Health effects assessment (Section 10.4) quantifies the health risk to people in the LSA from multiple exposure pathways (e.g., inhalation, ingestion of country foods and consumption of domestic drinking water). The assessment concludes that Project activities will result in negligible changes in air quality and in the levels of metals in the terrestrial environment (i.e., soil, vegetation, and country foods). These changes in metal concentrations in soil, vegetation, country foods, surface water and groundwater result in a negligible increase in exposure to metals above what currently exists under baseline conditions. This also results in a negligible increase in the human health risk above the baseline human health

Traditional Use	Site	Availability	Access	Experience	Quality
				Lake, and Coal Hill. It is anticipated that	risk are concluded to be negligible,
				main Project components, such as the	changes to human health are concluded
				mine rock storage facilities and the TSF,	to be not significant.
				will be noticeable from locations such as	
				Jacko Lake. Visual disturbances will be	
				reduced to slight in some areas during	
				the Post-Closure phase. However, some	
				changes to the visual landscape will be	
				permanent.	
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