



TECHNICAL MEMORANDUM

Ktunaxa Nation Rights and Interests in relation to Benga Mining Limited's proposed Grassy Mountain Coal Project

Prepared By: Dr. Craig Candler and Mathew Murray, the Firelight Group

Submitted To: Ktunaxa Nation Council

Date: January 28, 2019

Introduction

Based on a scope of work dated June 13, 2016, the Ktunaxa Lands and Resources Sector of the Ktunaxa Nation Council (KNC) retained the Firelight Group to support the completion of a Ktunaxa Knowledge and Use Study and Preliminary Assessment for the Grassy Mountain Coal Project (the Project) proposed by Benga Mining Limited (the Proponent)¹ north of Blairmore, Alberta.²

This technical memo provides a summary of results and preliminary assessment based on review of Project information provided by the Proponent, relevant EA documents including material submitted by the KNC for the 2015 Baldy Ridge Expansion (BRE) process in BC, existing KNC data for the Project area (including eastern Rocky Mountain foothills, Crowsnest Pass, and the Crowsnest River watershed), ethnohistorical and archival evidence, and interviews with Ktunaxa knowledge holders and a respected Blackfoot elder with Ktunaxa family ties.

KNC work is ongoing and assessment conclusions may be modified as a result of the ongoing review process. If additional or supplemental information becomes available or if assessment conclusions are modified during the application review period, KNC

¹ Benga Mining Limited is a wholly owned subsidiary of Riversdale Resources Ltd.

² While the authors and the Ktunaxa Lands and Resources Sector (KLRS) have worked to accurately reflect existing and available information regarding Ktunaxa knowledge and convey Ktunaxa use, rights, and interests in relation to the proposed Project, information contained in this memorandum is a partial and limited depiction of the dynamic and living system of use and knowledge maintained by Ktunaxa governments, elders and citizens. It is not intended as a comprehensive or complete statement of information concerning Ktunaxa Aboriginal rights, culture, history or interests related to the Project or generally. Available Ktunaxa information will continue to grow and evolve as further research occurs over time.

The information contained here, and the participation of KLRS in the preparation of this memorandum, is without prejudice to Ktunaxa title, rights and interests and does not express or imply Ktunaxa consent to, or approval of, the Project or any other activities undertaken by the Proponent or the federal or provincial Crown. Nothing in this memo shall be construed as defining, waiving, or limiting the title, rights and interests of the Ktunaxa Nation or other Indigenous communities. Information contained here is provided for the purposes of the Grassy Mountain environmental assessment and is specific to Ktunaxa considerations regarding the Project. It should not be relied upon to inform any other processes, assessments, or decisions except with written consent from Ktunaxa Lands and Resources Sector.

reserves the right to supplement the information contained in this report and/or reconsider its assessment of anticipated effects on Ktunaxa use, rights and interests. Based on this preliminary assessment, additional work is recommended to identify mitigations and other measures that can reliably reduce impacts, and enhance benefits for Ktunaxa use, rights and interests.

Assessment Context and Summary of Findings

Available information indicates that the Project is proposed just east of the Alberta-BC border in an area considered by Ktunaxa knowledge holders to be *ʔamakʔis Ktunaxa*³ (Ktunaxa territory or homeland) and associated with the traditional land district of *qukin ʔamakʔis* (Raven's Land) which includes *Kuʔwiaʔki* (the Crowsnest Pass), as well as the Michel Creek and Elk Valleys.

Archival and oral histories indicate that Ktunaxa citizens rely on the Project area for the preferred practice of a range of rights and interests that rely on particular preferred or critical places, species, and practices. These include subsistence harvesting, cultural-spiritual practices including teaching of oral histories and transmission of knowledge, and use of trails and roadways that allow access to important areas and resources. Practice of Ktunaxa rights in the Project area are ongoing and current, despite serious impacts from past coal mining, road development, extirpation of bison, and ongoing Canadian colonial policies, including those associated with National Parks and protected areas.

The Project is located within the spatial bounds of Treaty No. 7, signed in 1877 by Canada and several Indigenous nations residing east of the Rocky Mountains. The Ktunaxa Nation was not a party to Treaty No. 7, or any other treaty with the Canadian Crown. The Ktunaxa Nation maintains that Treaty No. 7 has no impact on Ktunaxa rights or interests associated with the Project area, and that pre-confederation Ktunaxa rights in the area continue to be in place under Indigenous law and Canada's *Constitution Act* of 1982, and have never been ceded, surrendered, or given up to the Canadian Crown.

The Ktunaxa Nation maintains underlying sovereign and sui generis rights to all lands and waters within its territories. The Crowsnest Pass area, like the Michel and Elk valleys to the west, has been used and occupied continuously by the Ktunaxa Nation since time immemorial. Based on historic treaties and agreements with neighboring First Nations, the Ktunaxa Nation recognizes that other First Nations from further east also have histories and rights in the Project area, alongside those of the Ktunaxa Nation.

As discussed further below, the Project is likely to contribute further adverse residual impacts on Ktunaxa use, rights and interests in the Project area including, but not limited, to:

³ *ʔamakʔis Ktunaxa* is used by the Ktunaxa Nation in place of "territory" to refer to the spatial area understood by the Nation and its citizens as representing the extent of Ktunaxa historical use and occupancy where Ktunaxa title, rights, and/or stewardship obligations apply, and upon which Ktunaxa citizens rely.

- Impacts on cultural-spiritual values, including sense of place and ability to pass on place-specific knowledge related to sacred landforms and Ktunaxa oral history of the Crowsnest Pass. This place-specific knowledge is reliant on the integrity of the viewscape and sensory environment surrounding *qukin ?akit#a?is* (Crowsnest Mountain), *Ku#wia?ki* (the Crowsnest Pass, and specifically Crowsnest Lake), Turtle Mountain and Frank, and other important areas within and beyond the Ktunaxa LSA;
- Impacts on environmental and cultural-spiritual values associated with the integrity of water resources at the headwaters of the Crowsnest River and downstream;
- Impacts on use of trails for travel and access to cultural landscapes, including important traditional Ktunaxa travel routes connecting lands west of the Rockies with the southern Alberta plains, including routes generally followed by the current Crowsnest Highway corridor;
- Impacts on preferred habitation (camp) areas and subsistence harvest areas (hunting, fishing, plant gathering), including in the area of Grassy Mountain. The viability of the Project area is especially important as it is located in the only area in *?amak?is Ktunaxa* where Ktunaxa citizens can practice hunting rights on both sides of the Rockies without interruption and interference from National Park restrictions;
- Impacts on ecological values, particularly related to currently vacant habitat, movement corridors, and hunting areas for plains bison, but also for grizzly bear and other culturally important species and habitats; and
- Potential impacts on Ktunaxa governance, stewardship, and relationships with neighbouring Indigenous communities in the Crowsnest Pass region.

Ktunaxa Perspective on the Project Description

The Grassy Mountain Coal Project is a proposed open pit metallurgical coal mine on Grassy Mountain in *?amak?is Ktunaxa* in southwestern Alberta. The proposed mine is located near the Crowsnest Pass, approximately 7 km north of the town of Blairmore in the foothills of the eastern slope of the Rocky Mountains, and in an area already impacted by past underground and above ground coal mining activity. According to the proponent's Project description (Millenium EMS Solutions Ltd., 2015), anticipated economic benefits will be felt most strongly in the Municipality of Crowsnest Pass and the Municipality of Ranchlands, and to a lesser degree neighbouring non-Indigenous communities to the west, such as Sparwood, Elkford and Fernie.

Ktunaxa experience with past mining in the Crowsnest Pass area is one where most or all socio-economic benefits are received by non-Indigenous communities and workers, and a disproportionate share of impacts are received by Indigenous communities, including the Ktunaxa Nation. This 'business as usual' approach results in a net adverse impact for Ktunaxa citizens and continued erosion of Ktunaxa use, rights, and interests.

KNC understands the Project to include mine construction, operations, decommissioning and reclamation of the following components:

- an open pit surface coal mine with service road networks and water management structures;
- a washing and processing facility, the Coal Handling and Processing Plant (CHPP)
- associated infrastructure including a product coal conveyor system connecting the CHPP to a rail load-out facility, an access corridor, maintenance shops, power lines and other facilities; and
- transport of produced coal from the Project area westward to marine terminals on the British Columbia coast by Canadian Pacific (CP) Railway.

While the focus of exploration, technical and environmental work comprises an area of approximately 2800 ha, the Project footprint is listed as an area of 1520.7 ha, of which approximately 1222 ha is open pit mine pit (Millennium EMS Solutions Ltd., 2016).

The mine life of the Grassy Mountain Coal Project is projected as 24 years with potential extension. KNC understands that the Proponent anticipates Phase 1 construction, commissioning, and production ramp-up will take approximately three years following initial coal production. Expected production capacity at Phase 1 is 2 Million tonnes per annum (Mt/a), followed by a Phase 2 target coal production rate of 4 Mt/a for an additional 22 years (to 2042). During Phase 2, an average of 37 million cubic metres of rock will be mined per year at Grassy Mountain (Millennium EMS Solutions Ltd. 2015: 17).⁴ Product coal produced at Grassy Mountain will be transported by haul road and conveyor to the rail load out facility for transport by rail.

Ktunaxa Communities and Reserves

The Ktunaxa Nation is made up of all Ktunaxa citizens residing both within and outside of *?amak?is Ktunaxa*, including member communities and their citizens. The northern portion of *?amak?is Ktunaxa* has historically been claimed by Canada, while the southern portion is claimed by the United States. In Canada, the member communities of the Ktunaxa Nation include, *akink'um?asnuqti?it* (Tobacco Plains Band), *?aq'am* (St. Mary's Band), *yaqan nu?kiy* (Lower Kootenay Band), and *?akisq'nuk* (Columbia Lake Band). In the United States, Ktunaxa communities include, *?aq'anqmi* (Kootenai Tribe of Idaho near Bonners Ferry, Idaho), and *k'upawizq'nuk* (Ksanka Band near Elmo, Montana). The Ktunaxa Nation maintains unceded Aboriginal title in much of what is now considered the East and West Kootenays. The British Columbia (BC) portion of the traditional territory is subject to ongoing treaty negotiations with the Province of BC and the Government of Canada. On November 30th, 2018, Canada, BC and the Ktunaxa Nation signed the "Ktunaxa Nation Rights Recognition and Core Treaty Memorandum of Understanding". Among other things, this MOU confirms that the Ktunaxa Nation treaty negotiations have moved from stage 4 to stage 5.

⁴ A full description of coal production process is outlined in section 2.3.2 (p17-18) of Millennium EMS Solutions Ltd.'s (2015) project description.

The Ktunaxa Nation maintains underlying sovereign and sui generis title to all lands and waters within its territories, however the Canadian government has set aside only a small number of federal Indian Reserves for Ktunaxa Nation communities, including:

- *akink'umłasnuqłiłit* (Tobacco Plains near Grasmere) – two reserves (Tobacco Plains 2, St. Mary's 1A);
- *łaq'am* (St. Mary's Band near Cranbrook) – five reserves (Bummers Flat 6; Cassimayooks (Mayook) 5; Isidore's Ranch 4; Kootenay 1; St. Mary's 1A);
- *yaqan nułkiy* (Lower Kootenay Band near Creston): nine reserves (Creston 1; Lower Kootenay 1A; Lower Kootenay 1B; Lower Kootenay 1C; Lower Kootenay 2; Lower Kootenay 3; Lower Kootenay 4; Lower Kootenay 5; St. Mary's 1A); and
- *łakisq'nuk* (Columbia Lake near Windermere): two reserves (Columbia Lake 3 and St. Mary's 1A).

The nearest Ktunaxa communities to the Project are *akink'umłasnuqłiłit* and *łaq'am*, located approximately 82 km southwest and 88 km west, respectively (as the crow flies).

Methods and Scope

This technical report provides a summary of results based on review of existing KNC use and occupancy data, additional semi-structured interviews with Ktunaxa knowledge holders regarding the Project and project area, one group interview with key Ktunaxa and Blackfoot knowledge holders conducted in 2017, a site visit to the Project site with Ktunaxa knowledge holders and KNC staff and review of ethnohistorical and archival sources, as well as Project information and the Proponent's assessment documents. All interviews were audio recorded and transcribed, and included documentation of informed consent. The purpose of the interviews, focus group, and existing data and document review, was to identify important Ktunaxa ecological and cultural values, knowledge and interests related to the Project area, and potential Project interactions. Other impacts, including impacts to Ktunaxa social, health, and economic rights, including employment, are not addressed in this memorandum. Additional work would be needed to undertake a more fulsome assessment.

Interview and mapping protocols used were based on standard techniques (Tobias 2009; DeRoy 2012). Ktunaxa use and occupancy information was documented in Google Earth Pro using direct-to-digital mapping at a scale of 1:50,000 or better. For the purposes of assessment, the Project footprint was defined based on physical works identified by the proponent (including mine pits, waste rock areas, roads, rail load out, processing plant, transmission lines, and water control features) plus a 250m buffer. A Ktunaxa Local Study Area (LSA) was defined within 5km the Project footprint. The footprint and LSA are show in relation to available site-specific data in Figure 1 below.

The work was limited by time and budget, and involved only a small sample of Ktunaxa knowledge holders. Ktunaxa work is ongoing and findings may be revised as new Ktunaxa information becomes available. The absence of mapped Ktunaxa values in any part of *łamakłis Ktunaxa* should not be interpreted as indicating an absence of value.

Ktunaxa Ethnographic and Oral Historical Context in the Project Area

Historically, *ʔamakʔis* Ktunaxa extends well east of the Rocky Mountains and south into present day Montana, Idaho, and Washington states. Ktunaxa sovereignty predates the 1846 establishment of the international boundary between Canada (then British North America) and the United States, and Ktunaxa title and rights extend across both provincial (Alberta/BC) and international borders. The core of *ʔamakʔis* Ktunaxa, within which Ktunaxa peoples, Ktunaxa culture, and Ktunaxa governance have persisted since time immemorial, is dominated by the valleys of the upper Columbia and Kootenay River systems, and by the slopes and peaks of the Rocky Mountains and adjacent ranges to the west (Ktunaxa Nation Council Society, 2005).

Current and historic Ktunaxa use of the Crowsnest Pass, as well as oral historical information pre-dating 1846, provides insight into the importance and continuity of Ktunaxa use and rights in the Project area, including the area of Blairmore. Archival and oral history records indicate that the Crowsnest Pass was traditionally used and occupied regularly by the Ktunaxa Nation prior to and after 1846 (the date of the Oregon Boundary Treaty) and prior to and after the signing of Treaty No. 7 in 1877. While impacts to Ktunaxa rights through land privatization, coal-related industrial development, extirpation of bison, and government policy has been widespread, Ktunaxa elders and land users continue to use and value the LSA and the surrounding area.

Based on interviews and oral histories collected in the late 19th and early 20th centuries, ethnographers (Chamberlain 1892; Curtis 1911; Boas 1918; Teit 1930; Turney-High 1941; Schaeffer 1935, 1966) clearly identify the Crowsnest Pass area as being originally and continuously occupied by Ktunaxa speaking peoples. Each of these sources supports an understanding that the Crowsnest Pass area of *qukin ʔamakʔis* in its entirety, was used, occupied, and effectively controlled by Ktunaxa speaking people for a long period of time prior to, and extending beyond, the assertion of British, Canadian or American sovereignty⁵ in the region. While exclusive Ktunaxa control of the Crowsnest Pass was challenged by the rise of the Blackfoot confederacy and disease epidemics in the late 18th and 19th centuries, Ktunaxa use and occupancy was maintained and is ongoing. Historic and modern Ktunaxa treaties and agreements with neighbouring Indigenous Nations provide the context for current sharing of rights and use in the Project area.

Ktunaxa oral histories, supported by historic archival and ethnographic data, suggest that Ktunaxa presence in the Crowsnest Pass area was anchored into the 20th century by an important Ktunaxa settlement at the confluence of Michel Creek and the Elk River habitation area named *kaqawakanmituk*, and later Michel Prairie, just west of the pass and near present-day Sparwood. This is a very important cultural area in the Elk Valley and was a base for bison hunts, and other activities east of the Rockies. It was occupied annually, and likely for a long period of time up to the late 1800's, by the

⁵ American assertions of sovereignty over much of BC, including the Project area, were not resolved until the Oregon Treaty was signed in 1846.

Michel Prairie people, also referred to as the Fernie Band, or *ĶaqawakanmitukniĶ*. This was a historic Ktunaxa community with close ties to the current Ktunaxa communities of Tobacco Plains and *ʔakisqʹnuk* whose annual round included hunting bison on the eastern slopes of the Rocky Mountains. As described further below, many Michel Prairie people died as a result of early smallpox epidemics, likely in the late 1700s.

The settlement of *Ķaqawakanmituk* at Michel Prairie included important tobacco cultivation areas, as well as areas for habitation, processing, and other features. Ktunaxa used trails that connected the valley to mountain passes to the east, including the Crowsnest Pass. Nearby areas, extending into the Crow's Nest Pass, and including Crow's Nest Lake and areas east of the Rockies, contain values that continue to be of central cultural and ceremonial importance for Ktunaxa people.

Based on Ktunaxa oral histories recorded by Schaeffer (1935-1937; 1966), the *ĶaqawakanmitukniĶ* (qakawakanmiṭuqnik in Schaeffer), along with other branches of the Ktunaxa Nation, including the *katamukinik*, were decimated by smallpox while hunting bison east of the Rockies, likely just prior to, or shortly after, the arrival of horses in *ʔamakʹis Ktunaxa* in the late 1700s. The area of the Crowsnest Pass in the vicinity of Blairmore figures prominently in oral histories of the epidemic. At least some of the survivors of the *ĶaqawakanmitukniĶ* returned to their people west of the Rockies and were later joined by Ktunaxa from further south under the leadership of Chief Michel (Hole-in-the-Head), an important Ktunaxa leader through the latter half of the 19th century. Chief Michel (also spelled Michelle) is mentioned by Teit (1930) and Turney-High (1941), and recalled in detail by Ktunaxa elders recorded by Schaeffer (1935-1937, 1966). Schaeffer records multiple versions, each differing slightly, of hunting buffalo east of the Rockies at a time when the Ktunaxa were decimated by an outbreak of smallpox or other illness. In the late 1960s, Chief Ambrose Gravelle provides a detailed oral history of the *ĶaqawakanmitukniĶ*, or Michelle Prairie village, contracting smallpox when a group of Ktunaxa warriors returned home from a raid east of the Rockies. On the advice of an old woman who had dreamt of the disease, the *ĶaqawakanmitukniĶ* moved east onto the plains to avoid spreading the disease to other Ktunaxa communities. Only a handful of *ĶaqawakanmitukniĶ* survived and returned to their kin west of the Rockies. One of those survivors (*Kanuktuʔam* or Whitehead⁶) returned to the area of *ĶaqawakanmitukniĶ* and Columbia Lakes. Some years later, Chief Michel married a daughter of Whitehead, became the leader of the Michel Prairie people and continued Ktunaxa use, occupation and control of the Crowsnest Pass area.

While surviving *ĶaqawakanmitukniĶ* went to live with other Ktunaxa communities, regular Ktunaxa use and occupancy of the Crowsnest Pass was maintained prior to and after clearing of a trail through the pass by the NWMP, and later construction of a railway by the CPR. While it is clear that other Indigenous peoples from east of the Rockies, including the Piikani (Blackfoot), and Nakoda (Stoney or Assiniboine), also used the pass for war or trade with the Ktunaxa or for other reasons through the early 1900s, and

⁶ In Ktunaxa, this is also a reference to bald eagle.

at times hunted or harvested resources west of the Rockies, there is no evidence that Ktunaxa authority over the Pass area was successfully challenged.

Ktunaxa Use and the Seasonal Round in Quikin ʔamakʔis and Adjacent Areas

The *kaqawakanmituk* are discussed in current Ktunaxa oral histories, and those documented in Schaeffer's field notes (1935-37, 1966), as relying on a seasonal round that included regular bison hunts east of the Rockies, as well as residence, agriculture, and harvesting in the Elk Valley and nearby areas. The annual round included hunting for sheep, deer, elk and goat, as well as other species in the Crowsnest Pass and adjacent valleys, fishing for cutthroat trout and other fish in streams and lakes, fishing salmon at Columbia Lakes and along the Columbia River drainage, and fishing for mariah or ling in winter in the area of Tobacco Plains (Schaefer 1935; Turney-High 1941). In summer, tobacco was cultivated at *kaqawakanmituk* (Michel Prairie, now Sparwood). Close relationships were maintained with other Ktunaxa communities. One Ktunaxa elder at *akink'umʔasnuqʔit* recalled that the Michel Prairie people would come to visit Tobacco Plains regularly:

...they had a big village and they had a chief and they were, they used to challenge the chief over here on horse races... (T06 Mar 1 2018)

Bison were hunted along the sheltered eastern slopes of the Rockies, including in the Project LSA, in the winter season, or farther afield on the plains in the summer. Numerous sources (e.g., Schaeffer 1935, Turney-High 1941, and use and occupancy mapping from the 2012-2015 Elk Valley Aboriginal Use and Interests Study), as well as archaeological evidence, indicate that mineral resources, including coal and stone tool material, were traditionally mined in the area. Beyond habitation, cultural use, hunting, trapping, fishing, and gathering of plants, mining of mineral sources in the Elk Valley and Crowsnest Pass area is recorded by Turney-High (1941), as is a Kutenai preference for sub-surface mining rather than surface collection:

The flint quarry near Missoula was mentioned in connection with arrow points. The Upper Kutenai also use one in Canada near Fernie, which they said was better. All informants in both subcultures (Upper and Lower Kutenai) say that flint work is the oldest and best known Kutenai art... The Kutenai preferred going to the quarries and digging for their flint claiming that surface flint was too brittle to work well... (Turney-High 1941).

As recorded by Schaeffer in field notes taken in the late 1960s, Chief Ambrose Gravelle confirmed Ktunaxa mining and use of coal from the Elk Valley and Crowsnest Pass area as a resource used by Ktunaxa to reliably transport fire in pre-contact times, especially for Ktunaxa peoples travelling east of the Rockies⁷:

⁷ It is interesting to note that one of the unique features of the 19th century *qakawakanmi#uqnik* (Michel Prairie) and Tobacco Plains seasonal round was a regular winter bison hunt on the eastern slopes of the Rockies using snow shoes, as well as summer hunts (Schaeffer 1964). Schaeffer (M1100 File 80) notes that, "the Michel Prairie and Tobacco Plains Kootenay, before horses were introduced, only went on buffalo hunt in winter on snowshoes" (M1100 File 80). The ability of Ktunaxa peoples to harvest and use coal from the Elk Valley in order to maintain a reliable source of fire and heat, as

The Kutenai used to collect coal at Coal Creek and use a piece to keep as a hot coal. They would keep a piece of heated coal in clam shells between camp sites and use it to start the fire. Mr. Fernie found a pile of coal at the Indian camp site and located the main vein on Coal Creek and claimed it. It was found and piled up by Mrs. Pierre Numa rather than by Chief David's wife (tale was that Mrs. David wore coal on her necklace)... (Interview recorded July 15, 1969, M1100 File #160, Book 5, File Folder 4, Box 17, folio page 2).

Other work by Schaeffer, as well as archaeological work on quarries in the east and west Kootenays and trade routes for mined material extending through adjacent regions, reinforces the importance of Ktunaxa mining as critical to Ktunaxa subsistence, trade, and economy. Ktunaxa continue to practice quarrying for mineral resources, including for ceremonial use as pipes and for other purposes.

Ktunaxa families maintained a traditional seasonal round, including bison hunting on the eastern slopes of the Rockies, until at least the 1880s. Travel to the east side of the Rockies by various mountain passes, including Crow's Nest Pass, Tornado Pass, and Fording Pass, continued until bison populations were decimated on the northern plains, but the cultural importance of bison hunting areas, including the trails and mountain passes used, continues:

... we used to always go to Buffalo two or three times a year and so there's, there's mountain passes getting through to go to Buffalo. And I think those are really important, those are important to me because that's, that's part of my aboriginal territory. Those are part of the lands that we were never, we were never consulted on... The trails are important because that's our network... You look at the archaeological record, you see sites here, sites there, sites here, but there's nothing really connecting them. They're all connected and it's those trails that connect them. (A01 27 June, 2012)

When the bison became too scarce, the Michel Prairie people, as well as other Upper Ktunaxa, relied more heavily on other resources; these included fish, elk, berries, and deer in the Crowsnest Pass, Elk Valley and elsewhere in the valleys west of the Rockies, including the area of Columbia Lakes, and south along the Elk and Kootenay Rivers to Tobacco Plains and beyond. Schaeffer's notes point to a series of at least named Ktunaxa campsites along a trail system running from the White River, north of Whiteswan Lake, through qukin ?amak?is, south to the main village site at Michel Prairie and then east towards important camp and sacred areas in the area of Crowsnest Lake, Alberta. Beginning at Whiteswan Lake, Schaeffer's notes indicate ⁸:

described by Chief Ambrose, may have been an important part of the Ktunaxa ability to safely travel difficult mountain passes in winter in order to hunt bison.

⁸ Bullets are quoted directly from Schaeffer's notes – while the notes are not dated, they appear to be from Schaeffer's last field trip to the area and were likely written in 1967 or shortly after. Additional work would be needed to identify exactly where Schaeffer refers to. Sparwood was formed in 1966 as part of the relocation of the communities of Michel and Natal. Schaeffer's own spelling of Ktunaxa words is maintained.

- A campsite of Michel Prairie Kutenai. The Kutenai camped here near the flint quarry used as material for tools. Name for White River was *Kanuk#unmituk*⁹ (White River). Across the divide east from White River to head of Bull River was named *aka#simuq*... The trail there runs east across another divide into Crossing Creek and east to Round Prairie...
- *Kakawakami#u*, “water running from the side into a main stream.” This was the main camp site of the Tunaxa¹⁰ located at a prairie south of the junction of Michel Creek and Elk River. The south side of the Prairie is now occupied by the Sparwood Elementary School. The site was occupied mostly in winter to escape the blizzards of the eastern foothills. Tobacco was planted here in spring and was cared for by a few people who lived here throughout the year. The Michel Prairie Kutenai were more numerous than any of the other Kutenai groups...
- An unnamed overnight camp site located on Antiste (“Andy”) Creek...which flows into Michel Creek...
- *Ki#wiaki akin#we* [second word unclear], “heart of the water.” A camp site at eastern end of Crowsnest Lake. The first buffalo stragglers (“mangy bulls”, *Kakqa#ka*) were encountered here but often passed over in favour of younger cows. The trail now ran on the north side of Crowsnest River until it crossed to south side east of Blairmore, and then re-crossed to the north side at Frank. Name may be derived from fact that river boils out of a cave in the solid rock. There are petroglyphs in the cave... (Schaeffer, date unknown, M1100, File 80).

Beyond Schaeffer (1935-37, 1964, 1966), Turney-High (1941), and the broader ethnographic record, Ktunaxa oral histories and ongoing land use indicate that Ktunaxa citizens have relied on, and to the extent possible, continue to rely on, the area of the Crowsnest Pass, including the Blairmore area, for a range of practices including the harvesting of fish, plant, wildlife, and mineral resources, trails and transportation routes, and associated camps, cultural areas, and practices.

⁹ Where a direct quote from notes recorded by Schaeffer, Ktunaxa words are written to approximate Schaeffer’s personal system of spelling. These are not standard Ktunaxa spellings approved by Ktunaxa language specialists.

¹⁰ Tunaxa is the term used in some early ethnographic literature to identify the plains Ktunaxa living east of the Rocky Mountains. Schaeffer uses it here to refer to the kaqawakanmituknik as a group that spent substantial time east of the Rockies with an economic focus on the bison hunt. While based primarily west of the Rockies, the territories regularly used by Ktunaxa-speaking communities extended well into Alberta to the present location of Lethbridge and beyond until the decimation of plains bison in the late 19th century. The weight of evidence suggests that Ktunaxa-speaking peoples were a dominant force along the eastern foothills until the late 18th and early 19th centuries when conflict with the ascendant Blackfoot confederacy combined with small pox and other diseases reduced the extent of ?amak?is Ktunaxa. It is possible that, prior to the 19th century, some Ktunaxa-speaking communities may have lived mainly or entirely east of the Rockies, but all credible ethnographic sources agree that, despite changes in extent, Ktunaxa speaking peoples have been based in the area of the Kootenay and Columbia Rivers for an extremely long period of time.

Relationships with Neighboring First Nations in the Project Area

Ktunaxa oral history and ethnographic evidence indicates the Ktunaxa were important within the dynamic social context of Crowsnest Pass, the eastern foothills, and the southern Alberta plains, prior to and after 1846. As illustrated in a group interview that included a respected Siksika elder, Blackfoot knowledge also recognized the Ktunaxa and Ktunaxa presence on the eastern slopes and plains. The Siksika elder indicated:

I was born in 1929... And my grandmother always [used to] say, “there’s people out west. We call them Koot-u-nai. Koot-u-nai is scabby and nai is robe.” Yes this is how we call you, Koot-u-nai. “And so, they lived in the mountains, they’re good fighters, they’re horse people, better horse people than the plains. And sure we can beat them out in the open but once they get us in the mountains they knock the hell out of you.” [laughs]... These are the true stories I was told by my grandmother. We used to ask questions, we said, “What are they doing in the plains?” [She said] “Well they’re hunters too, good buffalo hunters.” That’s what we were told. (group interview, Sept 15 2017)

The Ktunaxa Nation’s historical and ongoing relationships with eastern neighbours are formalized through Indigenous law and through both historic and modern treaties entered into with the Piikani, Nakoda, and others. These treaties served various purposes and are grounded in Indigenous legal traditions, rather than Canadian ones. They include peace agreements, agreements confirming access to certain lands for harvesting purposes, and the modern Buffalo Treaty, which deals with a commitment to restore and steward the return of bison within the animal’s historic range. Each agreement has implications for the Project area.

- Appendix 1 is copy of an 1895 agreement involving the Ktunaxa, Stoney (Nakoda), and Kinbasket, permitting Stoney hunting on the western slopes of the Rocky Mountains, and affirming Ktunaxa rights to harvest on the eastern slopes. This was an oral treaty that was written down and witnessed by the Department of Indian Affairs.
- Ktunaxa oral history describes another oral treaty that established a lasting peace between Ktunaxa from Tobacco Plains and the Piikani (or Peigan), which was entered into at Fort MacLeod and witnessed by the RCMP in the latter part of the 19th century. The purpose of the treaty was to resolve conflict and ally the nations in response to the changes occurring in the region as a result of confederation and Euro-Canadian settlement. Based on Ktunaxa histories, the peace agreement included exchange of ceremonial material—Ktunaxa received a ceremonial bundle, and in return the Piikani received an important ceremonial practice—and included recognition of shared use of eastern slopes.

...we had protocols with our neighbouring nations to the east of us across the mountains and I understand there’s a treaty with the Piikani or the Sana [Blackfoot], between the Tobacco Plains people and the Piikani... and the exchange of the treaty was they gave us a bundle and we gave them the [an important ceremonial practice] ... I was told they came to us and they said, because we were always

traditional enemies I guess...but they came to us and said “things are changing, we can’t keep at war with each other because of the changes that are happening with confederation and settler society moving in, and it’s time for peace.” It’s my understanding they were seeking a treaty with us, and so there was a treaty [in] the latter part of the 1800’s. And I understand that from there, they would come here to our Blacktail Deer Dances around 1900... (S14 Mar 2 2018)

... way back before [Ktunaxa and Piikani] started trading when they used to steal horses off one another and women I guess. But that was one of the trips they got together. They told them they had to go to Fort MacLeod. So they all got together, the Ktunaxa from that way and this way and they formed a group and they went over to Fort MacLeod, they had a big meeting there with the RCMP. And that’s when they were told to quit warring against one another and whatever. (T06 Mar 1 2018)

- A third treaty, the *Buffalo Treaty: A Treaty for Cooperation, Renewal, and Restoration*, has recently been entered into by the KNC as an agreement with other plains Nations, including the Pikanii Nation, Blackfoot Confederacy, Blood Tribe, and other Indigenous governments, to share a commitment to restore plains bison. The Project is located in an area that is critical to bison restoration plans.

Ktunaxa Rights, Current Use, and Assessing Project Impacts

While impacts to Ktunaxa use, rights and interests through land privatization, railway development, coal-related industrial development, and government policy have been widespread, Ktunaxa elders and land users continue to actively use and rely on the landscape of the Crowsnest Pass and surrounding mountains as integral to Ktunaxa identity, and to the practice of place-specific Aboriginal rights including teaching, cultural practice, harvesting, and transportation. Land use and occupancy interviews reinforce the data from the KNC Diet Study and indicate that while Ktunaxa use of the Elk Valley and Crowsnest Pass area is impaired by industrial footprints and concerns regarding contaminants, the area continues to be highly valued and used by Ktunaxa citizens. Figure 1 shows the Project in relation to reported site-specific Ktunaxa use values.

For the purposes of this technical memo, documented Ktunaxa rights, use and interests in the Project area were assessed in relation to the Project based on best practice standards described in Canadian Environmental Assessment Agency’s (CEAA) *Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes* (CEAA 2015). CEAA guidance clarifies that current use includes use of lands and resources including connections related to ceremonies, customs, governance or stories, as well as uses that may have ceased due to external factors, such as extirpation of bison, but can reasonably be expected to resume once

conditions change.¹¹ Numerous Ktunaxa use values are documented in the Project area along the Crowsnest Pass and eastern foothills, including cultural-spiritual values (e.g., sacred and ceremonial areas, teaching areas, place names), environmental features (e.g. specific highly valued habitat), habitation sites (e.g., camps, cabins), subsistence values (e.g., harvesting and kill sites), and transportation values (e.g., trails, passes, navigation sites) (see Figure 1). Key values are summarized below, and a preliminary assessment of potential Project impacts on related Ktunaxa rights, use and interests is provided.

Cultural-spiritual values

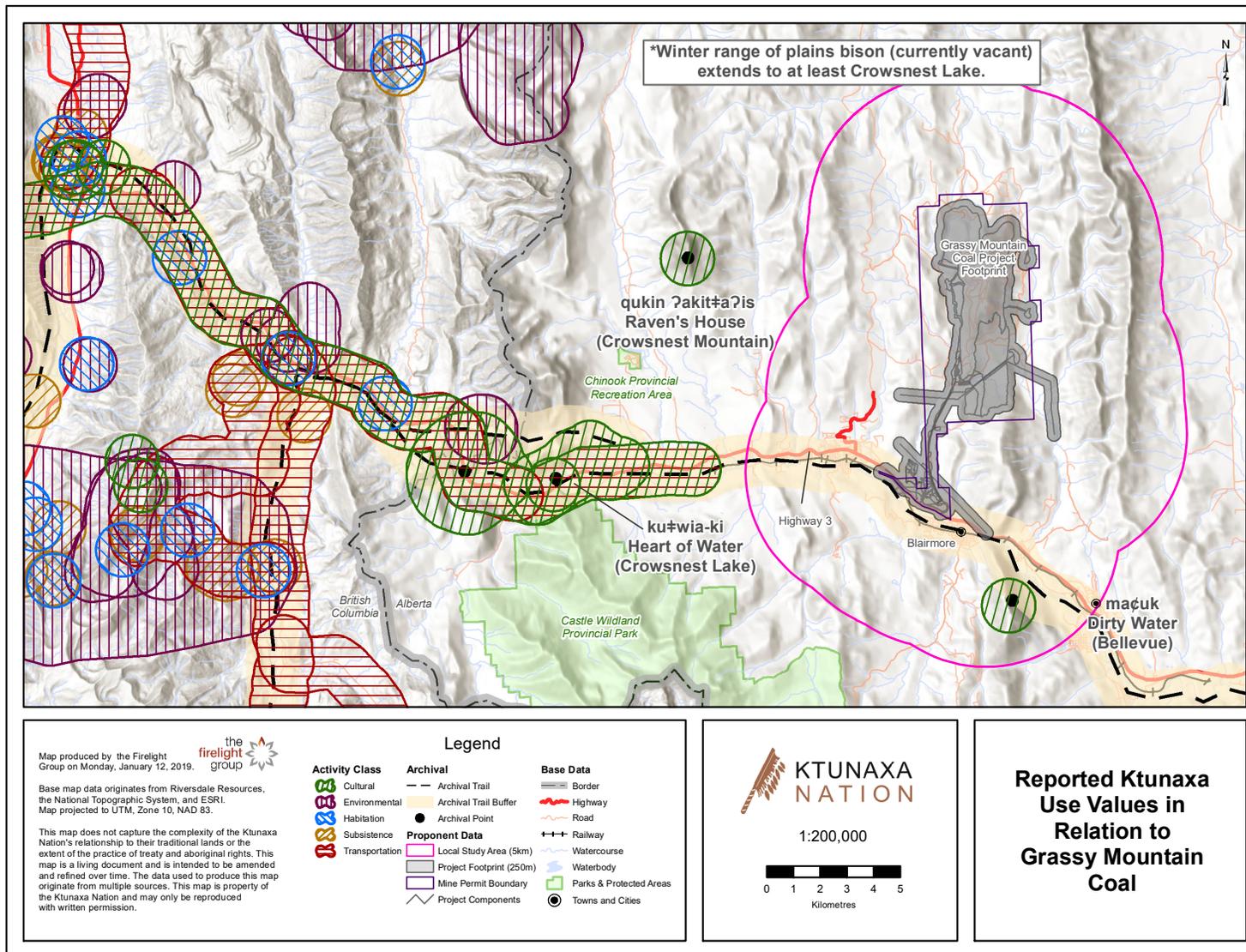
The Project area and adjacent areas, including Crowsnest Mountain, Crowsnest Pass, Crowsnest Lake, and the area of Frank, represent a deeply important cultural landscape for Ktunaxa citizens. The cultural landscape is associated with particular oral histories relating to bison hunting, relationships with Piikani and other groups, ancestral Ktunaxa villages east of the Rockies, Ktunaxa creation stories related to particular landforms and to the Frank slide, and areas connected to specific ceremonial practices, including an important Ktunaxa ceremonial location just east of Crowsnest Mountain. Documented values include Ktunaxa place names tied to key stories and landscape features, and teaching areas used to pass on Ktunaxa knowledge and history, including within the Project LSA and footprint in the area of Blairmore and Frank.

For Ktunaxa citizens, *qukin ʔakitʔaʔis* (Raven’s House or Crowsnest Mountain, spelled in Schaeffer as *Kokinakitteis*), and the headwaters area of Crowsnest River around *Kuʔwiaʔki* (Crowsnest Lake), are considered especially sensitive, sacred, and tied to Ktunaxa oral history. *qukin ʔakitʔaʔis* is considered the home of the creation being Raven, and is associated with oral histories of Ktunaxa chiefs from the area, as well as with specific ceremonial practices, and as a literal lookout to watch the movements of Blackfoot groups and buffalo in the Crowsnest Pass and the surrounding valleys.

A Ktunaxa elder from Tobacco Plains explained that the original translation resulting in the naming of the area as ‘Crowsnest’ was actually incorrect, and that the Ktunaxa place name should have been translated as “Raven’s House”:

¹¹ “In the context of an EA, “current use” refers to how the use of lands and resources may be affected throughout the proposed project’s lifecycle (pre-construction, construction, operation, decommissioning and abandonment)... “use” may refer to activities involving the harvest of resources, such as hunting, trapping, fishing, gathering of medicinal plants, berry picking, and travelling to engage in these or other kinds of activities. In addition, use may also refer to particular connections and uses of the lands and resources related to ceremonies, customs, cultural practices, traditional governance, trade or stories... Uses that may have ceased due to external factors should also be considered if they can reasonably be expected to resume once conditions change...The use of lands and resources by Aboriginal peoples may have tangible values (e.g., wildlife species or traditional plants) and/or intangible values (e.g., quiet enjoyment of the landscape or sites used for teachings). Intangible values are often linked with spiritual, artistic, aesthetic and educational elements that are often associated with the identity of Aboriginal groups... Traditional purposes typically relates to activities that are integral to a community’s way of life and culture, and have continuity with historic practices, customs and traditions of the community.” Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes (CEAA 2015: 4-6).

Figure 1. Site-Specific Ktunaxa Values in Relation to the Project



That's where his house [is]... Raven's house, yeah... You know they, whoever translated that, that was qukin, it wasn't crow. It was Raven... And he said Crow, so we're stuck with Crowsnest, crows. (T06 Mar 1 2018)¹²

As noted above, the Ktunaxa translation for *Ku#wia?ki* (Crowsnest Lake) is “Heart of the Water” (Schaeffer fieldnotes: 1932-33, 1966?). The location is associated with an important ceremonial area at the pass associated with water, and with specific cultural features in very close proximity to and currently impacted by the existing CP Rail line and the Crowsnest Highway. Fromhold's (2010) *Indian Place Names of the West* notes that the Stoney Nakoda place name for Crowsnest Lake, given as *kotenehew chango imne*, means “Kutenai Trail Lake”, and “Kutenai Trail” refers to Crowsnest Pass. For Ktunaxa, *Ku#wia?ki* is an extremely important and at-risk sacred and ceremonial place.

The town of Frank and Turtle Mountain, just southeast of the Project footprint, are also tied to important oral histories that relate to the disastrous consequences of mining and greed in *?amak?is Ktunaxa*, and the powerful and still active role that particular beings from Ktunaxa creation continue to play on the landscape.

Anticipated Project impacts on cultural-spiritual values:

- **Disturbance of Important Ktunaxa Cultural-spiritual Sites:** During a site visit to the Project site at Grassy Mountain, Ktunaxa knowledge holders and KNC staff identified the close proximity of the proposed mine to *qukin ?akit#a?is* (Crowsnest Mountain). The potential for negative changes to the viewscape and sensory environment (e.g., noise, smell, air quality) associated with direct (mine construction and operations) and incidental (e.g. rail traffic) Project activities are a primary concern for Ktunaxa current and future use, and stewardship of the values associated with *qukin ?akit#a?is*, *Ku#wia?ki*, and nearby areas associated with place-based cultural-spiritual practices. *Ku#wia?ki* is especially vulnerable to increased rail traffic related to the Project, but increased frequency of rail disturbance is likely to result in impacts to multiple sensitive areas within Ktunaxa territory. Due to deficiencies in the Proponent's assessment, additional assessment of increased sensory disturbance (viewscape, noise, sense of place) in the area of Crowsnest Pass, including increased frequency of rail related disruption as a result of the Project, is likely needed. Increased use of the rail route will impact access and sense of place for Ktunaxa citizens' at this important site. Maintaining a sensory environment around *qukin ?akit#a?is* and *Ku#wia?ki* that supports and sustains Ktunaxa citizens' current and future use and connection to these places is of high important.
- **Potential for Large Scale Slope Failure:** Given Ktunaxa oral histories and proximity of the Project to the Frank slide area, ground stability is a major concern for KNC due to historical precedent. It is unclear from the proponent's assessment if unique risk factors based on the area's history were included in slope stability analysis.

¹² The Ktunaxa translation of “Raven's House” also appears in Schaeffer's notes labelled “10/ 22/65 Ambrose Gravelle”, available at Glenbow Archives, M-1100-160.

Environmental features

The Project is located in the eastern foothills of the Rocky Mountains in an area valued by Ktunaxa citizens for clean freshwater sources, and wildlife habitat for culturally-important species such as bison, grizzly bear, mountain goat, sheep, elk, moose and wolverine which are critical to Ktunaxa harvesting, and Ktunaxa stewardship.

Anticipated Project impacts on Grizzly Bear, Bison and other Animals and Habitats

ʔa·kxamīs qāpi qapsin is a Ktunaxa concept meaning the root of all things and the relationship between all things including land, water, animals, Indigenous peoples and the air that we breathe. It is a living balance, is linked to Ktunaxa language and culture, and connects all things with the creator and with one another. Based on Ktunaxa use and knowledge of the Project area, the Project area and Crowsnest Pass contain a multitude of ecological values tied to cultural use and stewardship of the landscape by Ktunaxa including rutting areas for bighorn sheep, hunting areas for moose and elk, and values related to other plant and animal species of critical importance including whitebark pine, grizzly bear, mountain goat, and bison.¹³

- **Grizzly Bear:** The Ktunaxa relationship with grizzly bear in mountain areas is especially fundamental to Ktunaxa stewardship, as described in the Qat'muk Declaration (Ktunaxa Nation Council 2010b). The current application does not properly recognize likely Project effects on grizzly bear.
- **Bison:** It is unclear from the proponent's assessment if any consideration was given to understanding Project impacts on currently vacant bison habitat, including movement corridors, that are likely to become critical to bison, and Ktunaxa harvest of bison, once sufficient populations have been restored to the area.

Ktunaxa citizens consider the Project area as a place where bison were once abundant and harvested as a staple food by Ktunaxa ancestors up until the animal's industrial extirpation in the late 19th century under colonial pressure. Plains bison are critically important, both culturally and ecologically, to past and future practice of KNC rights in the Project area and eastern slopes of the Rockies. While bison are currently extirpated and habitat in the area of the Project is currently vacant, the return of plains bison and Ktunaxa harvest of bison in the Project area is planned and reasonably foreseeable. As a signatory to the *Buffalo Treaty*, the Ktunaxa Nation is committed to restoring bison to their former range. The Project is located in an area that is critically important for bison habitat suitability and capability, as well as the viability of future KNC and other indigenous harvest of bison in the Project area. Initial reintroduction of plains bison is occurring in National Park areas both north and south of the Project.

As a signatory to the Buffalo Treaty, the KNC wishes to ensure the Project provides a reasonable assessment of impacts on bison habitat suitability and capability, that it provides reliable habitat offsetting supportive of bison for the

¹³ The Proponent's project description (Millennium EMS Solutions Ltd. 2015) shows the occurrence of whitebark pine (at least 15 detections shown in figure 5.1-16) within the mine permit boundary and in the direct vicinity.

duration of Project impacts, and that end land use goals are clearly supportive of long term future habitat restoration for bison and Ktunaxa harvest in the area. KNC is concerned that the assessment currently fails to take into consideration potential effects (positive or negative) of the proposed Project on bison habitat and bison recovery, particularly in light of the proximity of reintroduced bison in the National Parks, the potential for range expansion into the Project area, and plans under the modern Buffalo Treaty, to which KNC is a signatory and accountable to partner nations. At minimum, the assessment should include Ktunaxa and other Indigenous knowledge expertise to consider: how bison range is likely to expand from national parks and other restoration areas; the potential of the Project area to support bison habitat and habitat connectivity; and opportunities available to offset Project related losses through targeted habitat recovery or protection. The proponent should also be required to identify a clear and reliable plan for inclusion of bison, Ktunaxa knowledge of bison, and Ktunaxa bison harvest within end land use goals for reclamation and restoration.

Project impacts to the success of bison restoration, and to grizzly bear and other species, are anticipated to include sensory disturbance, habitat loss and degradation (including contamination) and connectivity impacts including fragmentation within an important movement corridor.

Anticipated Project Impacts on Water:

Maintaining healthy water quality and avoiding mining or rail-related contamination (e.g., sulphate and selenium) is a primary Ktunaxa concern in relation to the Project and the Crowsnest River watershed. Mobilization of selenium into waterways from nearby surface coal mining is a known issue. High levels of selenium in the Elk River from adjacent coal mining (McDonald and Strosher 1998) have resulted in serious concerns for the health of westslope cutthroat trout and other species. Past Ktunaxa studies have shown that contamination and health concerns associated with upstream mining often result in a direct impact on Ktunaxa citizen's confidence in wild foods, and on Ktunaxa ability to confidently rely on preferred places and species. Increased impacts on water in the area are likely to result in impacts on Ktunaxa use, including use of camp and habitation areas adjacent to the Crowsnest River and its tributaries. Potential impacts on water quality in the vicinity of coal transport and rail routes are also a concern.

Anticipated Project impacts include mobilization of mining contaminants into adjacent waterways by airborne deposition, runoff from the mine site, and releases of treated wastewater into the environment. Based on the location of the Project, Blairmore Creek and Gold Creek drainages appear likely to receive impacts from upslope development of the Project. Both waterways flow into Crowsnest River.

Anticipated Project Impacts on Habitation Values

Ktunaxa habitation values in the Project area and Crowsnest Pass include a recent hunting camp west of Crowsnest Lake, as well as known historic camp locations at Crowsnest Lake, along the Crowsnest River, and east of Crowsnest Mountain. Based on known patterns of use elsewhere in ?amak?is Ktunaxa, Ktunaxa camps are particularly reliant on access and trail networks and water resources, with areas adjoining creeks, and especially confluence areas, being of high importance. Flanagan

(2001: 36-7) cites Ktunaxa oral history related to camping at the lakes in Crowsnest Pass, as well as archaeological evidence of camps in the pass area:

A Kutenai woman related to her granddaughter how buffalo once stampeded through a winter camp, knocked down the lodges, scattered the campers, and how some of the rampaging buffalo were killed on the ice of the little lake as they helplessly skidded and sprawled... A 1977 archaeological dig revealed evidences of use including tipi rings, hearths, and arrow points in the pass area. (p.36 and 37)

In the context of the proposed Project, the quality of water, and the presence of industrial disturbance are major factors influencing Ktunaxa use of camping areas. Ktunaxa plans for restoration of bison, and ultimately bison harvest, within the foreseeable future will also rely on the viability of camp areas that support future use.

Subsistence use

The KNC's existing use and occupancy information indicates that Ktunaxa citizens continue to exercise harvesting rights in the Crowsnest Pass and surrounding areas. The area west of the Project contains important fishing and hunting values, including harvest of cutthroat and rainbow trout, moose, and whitetail deer. Additional work is likely to confirm that similar uses extend east into the Project area. The Project footprint and surrounding area is known habitat for important traditional food plants and animals.

Historic use of Crowsnest Pass by Ktunaxa for bison hunting, and its ongoing importance as an area for bison restoration, is confirmed by Ktunaxa knowledge holders, ethnographic evidence, and the *Buffalo Treaty*. It is reasonably foreseeable that Ktunaxa and other indigenous harvest of bison, and related cultural practices (e.g. transmission of knowledge, resumed use of hunting camps), in the Project area will resume once conditions change as planned under the Bison treaty.

Anticipated Project impacts:

- Reduction of habitat for food animals and plants that support and sustain Ktunaxa harvesting rights.
- Loss of confidence in the quality of traditional foods due to contamination concerns associated with the Project.
- Increased sensory disturbance in key harvesting areas associated with activities and increased traffic at the Project site, as well as along the rail route through ?amak?is Ktunaxa, resulting in sense of place impacts, and avoidance of the areas by animals targeted by Ktunaxa harvesters.

Transportation values

Based on review of existing KNC use and occupancy information, and archival and ethnohistorical documents, several trails associated with Ktunaxa movement through the Rocky Mountains to and from the plains directly intersect the Project area, and areas to the north and south. These trails continue to be important values for the transmission of knowledge and connection to Ktunaxa ancestors and oral history in

Crowsnest Pass. The Project will interrupt use of road and trail based access through the Project area.

Summary of Anticipate Project Impacts on Ktunaxa Use, Rights and Interests within the LSA

Table 1: Anticipated Project Impacts on Ktunaxa Use, Rights and Interests

	Cultural-Spiritual	Environmental Features	Trails and Transportation	Habitation	Subsistence Use
Construction	Yes	Yes	Yes	Yes	Yes
Operation	Yes	Yes	Yes	Yes	Yes
Closure and Reclamation	Yes	Yes	Yes	Yes	Yes

Project Associated Increases in Rail Traffic in ?amak?is Ktunaxa

Anticipated impacts associated with increased use of the CP railway for the transport of coal, an activity which the Proponent describes as “incidental” in their project description (Millenium EMS Solutions Ltd. 2015: 18), is a major concern for KNC and Ktunaxa citizens. Numerous Ktunaxa values occur along the CP Railway’s route westward through ?amak?is Ktunaxa, and beyond the Crowsnest Pass, including areas and values critically important to the practice of rights, subsistence and cultural practices.

These values are already impacted, and additional use of the railway for coal transport will further reduce access, increase wildlife collisions and mortality, and reduce local abundance of food animals, and increase the risk of rail incident (e.g., derailment, spills). KNC’s understanding based on participation in regulatory processes involving CPR is that important pieces of CPR infrastructure, such as the Kootenay Landing Bridge near yaqan nu?kiy, are already at the end of their life span. This raises important questions that are not addressed in the Proponent’s assessment regarding the impact of the additional load on rail infrastructure both in the vicinity of the Project, as well as along the rail route to the coast through ?amak?is Ktunaxa.

Cumulative Effects

Based on past work in the Elk Valley, KNC has determined that cumulative effects on Ktunaxa rights and interests stemming from impacts to lands and waters within the Elk Valley drainage have already exceeded a threshold of significance, and that without substantial mitigations and other measures, adverse impacts from other projects in the region will act cumulatively to increase the magnitude and duration of significant effects. While assessment is preliminary, existing impacts on Ktunaxa practice of rights in the Crowsnest Pass area have also been significant. Based on available Ktunaxa information, Project effects on Ktunaxa use, rights, and interests in the Project area are

also adverse and are likely to extend the duration, magnitude and extent of existing significant impacts in the region, including impacts on cultural landscapes, water, bison, and other resources that are fundamental to Ktunaxa practice in the area.

Conclusion

The Proponent's current assessment that the Project would result in 'No' impact to Ktunaxa use and values (as indicated in table CEAA 2-10 located in Appendix A-2-45, Cumulative Effects Assessment to address CEA Agency IR#2, Feb. 27, 2018) is inaccurate based on the information documented in this technical report. The Proponent's assessment provides no criteria for characterization of Project effects on Indigenous VCs, including impacts on Aboriginal or Treaty rights, and impacts on Indigenous use of lands and resources. It is unclear how the Proponent concluded that the Project would result in 'No' impact to Ktunaxa use and values, however, their determination appears to be based on the exclusion of evidence based on a narrow and impoverished definition of "current use" of lands and resources and a limited understanding of good practice in assessing impacts on Aboriginal and Treaty rights.

The proposed Project is in an area of *ʔamakʔis* Ktunaxa with a deep history of Ktunaxa use and occupancy, and ongoing cultural-spiritual importance. While this memorandum is preliminary, based on available information and absent substantial precautionary mitigations, the Project is considered likely to result in significant adverse effects, including impacts on Ktunaxa traditional use and access to lands and resources, sensory experience and cultural connection to sacred areas nearby, impacts to ecological values including fisheries in the Crowsnest River and wildlife, and Ktunaxa stewardship commitments related to bison (ie. Buffalo Treaty) and *ʔa-kxamīs q̄api qapsin* (all living things).

References

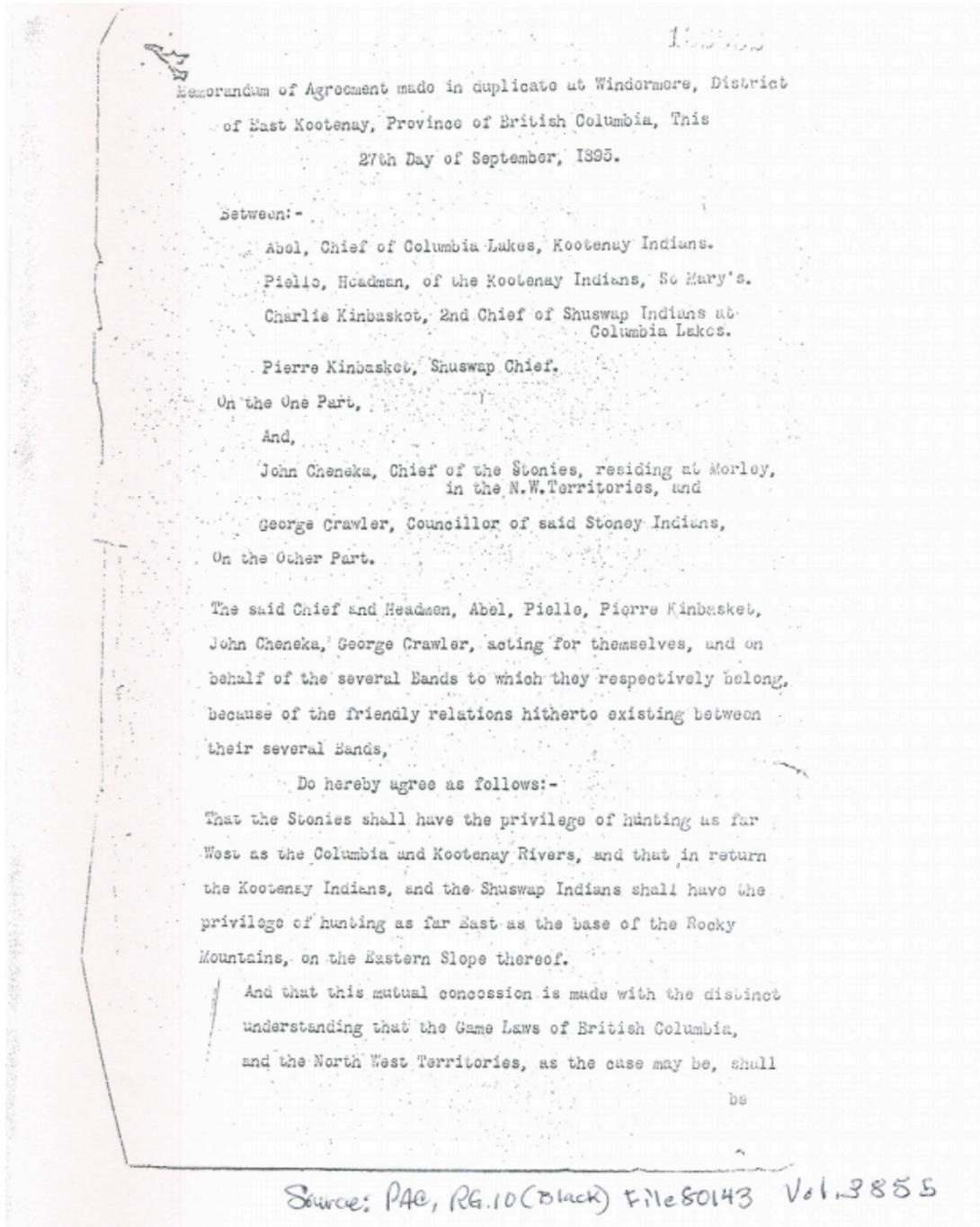
- Boas, F. and A.F. Chamberlain. 1918. *Kutenai Tales*. Smithsonian Institution Bulletin, Bureau of American Ethnology, Washington, DC. 387 pp.
- Canadian Environmental Assessment Agency. 2015. *Technical Guidance for Assessing the Current Use of Lands and Resources for Traditional Purposes under the Canadian Environmental Assessment Act, 2012*. Draft for public comment. https://www.canada.ca/content/dam/ceaa-acee/documents/policy-guidance/assessing-current-use-lands-resources-traditional-purposes/current_use_final_draft-eng.pdf.
- Chamberlain, A.F. 1892. *Report of the Kootenay Indians of South Eastern British Columbia*. British Association for the Advancement of Science, London.
- Curtis, E.S. 1911. *The Kutenai*. In Frederick W. Hodge (ed.), *North American Indians: Being a Series of Volumes Picturing and Describing the Indians of the United States and Alaska*, vol. 7. Plimpton Press. Norwood, MA (reprinted Johnson Reprint. 1970) pp. 117–155 and 167–179.
- DeRoy, Steven. 2012. *Using Geospatial and Network Analysis to Assess Accessibility to Core Homeland Areas of the Athabasca Chipewyan First Nation (ACFN) in the Context of Increasing Oil Sands Development*. Dissertation for Masters of Geographic Information Science, University College London.
- Flanagan, Darris. 2001. *Indian Trails of the Northern Rockies*. Stevensville, Montana: Stoneydale Press Publishing Company.
- Fromhold, Joachim. 2010. *2001 Indian Place Names of the West - Part 1 -*. Available at https://books.google.ca/books?id=ahvVAgAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Ktunaxa Nation Council. 2010a. *BCTC Columbia Valley Transmission CPCN Exhibit C7-4: Written Evidence of the Ktunaxa Nation Council*. The KNC's written submission for the application by BC Transmission Corporation for a certificate of public convenience and necessity for the Columbia Valley Transmission Project. https://www.bccuc.com/Documents/Proceedings/2010/DOC_25494_C7-4_KNC_Written-Evidence.pdf.
- Ktunaxa Nation Council. 2010b. *Qat'muk Declaration*. <http://www.ktunaxa.org/who-we-are/qatmuk-declaration/>.
- Ktunaxa Nation Council. 2015. "Ktunaxa Nation Background." Section C1.5 in *Ktunaxa Nation Rights and Interests for the Teck Baldy Ridge Extension Project Environmental Assessment Certificate Application*. Report prepared by the Firelight Group Research Cooperative with the Ktunaxa Lands and Resources and Teck Coal Limited. Available at <https://projects.eao.gov.bc.ca/p/baldy-ridge-extension/docs?folder=27>

- McDonald, Leslie E., and Mark M. Strosher. 1998. *Selenium Mobilization from Surface Coal Mining in the Elk River Basin, British Columbia: A Survey of Water, Sediment and Biota*. Cranbrook, BC: Pollution Prevention, Ministry of Environment, Lands and Parks.
http://a100.gov.bc.ca/appsdata/acat/documents/r12589/1seleniumelk_1205347116802_8e248a68ce5980fb2667bdb4930a251fb186e4d5b0b.pdf.
- Millenium EMS Solutions Ltd. 2015. *Grassy Mountain Coal Project Description*. Report prepared on behalf of Riversdale Resources Limited for the Canadian Environmental Assessment Agency. File #14-00201-01.
- Riversdale Resources. 2016. Grassy Mountain Coal Project - Updated Environmental Impact Assessment. EA report submitted to CEAA, August 12, 2016.
- Schaeffer, C.B. 1935-1937 [Ethnographic fieldnotes from Kutenai research]. Unpublished, on file with the Ktunaxa Nation Council Archives.
- Schaeffer, C.B. 1966. *Bear Ceremonialism of the Kutenai Indian*. Studies in Plains Anthropology and History No. 4. Browning, Mont. U.S. Dept of Interior, Indian Arts and Crafts Board.
- Schaeffer, C. E. 1982. Plains Kutenai: An Ethnological Evaluation. *Alberta History* 30 (4): 1-9.
- Teit, James A. 1930a. Traditions and Information Regarding the Tona'xa. *American Anthropologist* 32 (4): 625-32. <https://doi.org/10.1525/aa.1930.32.4.02a00040>.
- Teit, J. A. 1930b. *The Salishan Tribes of the Western Plateaus*. In Franz Boas (ed.), Forty-fifth Annual Report of the Bureau of American Ethnology. United States Government Printing Office, Washington, D.C. p. 23-396.
- Turney-High, H.H. 1941. *Ethnography of the Kutenai*. Memoirs of the American Anthropological Association No. 56. American Anthropological Association. Menasha, WI. 202 pp.
- Tobias, Terry N. 2009. *Living Proof: The Essential Data-Collection Guide for Indigenous Use-And-Occupancy Map Surveys*. Ecotrust Canada.
- Wissler, Clark. 1910. *Material Culture of the Blackfoot Indians*. Vol. 5. The Trustees.

Appendix 1

1895 Hunting Agreement Between the Ktunaxa, Kinbasket, and Stoney

The archival images below show the hunting agreement between the Ktunaxa, the Kinbasket and the Stonies, signed September 27, 1895:



be strictly observed, and that any infraction of the said Game Laws by the Stoney of British Columbia, or by the Kootenays or Shuswaps, in the North West Territories, shall be considered sufficient reason for withdrawing the concession above made, from the Band or Bands to which the Party, or Parties Transgressing belong.

In witness whereof the Parties to this Agreement have set their hands hereto, this Day and Year above written:-

Signed in the presence of,	his Abel. x Chief Columbia Lake, mark Kootenay Indians.
A.E. Forget, Asst Indian Comm'r.	his Pielle. x Headman, St Mary's Res. mark
R.L.T. Colbraith, Indian Agent, Kootenay.	his Charlie x Kinbasket. Second Chief, mark of Shuswap Indians.
George Golding, J.P.	his John x Cheneka. Chief Stoney mark Indians.
John McDougall, Missionary on Stoney Res.	his George x Crawler. A Stoney Indian. mark
	his Pierre x Kinbasket. Shuswap Chief. mark

I hereby certify that this Agreement, previous to its being signed, was carefully translated and explained to the Kootenays and Shuswaps Indians, by Lewis Stowekin, Official Interpreter at the Kootenay Agency, and by the Rev John McDougall, to the Stoney Indians.

sgd A.E. Forget.