



February 3, 2020

CPAWS Yukon  
506 Steele Street  
Whitehorse, Yukon  
Y1A 2C9

Attn: YESAB Executive Committee - Kudz Ze Kayah Project

Re: CPAWS comments on Draft Screening Report  
YESAB # 2017-0083

Dear Executive Committee,

The Canadian Parks and Wilderness Society (CPAWS) Yukon advocates for the territory's most valuable and priceless resource: our wilderness. Our mission is to conserve the land, water and wildlife of the Yukon for current and future generations. We want conservation to be a pillar in the Yukon so that our rich wildlife and diverse landscapes receive the protection they deserve.

CPAWS Yukon acknowledges that mining is an important economic activity in the Yukon. We also acknowledge that mining can profoundly reshape landscapes, reducing wildlife habitats already under threat from climate change and other human activities. Mining is also among the most energy-intensive industries and mining companies around the world are incorporating renewable energy sources into their operations and committing to carbon offsetting<sup>1</sup>.

In northern Canada, taxpayers have been responsible for billions of dollars in mining remediation costs, for example at the Giant mine near Yellowknife and the Faro mine in the Yukon. The Wolverine mine, 25 kilometers to the east of the proposed Kudz Ze Kayah project, has cost the Government of Yukon nearly \$5.6 million over four short years in care and maintenance. We need to learn from these past lessons to manage mining projects more responsibly and sustainably in ways that avert damage to our environment, safeguard people, plants and animals, water and land, and not preclude our territorial, national and international commitments to climate and biodiversity targets.

---

<sup>1</sup> Umar, A. (2019) Going green: renewable energy projects at mines around the world. URL: <https://www.mining-technology.com/features/going-green-renewable-energy-projects-at-mines-around-the-world/>

CPAWS Yukon's position is aligned with the international best practice standard for impact management, namely **the mitigation hierarchy**. The mitigation hierarchy is an established four-step framework used to limit the negative impacts of development projects, in this case, a mining project's impacts on Yukon wilderness and wildlife, and First Nation non-industrial land interests and uses. Steps 1 through 3 are Avoid, Minimise, and Restore, and are intended to reduce residual impacts. Step 4: Offsets, are a last resort to manage any residual significant impacts. CPAWS Yukon advocates for prioritizing the first stage of the mitigation hierarchy. **Impact avoidance** is the most effective way of managing harm to ecosystems, their function and services<sup>2</sup>.

In light of this position, CPAWS has the following comments on the above referenced Draft Screening Report for the Kudz Ze Kayah Project (YESAB #2017-0083), a copper, lead, zinc, gold and silver project located 115 km south of Ross River in the northern Pelly Mountains in south-central Yukon.

1. What we value in the proposed project area.

**Wild species.** The Kudz Ze Kayah area in the Pelly Mountain foothills has had **very little species inventory work** done although wide-ranging taxa such as bees, birds, bats and bears occur there (pers. comm., Bruce Bennett, Jan. 30, 2020). While it may not be an area with a high likelihood of rare species, **cumulative impacts on common and generalist taxa should not be overlooked**.

A species of special concern in the project area is the **northern mountain woodland caribou** (*Rangifer tarandus*).

**Watersheds and waterways** of ecological and traditional value characterize the greater project area. We note that the Draft Screening Report acknowledges that the surface water at Fault Creek is a drinking water source for Kaska citizens, that headwater streams including Geona Creek hold important value within the traditional territories, and that waterways in the Finlayson watershed have been historically important for citizens of Liard First Nation<sup>3</sup>.

2. How might these values be affected or impacted by the proposed project and why?

**Impacts to common wild species.** Wildlife such as beavers, moose and bears are expected to be impacted as mining often displaces wild species which tend to avoid human activities, infrastructure, and noise.

**Impacts to the Finlayson caribou herd.** The Finlayson caribou herd is a northern mountain caribou, assessed as "special concern" by the Committee on the Status of Endangered Wildlife in Canada. The Finlayson herd has declined over the past 40 years, prompting the Government of

---

<sup>2</sup> Phalan, B., Hayes, G., Brooks, S., Marsh, D., Howard, P., Costelloe, B., . . . Whitaker, S. (2018). Avoiding impacts on biodiversity through strengthening the first stage of the mitigation hierarchy. *Oryx*, 52(2), 316-324. doi:10.1017/S0030605316001034. URL:

<https://pdfs.semanticscholar.org/334b/926b98f0aa0a2aed937128ff1d28e4ae28c9.pdf>

<sup>3</sup> Icceton, G. (2019). Kudz Ze Kayah Mine Project: Independent Study of Liard First Nation Land Use. Prepared for BMC Minerals (No. 1) Ltd.

Yukon to exclude the herd from permitted hunting in 2018. Caribou are sensitive to any form of human development and it can be assumed that this herd is no different and that effects from mining development would be adverse. In spite of the overall vulnerability of the Finlayson caribou herd, YESAB's Executive Committee has concluded that the Kudz Ze Kayah project poses no significant impacts to the herd.

CPAWS Yukon is concerned that the cumulative impacts of climate change, industrial development, road traffic<sup>4</sup>, increased human access, harvest and predation could foreseeably pose significant threats to the health and survival of the Finlayson herd. Activities associated with the Kudz Ze Kayah Project are set to span 38 years: over four caribou generations based on the 9 year generation time of northern mountain caribou<sup>5</sup>.

The range of the Finlayson caribou herd spans areas of high mineral interest. Activities at the Wolverine and Selwyn Chihong mine sites, continued exploration and staking, and the potential for new mine proposals could substantially increase the industrial footprint within this herd's range.

The cumulative impacts of predation, progressive piecemeal development, and other anthropogenic changes are driving some caribou herds, farther south in Canada, towards extinction. Southern mountain caribou, central mountain caribou and boreal caribou herds in parts of British Columbia and Alberta have sharply declined over recent decades. The South Selkirk and South Purcell herds are functionally extinct. If current trends continue, all boreal caribou herds in Alberta are projected to fall below ten animals by the middle of the century<sup>6</sup>.

Human development within the Finlayson caribou range must remain within acceptable thresholds. Unfortunately, no management plan has been completed for the Finlayson herd. The lack of a plan limits the ability of YESAB to make an informed assessment of the Kudz Ze Kayah Project against the conservation priorities of the Finlayson herd. Therefore, the **completion of a management plan for the Finlayson caribou herd should be a condition precedent to the further consideration of the Kudz Ze Kayah project.**

**Impacts to rare landforms.** With regards to the upgrading of the road and extending of the airstrip, we note that the Draft Screening Report lacks information on where materials will be sourced for the construction of these upgrades. Our concern is that materials not be sourced from rare or sensitive landforms such as eskers<sup>7</sup>, or other landforms of importance to and used by

---

<sup>4</sup> Rosen, Y. (2016). Why don't the caribou cross the road? Alaska Dispatch News. Eye on the Arctic. Friday, February 5, 2016. URL:

<https://www.rcinet.ca/eye-on-the-arctic/2016/02/05/why-dont-the-caribou-cross-the-road/>

<sup>5</sup> COSEWIC. (2014). COSEWIC assessment and status report on the Caribou Rangifer tarandus, Northern Mountain population, Central Mountain population and Southern Mountain population in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxii + 113 pp. ([www.registrelep-sararegistry.gc.ca/default\\_e.cfm](http://www.registrelep-sararegistry.gc.ca/default_e.cfm)).

<sup>6</sup> Schneider, R.R., Hauer, G., & Boutin, S. (2010). Triage for conserving populations of threatened species: the case of woodland caribou in Alberta. *Biological Conservation*, 143(7), 1603-1611.

<sup>7</sup> Williston, P., Bartemucci, P., Pojar, J. (2004). Eskers and Outwash Plains: Skeins of Connectivity in the Liard Basin.

people, past and present, and by wildlife, as trails, camp and den sites, landmarks, or archaeologically significant sites.

**Water.** We note that the Executive Committee, “has determined that the Project will result in significant adverse effects to water quality during closure due to intermittent failures to meet water quality objectives in the Geona and Finlayson Creek drainage” and that “Uncertainty regarding the potential magnitude of impacts to water quality further warrant the implementation of monitoring efforts to minimize risks of the Project.”

### 3. What suggestions do we have for how these effects could be avoided and minimised?

We strongly advise that this and other mining project proposals in the Yukon adopt the mitigation hierarchy framework to avoid and limit negative impacts, and enhance positive impacts.

We suggest that inventory work be carried out by relevant authorities from YG in conjunction with Kaska citizens to help fill current gaps. Such inventories would ideally go beyond large mammals such as bears, furbearers such as wolves, and other vertebrate taxa such as birds and extend to and **include plants and insects**. We cannot properly assess losses if we lack baseline data on too often overlooked taxonomic groups.

In addition, cumulative impacts on common species would ideally be duly monitored including their use or avoidance of the project area, encompassing not only the immediate mine site but also the proposed “upgraded all-season” access road, where the road meets the Robert Campbell highway, and the Finlayson Lake airstrip (which we note will be extended). Changes to wildlife movement or activity patterns within the project area—including the road, highway, and airstrip, and within a predetermined but adaptive radius of these—should be well-documented as part of the proponent’s “avoid and minimise” plan.

We commend the recommendation that bear denning be monitored by Ross River Dene Council land stewards and a Yukon Government conservation officer “within a 5 km radius of the Project footprint”. We will follow with interest how any measures, determined to “prevent bears from denning too close to the pit” (p. 22), square with “giving wildlife the right-of-way” (p. 23), and how the impact radius will be determined for taxa other than bears.

We commend the plan for a bird inventory and the plan for a survey program to monitor the area’s caribou. However, as said above, the project should be conditional on the completion of a management plan for the Finlayson caribou herd. Further, to avoid and minimise effects on the caribou, mining activities should be limited or altogether halted when the Finlayson herd is using or moving through the area, if the project is permitted to proceed.

We note that beaver dams have been cited as a possible cause for differences in water quality between the 1990s and 2015-2018. Given the association of beaver activity with the formation of local lentic environments and fish habitats, and their effects on water quality, we suggest that beaver activity in the area be monitored as part of the plan to “avoid and mitigate harmful impacts to fish and fish habitat” and because beavers play pivotal roles in the health of streams and

wetlands<sup>8</sup>. Understanding how the ecosystem downstream from beaver dams may change because of proposed project activities requires a careful monitoring strategy.

Any “habitat creation” should be adaptive and reflect the company’s commitment to proper mitigation. For example, if the “approximately two hectares of fish habitat compensation ponds to be created during construction phase of the project and to serve as mitigation for waterfowl” are deemed inadequate, the company should be responsible for additional mitigation. Any offsetting<sup>9</sup> should have measurable net gain (in e.g. hectares of habitat), be weighed against a target-based approach<sup>10</sup>, and adhere to a reasonable timeline determined in consultation with Kaska citizens, government and non-government conservation scientists.

Last but not least, we urge that **the proponent demonstrate their recognition of the Yukon’s declared climate emergency** by incorporating renewable energy sources (i.e. diesel power plants should no longer suffice) and carbon offsetting into operations and committing to transparent monitoring of greenhouse gas emissions<sup>11</sup> for the duration of the project. We are concerned that the Draft Screening Report makes virtually no mention of climate change mitigation.

#### 4. What we base our concerns on.

We draw on our collective experience, media reports and research referenced in this letter, and personal communication with relevant experts.

Sincerely,

Dr. Katarzyna Nowak, Conservation Science Coordinator  
Malkolm Boothroyd, Campaigns Coordinator  
CPAWS Yukon

Emails: [knowak@cpawsyukon.org](mailto:knowak@cpawsyukon.org); [mboothroyd@cpawsyukon.org](mailto:mboothroyd@cpawsyukon.org)

Tel: 867-393-8080 ext. 7 and ext. 3 respectively

---

<sup>8</sup> Charnley, S. (2018). Beavers, landowners, and watershed restoration: experimenting with beaver dam analogues in the Scott River basin, California. Res. Pap. PNW-RP-613. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 38 p. URL: [https://www.fs.fed.us/pnw/pubs/pnw\\_rp613.pdf](https://www.fs.fed.us/pnw/pubs/pnw_rp613.pdf)

<sup>9</sup> E.g. "The preliminary FOP describes measures that will be implemented to avoid and mitigate harmful impacts to fish and fish habitat. Residual impacts (impacts that are not avoided or mitigated) are then addressed by offsetting." P. 78 of the Draft Screening Report

<sup>10</sup> Simmonds, J.S. et al. (2019). Moving from biodiversity offsets to a target-based approach for ecological compensation. *Conservation Letters* URL: <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12695>

<sup>11</sup> Silver, S. (2019). Minister Pauline Frost's mandate letter 2019. URL: [https://yukon.ca/sites/yukon.ca/files/eco/eco-mandate-pauline-frost\\_1.pdf](https://yukon.ca/sites/yukon.ca/files/eco/eco-mandate-pauline-frost_1.pdf)