

Tenas Coal Project – Caribou Sub-Working Group Meeting
Thursday, March 21, 2019 from 11:00 am – 3:00 pm
Nora Building, 1st Floor Bat Cave, 3726 Alfred Street, Smithers and
Online Meeting/Teleconference (1-888-952-9304, 439795#)

Meeting Summary

Meeting Participants

Indigenous Nations

- Walter Joseph, Office of the Wet'suwet'en

Provincial Government

- Terry Pratt, Environmental Assessment Office (EAO)
- Matt Rodgers (EAO)
- Anita Threlfall (EAO) – by phone
- Heather Wiebe, Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRORD)
- Chris Schell, FLNRORD
- Sean LeRoy, Ministry of Energy, Mines, and Petroleum Resources (EMPR) – by phone
- Liz Freyman, Ministry of Environment and Climate Change Strategy (ENV) - by phone

Federal Government

- Stephen Sheehan, Environment and Climate Change Canada (ECCC) – by phone
- Kathleen Belton, ECCC – by phone
- Kimberly Dohms, ECCC - by phone

Proponent and Consultants

- Angela Waterman, Telkwa Coal Limited (TCL)
- Kirsten Roberts, TCL
- Laurence Turney, TCL Consultant
- Sean Sharpe, TCL Consultant
- Todd Mahon, TCL Consultant (EDI) - by phone
- Megan MacCallum, TCL - by phone

Meeting Objectives

- For Telkwa Coal Limited (TCL) to provide an overview of the potential interactions between the proposed Tenas Coal project and the Telkwa caribou herd (TCH);
- To initiate a dialogue on caribou issues and cumulative effects with respect to the proposed Tenas Coal project;
- To provide an overview of the respective roles and perspectives of Working Group agencies regarding assessment of potential effects, including cumulative effects, on caribou; and
- To discuss initial Working Group issues and concerns, including potential needs for field work, data sets, and/or analyses required in the draft Application Information Requirements (AIR).

Welcome/ Introductions/ Agenda Review

- The EAO opened the meeting by acknowledging being on the Gitdumden Clan territory of the Wet'suwet'en people. It was followed by round of introductions of Working Group members in the room and those calling in.
- The agenda was reviewed and approved with the addition of federal and provincial jurisdictional roles and responsibilities following the lunch break.

Overview of caribou VC, studies/findings from Baseline Report, and potential interactions of Tenas Coal project with the TCH

TCL gave an overview of the caribou VC, and studies and findings from Baseline Report

- A small southeast portion of the Tenas mine pit is on the edge of the TCH core Wildlife Habitat Area (WHA 6-333). It was noted that the WHA substantially overlaps with an extension of the

ECCC critical habitat area map from the 2014 Recovery Strategy. Core mapping within the WHA is constrained by timber harvesting areas – had to avoid these areas to meet the targets. Tenas mine pit components are on the edge of core habitat area of WHA.

- Recent studies indicate the need to consider the status of the TCH, natural factor effects and anthropogenic factor effects to the herd. These factors help identify potential interactions between the proposed project and the TCH, cumulative effects on the TCH, and mitigation strategies to reduce effects of land use activities on the TCH.
- Historic TCH information collected by the Province includes 50 years of population surveys, telemetry studies (estimated range), seasonal migration, and mortality (population crashed in 1970s mainly due to helicopter hunting).
- TCL's caribou baseline information includes Predictive Ecosystem Mapping (PEM) and Terrestrial Ecosystem Mapping (TEM), caribou ratings by Provincial and Contract biologists, ground-based lichen surveys, and Resource Selection Function (RSF) models (telemetry-based habitat modelling).
 - TCL noted that TEM habitat mapping was done in the 90s needs to be updated. PEM was done around 2010 (most recent) and also needs to be updated to reflect more recent cut block info and other anthropogenic disturbances.
- Provincial TCH management includes population augmentation, Provincial TCH Recovery plan, and WHA designation.
- Federal TCH management includes Southern Mountain National Ecological Area (SMNEA) Recovery Strategy (2014) and critical habitat designation under the federal Species at Risk Act (SARA).
- TCL noted the following key factors limiting the recovery of the TCH:
 1. Mortality from predation. Mid-1990s predation was mainly by bears, wolverine, and golden-eagle. Presently predation mainly by wolves. The hypothesis is that predation is elevated due to apparent competition and facilitated predation directly related to cut blocks – per Debbie Cichowski's 2014 report. Mortality has the highest severity of indirect impacts.
 - After reviewing the draft meeting notes ECCC provided the following additional comment on April 30, 2019: *Mortality has been a result of predator access via anthropogenic and other disturbance. It is a result of habitat alteration, so it could be seen as an "indirect" impact vs. "direct" impact from disturbance itself.*
 2. Habitat alteration (primarily from forestry) – loss of lichen associated with mature forest, increased seral vegetation and associated vertebrate communities, and increased predator access. Habitat alteration has a moderate level of severity of impacts.
 3. Range movement (contraction) – from human development in the Bulkley Valley. Loss of historic range, less movement between the groups and contraction into small pockets. Range movement has lowest level of severity of impacts.
 - After reviewing the draft meeting notes ECCC provided the following additional comment on April 30, 2019: *Range contraction is potentially very serious, particularly if animals are being forced out of areas by disturbance that they are currently using effectively in a highly disturbed landscape. Recovery would hope to see stabilization of populations and range expansion, thus ECCC considers range movement to have a higher level of severity on recovery of the TCH.*

4. Temporal food availability - lichens grow slowly and are located in specific areas. Under certain weather conditions some forage areas may be unavailable (e.g. ice on alpine terrestrial lichens) and caribou need to move to find alternative food. In the past, when caribou populations were larger, and the landscape contained fewer anthropogenic disturbances that affect movement, herds may have had better opportunities to move to alternative forage areas, which may have contributed to inter-herd movements, dispersal and breeding.
 5. Disturbance from recreation activity, notably snowmobile activity in the Telkwa range, could displace caribou from high quality habitats and seasonal movements, reduce habitat quality (pack snow), cause stress, elevate energetic expenditures, and contribute to facilitated predation. The severity of these effects is poorly understood but is estimated to be moderate relative to other effects.
 6. Climate change and increased traffic: increased frequency of icing from more roads causes freeze/thaw action resulting in predator migration to higher elevation caribou habitats. Recreationists in caribou habitat cause stress and behavioural changes. Climate change affects terrestrial lichen availability, forcing caribou down to lower elevations, which increases predation and risk. Climate change and increased traffic have an unknown level of severity
- TCL noted that the actual levels of severity will be assessed in cumulative effects analysis during the EA.
 - A discussion followed around what is defined as federal matrix critical habitat. Species Account and Habitat Suitability Model has been developed using TEM/PEM that could be used to predict effects to caribou habitats (based on WHA).
 - TCL noted that they are not seeing terrestrial lichen habitat in the project area and the local project area isn't one of the frequently used calving areas but may still be used for calving.

TCL outlined potential interactions between the proposed Tenas Coal project and the TCH

- TCL has conducted a preliminary scoping exercise and has determined the following potential interactions:
 1. Mortality (direct and indirect): the proposed project could produce conditions that are suboptimal for competition and facilitated predation; also, the project footprint would be small relative to TCH range and existing land use activities.
 2. Habitat alteration (loss of lichen forage or seasonal security) – there is a small project footprint relative to available habitat and the project would occur mostly in low quality habitat (i.e. low lichen areas) outside of sensitive seasonal ranges.
 3. Movements/range use (restriction or change of range or movement corridors) – proposed project is located on northern edge of TCH's range, outside of key seasonal areas and does not intersect known or likely movement paths.
 4. Disturbance (stress/behaviour): preliminary and will go through a formal effects' assessment. Caribou sub-Working Group formed to ensure assessment is conducted correctly;
- As noted above, TCL will assess these interactions in detail as part of the formal Effects Assessment. The purpose of this discussion was to scope the relative degree of interaction of the different factors and get feedback from the sub-Working Group about whether anyone thought other interactions could occur.

- TCL's goal is to improve overall management of TCH, which would be defined, identified and presented through the mitigation and management strategies within the Environmental Assessment. One example of potential offsetting is the potential deactivation of roads.

Questions and discussion on caribou VC and TCH baseline information

- A question was raised about the most recent sighting of caribou in the area. It was noted that collared work from the 90s showed a number of hits in the area.
- A discussion around Local Population Units (LPU) boundaries followed. Differences were noted in mapping between a broad LPU created by BC in 1998 and last updated in 2008 and what was considered critical habitat within the WHA and the ECCC boundaries. The original LPU boundaries were primarily based a very broad outline at the provincial level and not habitat-based information. It was also noted that the WHA boundaries established were based on a consensus and not solely on existing collar location or habitat use information available at the time. There are important discussions ongoing between BC and the Federal government around LPU boundaries and mapping of critical habitat. ECCC is of the view that cumulative effects should be analysed at the scale of the LPU.
- The Working Group asked TCL how far back the historical data will go for baseline work.
 - TCL is looking at available inventory data from the late '70s onwards with context from the Wet'suwet'en to incorporate into baseline information.
 - It was noted that the bigger the assessment study area, the lower the potential impacts will be. Assessment information should be relative to current conditions so a landscape of 100 animals is not that far off to what exists today.
 - It was recommended that TCL set up assessment study boundaries based on populations from 10 years or so before the current decline.
- Office of the Wet'suwet'en will be asking the Wet'suwet'en Clans for their perspectives on caribou management and historical populations and habitat.
- It was noted that a collaring exercise took place three weeks ago and the current population of the TCH is estimated at approximately 22. The 2019 survey will occur next week following which there will be a more accurate estimate of the TCH population.
- Other factors affecting the herd beyond what has been identified that need to be considered in the cumulative effects assessment of the environmental assessment (EA) include mineral explorations in the alpine and a potential Coastal GasLink pipeline coming through.
- A discussion around potential effects of climate change on the TCH followed. Freeze/thaw effect is due to climate change and is affecting lichen growth. It was noted that climate change is also changing the timing of blackfly season. The onset is early for some species, which can correspond with the calving season and weaken young caribou.

Respective Roles and Perspectives of Working Group Agencies

- A discussion around the draft Section 11 Agreement between Canada and B.C. and the draft Partnership Agreement between Canada, B.C., West Moberly and Saulteau First Nations followed.
 - The two draft documents are available online and are open for feedback and comment until April 26, 2019. Engagement sessions, including Town Halls, will be taking place across BC.

- o \$50 million from BC is going into these initiatives. Canada has conducted an imminent threat analysis. Important time for BC and Feds to collaboratively get together and move towards implementation. This is the time when we want to see changes on the landscape.
- o The draft Partnership Agreement is for the central group (Omineca region to the Mackenzie TSA). The goal is to stabilize caribou populations, sustaining populations, getting to a place where there will be a First Nations traditional hunt. The Partnership Agreement covers high elevation and low elevation habitat and addresses forestry operations.
- o The draft Section 11 Agreement covers all Southern Mountain caribou in BC. It is a bilateral conservation agreement between BC and Canada, an option within the Federal *Species at Risk Act* that demonstrates partnership and moving ahead collaboratively. Discussions around the Section 11 Agreement will lead into herd planning (looking at local herd, current status trends and situations, and possible recovery strategies).
- o It was noted that the Section 11 Agreement between Canada and B.C. is more relevant to the TCH than the Partnership Agreement. Herd planning gets down to details, formulating the recovery planning together and then on to implementation.
- o Concerns were raised around communication and outreach around the two documents with local trappers. Some trappers are concerned that they won't be able to use their traplines anymore. It was noted that going forward there will be engagement on the two draft documents with all stakeholders, including local trappers.

General Questions and Discussion

- A discussion around the TCH maps and study area boundaries that TCL will be using followed.
 - o TCL indicated that they would use an ecosystem-based map for caribou habitat suitability ratings and for a general overview of TCH caribou habitat, TCL would use an ECCC map.
 - After reviewing the draft meeting notes ECCC provided the following additional comment on April 30, 2019: *ECCC mapping is done based on a recovery framework and thus, this habitat would be that which is required to achieve a recovery scenario, taking into account historical, current, and future use cases.*
 - o It was noted that as a first step, it would be best to determine the regional study area (RSA), recognizing the size of the assessment area and the level/quality of data available to support the ultimate evaluation conducted. TCL noted that if the federal critical habitat layer is an important piece of information to consider in determining the extent of the RSA A larger RSA cannot be used if data is not there to support it.
 - o There was general appreciation shown about having study area boundary conversations early in the EA process.
 - o TCL noted that in general, the area around the proposed Tenas Coal mine pit to the west has the least amount of disturbance to TCH habitat and to the north, south, or east has more disturbance.
- Additional concerns were raised around the LPU boundary. There is a need to have federal and provincial representatives sit down with the current LPU mapping to refine the boundary to better reflect the TCH's current and historical range.
- A concern was raised that initial caribou recovery plans protected entire mountains, but that dropped to protection of mountain tops only. A clear objective is required to work toward serious recovery of caribou rather than maintaining a few. It was noted that the end goal is not just to maintain caribou, but to ensure minimum viable populations.

- It was suggested that habitat management, including habitat offsetting in the short term, is the best approach to grow current TCH populations. Offsetting involves recovering other disturbed habitat with the aim of reducing predation risks.
- The Working Group noted that the recreational closure in the WHA under the *Wildlife Act* has not been very successful and there has been minimal compliance. Managing the recreational side of things is important for TCH recovery.
- It was noted that the WHA does not meet federal guidelines toward the protection of caribou habitat.
- A concern was raised around potential impacts from other companies and their exploration drilling in the WHA.

Overview of Action Items and Next Steps

- TCL to prepare local and regional study area boundaries based on feedback from ECCC and FLNRORD.
- ECCC to meet with provincial counterparts to discuss the LPU boundary and critical habitat mapping, then provide the latest version of the critical habitat mapping of TCH.
- FLNRORD to provide latest caribou location and use data, as well as mortality rate data report to the EAO for sharing with TCL.

End of meeting (~2:00 pm)