

Tenas Project Environmental Assessment Caribou Technical Advisory Sub-Committee Meeting

June 10, 2025, 9 am to 12 pm (PST), MS Teams Meeting

Meeting Objectives:

- For Telkwa Mining Limited (TML) to present an overview of the Caribou Information Request (IR) Response
- For Caribou Subcommittee members to ask questions regarding the Caribou IR response and the IR review process

Agenda:

Item	Description	Item Lead	Time	Duration
1	- Meeting Opening and welcome - Agenda overview - Introduction of EAO and TML team members	EAO	9:00- 9:10 am	10 mins
2	Tenas Coal Project Schedule Update and IR Response review guidance including: - Tenas Project Recap - Schedule Update - Guidance for review of Caribou IR response - Next steps	EAO	9:10- 9:20 am	10 min
TML Caribou IR Response Presentation				
3	Vision	TML	9:20 – 9:40 am	20 min
4	Effects Assessment	TML	9:40 – 10:10 am	30 min
5	Mitigation Hierarchy	TML	10:10 – 10:30 am	20 min
	Break	ALL	10:30 – 10:40 am	10 mins
6	Acoustic Modelling	TML	10:40 – 10:50 am	10 min
7	Recreational Access	TML	10:50 – 11:10 am	20 min
8	Q&A and Discussion	ALL	11:10 – 11:55 am	45 min
9	Closing & Next steps	EAO	11:55 – 12:00pm	5 mins

Meeting Participants:**BC Environmental Assessment Office (EAO)**

Matt Scarr
Stasia Ferbey
Elise Matzanke

Telkwa Mining Ltd. (TML)

Jessy Chaplin
Dan Farmer
Korina Houghton (EDI Environmental Dynamics)
Cathy MacKay (EDI Environmental Dynamics)
Steve Wilson (Ecologic Research)

Wet'suwet'en First Nation

Rick Krehbiel

Witset First Nation

Brad Densmore

Office of the Wet'suwet'en

Mary Kelly (Firelight)

Skin Tyee First Nation

Jorge Rios
Chelsea Brenton (Senior Anthropologist at Sipu to Stalo Consulting)

BC Ministry of Water, Land and Resource Stewardship (WLRS)

Doug Wiggill
Kindra Maricle

Environment and Climate Change Canada (ECCC)

Kelsey Lee
Lucy Reiss
Robin Steenweg
Rachel Canham

Meeting Notes:

EAO recap of the Tenas EA process and timelines

- TML's draft responses to fish and fish habitat, Section 25 matters, and water IRs will be submitted for review and comment over the summer.
- The draft Caribou IR response is currently with the Caribou Technical Advisory Sub-committee for review and response by June 25, 2025.

TML's Presentation on the Caribou IR Response

- TML provided background and context for the draft Caribou IR response to clarify what material has already been reviewed. All of the previous information is available on [EPIC](#) and the EAO's Tenas Project SharePoint site.
- The Caribou IR is a response to comments received during Application Review thus far and represents the fourth round of comments. ECCC, WLRS, and First Nations have provided significant comments for TML to address and the majority of these have been successfully responded to and closed.
- TML provided a presentation on TML's responses to the EAO's Caribou IR including the assessment of effects on caribou with modified buffers and habitat, mitigation hierarchy, acoustic modelling, and recreation access to address the remaining comments.

Project Area in relation to Caribou habitats:

- **WLRS**
 - o WLRS disagrees that caribou are using only high elevation habitat. Collar data (from 2021 – 2025) shows that the caribou are using the lower elevation habitat.
 - o As the population grows, we will likely be seeing them use more of the lower elevation habitat too.
 - o Recently collared a young, immature bull, and are looking forward to seeing the data to understand its use patterns.
 - o With this current data, it is difficult to go on the assumption that caribou are only using high elevation.
 - o *TML Response:* It does not affect what TML is presenting in the IR response because low elevation habitat in the effects assessment is now treated as if it were occupied and used by Caribou. This represents a shift from the previous EA Application responses and methodology. TML understands the sensitivity of this issue as pointed out by WLRS and ECCS in 2021 / 2022 and First Nations in 2025. TML stated it will incorporate updated telemetry data into their work.
 - o *WLRS added* that there is evidence of calving (one calf) in the lower elevation habitat. ECCC noted that Telkwa caribou are geographically close to Tweedsmuir caribou and Tweedsmuir typically use lower elevation, so this pattern makes sense.
 - o TML's assessment concurs with the scientific consensus that low-elevation Telkwa habitat is currently very hostile to caribou because of abundant moose and wolves and the recovery of caribou will require substantial land use changes and perhaps ongoing predator-prey management to establish favourable conditions consistent with a self-sustaining caribou population. These actions will need to be implemented by regulatory agencies over a much larger area than the Project and will need to persist for much longer duration than the expected timeline of the Project.
 - o **Action: TML to follow up with WLRS to acquire the most recent telemetry data for caribou and will update reporting as necessary.**
- **WLRS**

- Did TML receive this information about the Traditional Knowledge Caribou Route information presented from a First Nation?
- *TML response:* Yes, OW directed TML to a University of Calgary Master's degree study that was based on Indigenous Knowledge and Use which is where this specific information came from.
- **Action: TML to share this study with WLRS and other sub-committee members.**

Effects assessment:

TML applied the recommended buffers and revised the effects assessment based on the recommended buffers and also assumed that all tertiary and quaternary roads, burns and cut blocks were fully regenerated.

- **ECCC**
 - We have some more recent studies that can be shared with TML to show that the sensory disturbance buffer numbers have a little more backing behind them (i.e., data supports that they are not just arbitrary numbers).
 - **Action: ECCC to share recent studies that support sensory disturbance buffers.**
- **Skin Tyee First Nation**
 - Why did you choose 55 decibels (db) for noise tests since blasting can go up to 120 db?
 - *TML Response:* 55 db is considered to be the equivalent of background noise in the absence of blasting. This is also related to health impacts of noise.
 - TML looked at how far the noise above 55 db was detected from a point source blast pattern. The circles on the maps in TML's presentation indicate where the noise would be above 55 db.
 - Beyond the circles, the noise would be less than 55 db as the sound would dissipate with the square of the distance as it travels away from the blast.
- **ECCC**
 - Can you explain how the net indirect effect is smaller than the direct effect in low-elevation caribou winter range habitat (on slide 19)?
 - *TML response:* When you apply large buffers around permanent disturbance, you get a small net effect because the buffers associated with Project effects overlap existing buffered permanent disturbance.
 - In this case, most of the Project area is covered by buffered permanent disturbance, so only a small net increase in indirect effects is attributable to the Project. The direct effects of the Project overlap little permanent disturbance. This results in net direct effects of the Project being larger than the net indirect effects in this particular habitat zone. Bigger buffers do not always generate larger effects as they can interact in unintuitive ways and result in smaller net effects.
- **ECCC**

- Can you clarify that when you are looking at the total disturbed area numbers (on slide 19) that the calculations are within the project area and not across the range? Are you looking at the disturbed area within the project area or the entire low elevation range?
- *TML Response:* No, this is the impact on the entire low elevation range. The project covers only a small proportion of the low-elevation range of Telkwa caribou.
- **ECCC**
 - The federal government provides advice on cumulative effects of the project and then breaks it up across habitat types.
 - TML presented that it is complicated to talk about movement. We know that as a result of the Trend/Roman mine expansions the caribou were displaced from the area. They settled in low elevation and then were not able to adapt and perished as a result. This is not expected for the Tenas Project as there is almost no direct disturbance in high elevation caribou habitat, unlike the case for the Trend/Roman mine expansion.
 - How can we account for movement, displacement, abandonment of high elevation habitat? The analysis is not clearly showing this. They could be travelling through the area; this could be an abrupt shift that could make them maladapt. What are the effects of the pit?
 - *TML Response:* This is basically a low elevation project, and there is no evidence that caribou are using the low elevation habitat that would be affected by the Project. The effects assessment is based on mitigating against an assumed/theoretical effect where Project conditions are fully regenerated besides permanent disturbance features. Currently and well into the future, the low elevation habitat is very hostile to caribou because of habitat conditions, moose and wolves. Conditions could improve in future if a variety of actions are taken which are outside the control of the Project. The high elevation pieces that are disturbed by the Project – this is not the core area of where they are existing – they are not hanging out the edge of the high elevation core area that is overlapped by the Project footprint and they don't seem to be found in the proposed pit area which is in low elevation. Therefore, the Project will not displace caribou based on baseline conditions. Obviously, the pit will be unavailable for possible use by caribou for the duration of the Project, and after closure, until remediation is complete, and the habitat recovers.
- **WLRS Comment/Question in response to ECCC question/TML response:**
 - Things take time to recover, and the wildlife habitat area only came into effect in 2018.
 - We are only collaring cows currently and there likely will be use in the area that we are not capturing.
 - There is also recreational use in the Grizzly plateau area.
 - How do we assess this among all other existing disturbances?
 - *TML response:* If you start from the baseline of other existing disturbance, you only get a small increase in disturbance as a result of the mine because the area is already disturbed. If you have non-functioning caribou habitat and you put a mine there you still have non-functioning caribou habitat. TML based the effects assessment on a theoretical (although unlikely) future condition where Project conditions are fully regenerated besides permanent disturbance features, to capture the maximum potential effect in the effects assessment.

The original EA application measured against current conditions using 500 meter buffers so people could review the application to make a comparison between current and no disturbance effects conditions.

- TML did ask what the cumulative impact looks like – we struck the caribou sub-committee working group and meetings when we were developing the draft application information requirements for the EA application. That’s where we presented the percent of disturbance based on activity and fire and including buffer disturbances of 500 meters and compared the Project to that overall cumulative disturbance. This was the approach agreed upon by the sub-working group. To Steve’s point, due to the IRs that have come through since the EA – this is a very protracted timeline – we received the IRs in Oct 2022 – these are the ones we are responding to and now we are taking a very conservative approach now.
- The change from the original effects assessment based on current condition and a 500 m buffer to the revised assessment based on only permanent disturbance and 3 km/1.8 km buffers is substantial:

Habitat component	Effects component	Original effects assessment (ha)	Revised effects assessment (ha)
High-elevation core range	Direct	0.0	3.4
	Indirect	0.0	1,103.9
Low-elevation Type 1 matrix range*	Direct	0.0	897.4
	Indirect	15.1	2,920.2
	Total	15.1	4,924.9

* Includes caribou biophysical habitat

- Skin Tyee First Nation

- Related to Indigenous knowledge, it was mentioned that there was a master’s thesis used as an information source. Is there any other Indigenous knowledge that was used? With the undisturbed area, was there any Indigenous knowledge used to understand the baseline.
- *TML Response:* The Office of the Wet’suwet’en has been very involved in reviewing the project throughout the EA since 2017. Witset First Nation has become involved as well as Skin Tyee First Nation and Wet’suwet’en First Nation. There has been indigenous input in the project since 2017. We can provide this information to you.
- Was the Indigenous knowledge used to inform the study?
- *TML Response:* Yes

- Skin Tyee First Nation

- Given the system is already disturbed, is there a way the proposed mine can contribute to reducing the prey- predator system or helping improve the chances for the Caribou?
- *TML Response:* This will be one of the key questions that the Telkwa Caribou Stewardship Committee needs to provide an answer to. Offsetting funds could be used elsewhere in the

range to improve habitat conditions. Initial reconnaissance found limited options for effective habitat restoration, but TML is committed to working with First Nations and governments to use funds in the most effective manner possible to improve the probability of recovery of the Telkwa caribou herd. The current prospects for recovery are low, either with or without the Project.

Mitigation Hierarchy:

- WLRS

- I met with a colleague who talked to TML about restoration. Did TML take into analysis those sites that are overgrown and likely not used?
- *TML Response:* Yes, this was a desktop exercise, but we did go out on the land and look at them in the field and found the condition mentioned. TML agreed that many of the restoration candidates are not suitable for treatment and that effort should be directed elsewhere.

- ECCC

- A lot of the roads are already overgrown and on a path to recovery. Maybe they would be in a suitable place to reduce movement of wolves and reduce the competition of moose in 10 – 30 years. How does TML account for putting the mine in and reducing the recovery to 2090 instead of decades sooner. For example, if some of the disturbance is naturally recovering, now you put a mine in place which will prolong the rate of natural recovery.
- *TML Response:* Some roads are overgrown, and some are not because they are being used by snowmobiles, etc. Using a baseline condition that assumes a theoretical optimal condition for caribou at the start of the Project captures any situation where the Project might delay natural recovery, so this concern is addressed by the completed effects assessment.

- ECCC

- Did you run the offset calculator? What is the rationale for a like for like or for not using the calculator?
- *TML Response–* Yes, they ran it. It took the 10 to 1 and did a calculation like for like. We found the calculator required you to make many arbitrary decisions so you can take a lot of time trying to do that. They decided that they would use the like for like model but might decide to go back to the calculator. Depending on how things land and how discussions go with First Nations and regulatory agencies.

- ECCC

- The numbers seem to look good in terms of the costs. Both EAO, EC, WLRS, ECCC have had some good experiences with the offset calculator. There is no reason for TML to try to navigate the calculator on your own. ECCC can help with it. This is a good place to start but the calculator helps to account for the time lag – recovery takes a while for habitat to come online and the calculator also takes into consideration the uncertainty around habitat

restoration. ECCC is offering to help TML use the calculator – it is transparent, it calculates for uncertainty, and it is a good tool.

- *TML Response:* We do need to sharpen our pencils on this to see how things need to be applied. Whatever offsetting restoration requirements result from this Project they need to be applied in the most effective and fairest way.

- **TML**

- Comment based on ECCC's offer to help with the offsetting tool.
- TML was provided the draft offset tool in October 2022, and as well the WLRS caribou team offered to go through it, so TML met with a few people from the provincial caribou team.
- As part of responding to the IRs the onus was on TML to meet with WLRS on the BC government offset tool, which we did on Dec 15, 2002 with Karen Stefanyk, Jake Bradshaw, and Kindra Maricle from WLRS. What is being presented here is what we feel is suitable mitigation including offset, mitigation hierarchy, etc. considering all information including the offset calculator results.
- We think this approach goes beyond what the IR asks of us in terms of effects of the Project and presents a very positive offset to the Telkwa Herd.
- We feel it would be better to have something that could be a commitment by the Project instead of going back and forth on the offset calculation results.
- *ECCC Response:* Please share the versions of the offset calculator that you used so we can test it to see if the offsets make sense in the spirit of transparency.
 - **Action: TML to share versions of offset calculator they used.**

Question/Answers and Discussion:

- **Witset First Nation**

- Can you tell us about the recreation development (second to last bullet, slide 32)? What's the origin of that idea?
- *TML Response:* Recreation development is to provide alternatives to current use within caribou habitat. These are some of the activities that the Telkwa Caribou Stewardship Committee could use the funds to benefit the Caribou in the area.

- **Skin Tyee First Nation**

- Is there a way to obtain a map of the Caribou habitat zone with UTM coordinates, topography and hydrology?
- **Action: TML to provide this map and shapefiles.**
- **Action: TML to provide project information and engagement history.**
- **Action: EAO to add new Skin Tyee First Nation contacts to the EAO's SharePoint Site for Tenas.**

Meeting adjourns at 11:30am

Action Items:

- TML to follow up with BC government to get the most recent telemetry data for caribou. (note: the request to made to SPI with cc to Kindra was made on June 10)
- TML to share University of Calgary Master's degree study that was based on Indigenous Knowledge and Use with WLRS and other sub-committee members.
- ECCC to share recent studies that support sensory disturbance buffers with TML.
- TML to share with the Caribou Subcommittee the versions of offset calculator TML used for its estimate of offsets.
- TML to provide caribou habitat map and shapefiles and project information and engagement history to Skin Tyee First Nation.
- EAO to add new Skin Tyee First Nation contacts to the EAO's Tenas Project SharePoint Site.