From: Rezansoff, Kyle FLNR:EX

Sent: Friday, March 11, 2016 3:27 PM **To:** Van Tassel, Mark A FLNR:EX

Subject: s.13

Attachments:

Follow Up Flag: Follow up Flag Status: Flagged

s.13



Kyle Rezansoff, B.Sc., RPBio. Ecosystems Biologist

Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 P: 250-787-3369 | F: 250-787-3490

Email: <u>kyle.rezansoff@gov.bc.ca</u>

Page 02 to/à Page 12

Withheld pursuant to/removed as

s.13

From: Rezansoff, Kyle FLNR:EX

Sent: Monday, April 25, 2016 1:25 PM

To: Harvey, Kerry FLNR:EX

Subject: RE: Proposed Sukunka Coal Mine Project - Request to review and comment on

caribou information / Next Steps in EA

Follow Up Flag: Follow up Flag Status: Flagged

Just got off the phone with David Grace – apparently EAO has set aside this week for Steven Wilson to review the comments so if we could comment 'as soon as possible' he would appreciate it. David told me that Dale Seip responded to the comment request but didn't really mention the report and Chris Ritchie also responded (and cc'd Chris Addison).

I erroneously told him that you were meeting with Chris A. this afternoon rather than tomorrow.

Kyle

From: Harvey, Kerry FLNR:EX

Sent: Monday, April 25, 2016 11:22 AM

To: Rezansoff, Kyle FLNR:EX

Subject: FW: Proposed Sukunka Coal Mine Project - Request to review and comment on caribou information / Next

Steps in EA

Forgot you in my cc to Chris.

Kerry Harvey, R.P. Bio.

Senior Ecosystems Biologist | Northeast Region Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 Ph:250-787-3204 | Fax:250-787-3490

From: Harvey, Kerry FLNR:EX

Sent: Monday, April 25, 2016 11:18 AM To: Addison, Christopher FLNR:EX

Subject: FW: Proposed Sukunka Coal Mine Project - Request to review and comment on caribou information / Next

Steps in EA

Any insight as per my inquiry below Chris? Can discuss at tomorrow's 3:00 meeting if you prefer. Kyle will be advising the EAO that comments from our agency will be forthcoming later this week.

Kerry Harvey, R.P. Bio.

Senior Ecosystems Biologist | Northeast Region Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 Ph:250-787-3204 | Fax:250-787-3490 From: Harvey, Kerry FLNR:EX

Sent: Thursday, April 14, 2016 11:26 AM

To: Addison, Christopher FLNR:EX

Subject: FW: Proposed Sukunka Coal Mine Project - Request to review and comment on caribou information / Next

Steps in EA

Hi Chris,

As per the email below, the EAO is requesting agency insight around the caribou report prepared by Steve Wilson by the 25th of April. Kyle and I can definitely do this, but before we launch into a document review, I wanted to check in with you as to what has been communicated already to the EAO about the document. I don't want our insight to be contradictory to conversations that have occurred at a level higher than us operational staff. The lens we approach this review with is important so your insight is appreciated.

Thanks.

Kerry Harvey, R.P. Bio.

Senior Ecosystems Biologist | Northeast Region Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 Ph:250-787-3204 | Fax:250-787-3490

From: Tombs, Joanna EAO:EX
Sent: Friday, April 8, 2016 5:12 PM

To: Carmichael, Bruce ENV:EX; Bellefontaine, Kim MEM:EX; Howe, Diane J MEM:EX; Hamilton, Tony ENV:EX; McNaughton, Steve EAO:EX; Hunt, Elizabeth A FLNR:EX; 'Dale.Desrochers@dfo-mpo.gc.ca'; Koyanagi, Victor MEM:EX; Seip, Dale ENV:EX; Matscha, Gabriele ENV:EX; van Geloven, Chelton FLNR:EX; 'jcalvert@doigriverfn.com'; Stockman, Fern P EAO:EX; Plain, Earle N ENV:EX; Barkhouse, Ralph FLNR:EX; Payne, Lisa MEM:EX; 'Shelley.Ball@NRCan-RNCan.gc.ca'; Karmona, Jennifer EAO:EX; 'mnichols@gochetwynd.com'; 'tim.archer@NRCan-RNCan.gc.ca'; Lawson, Jason FLNR:EX; 'CMarshall@saulteau.com'; 'june.yoo.rifkin@ec.gc.ca'; Zahariev, Konstantin ENV:EX; Narynski, Heather M MEM:EX; McConnachie, Jennifer MEM:EX; 'sarah.bennett@ec.gc.ca'; 'lucille.lukey@hc-sc.gc.ca'; 'Nick.Russo@ec.gc.ca'; 'Kole.Casey@prrd.bc.ca'; Hughes, Paul; 'phughes@mining.ubc.ca'; 'Agathe.Lebeau@canada.ca'; Gibson, Alan ENV:EX; Bailey, Brenda MEM:EX; Rezansoff, Kyle FLNR:EX; Briggs, Sheena FLNR:EX; Herbert, Brian ENV:EX; Bowes-Lyon, Lea-Marie MEM:EX; Smyth, Danielle MEM:EX; Rainey, Erin ENV:EX; 'Melissa.aalhus@northernhealth.ca'; 'tthielen@doigriverfn.com'; 'lynne.tolland@canada.ca'; Avis, Lynn FLNR:EX; 'Quincy.Leung@ceaa-acee.gc.ca'; Harvey, Kerry FLNR:EX; 'JWebb@incentre.net'; 'BCCEARAdmin@aandc-aadnc.gc.ca'; 'landusemanager@westmo.org'; Cheema, Kashmiro K EAO:EX; Grace, David H EAO:EX; 'resource.development@northernhealth.ca'; 'Brian.Milakovic@erm.com'; 'Ryan.Mills@aecom.com'; 'espence@mlib.ca'

Cc: Grace, David H EAO:EX; Hall, Susan M EAO:EX

Subject: Proposed Sukunka Coal Mine Project - Request to review and comment on caribou information / Next Steps in EA

Dear Working Group Members:

The purpose of this email is to provide working group members with a 'heads up' on the next steps of the environmental assessment (EA) for proposed Sukunka Coal Mine Project (Sukunka) and to request the working group review and comment on information related to caribou.

As you aware the EA for Sukunka is currently suspended. During the past few months EAO has been working towards resolving issues related to caribou and water quality with Glencore.

Request to Review Caribou Information

With respect to issues related to caribou, Glencore prepared a response to Environment and Climate Change Canada (ECCC) information request (IR) #95 is available for your review and can be accessed on the FTP site link or SharePoint Site link. See below.

In January 2016, EAO hired an outside consultant to complete an analysis on the potential impact of Sukunka on the Quinette herd and whether the potential effects of Sukunka are consistent with the goals and objectives of the provincial Implementation Plan for the ongoing management of South Peace Northern Caribou in BC and the federal Recovery Strategy for the Woodland Caribou Southern Mountain Population. EcoLogic's report, is attached for your review and/or can be accessed on EAO's SharePoint Site (link below). **EAO would appreciate if the working group could please submit comments on EcoLogic's report and Glencore's response to IR#95 to me by email at Joanna.Tombs@gov.bc.ca by end of day** *April 25, 2016.* **The working group's input and comments on the caribou information will assist EAO with making a decision on whether this information provided is sufficient to address the issue related to caribou.**

SharePoint site link

s.15

Username: s.15 Password: s.15

** To access both of the documents (IR 95 response & EcoLogic's report) see folders: [left side of page]

FTP site link

Automatic Login: s.15

By clicking on the link above (or pasting the link into Windows Explorer) you will be automatically logged into your FTP site.

Manual Login: s.15
Login name: s.15
Password: s.15
Disk Quota: 2GB
Expiry Date: 5/5/2016

Next Steps in the EA

Request to Review Water Quality Information

Further, within the next few weeks, Glencore will provide EAO with additional information related to water quality. Upon receipt, EAO will provide the working group with the opportunity to review and comment on this information. The working group's input and comments on the water quality information will assist EAO with making a decision on whether this information provided is sufficient to address the issue related to water quality.

Opportunity to Review EAO Referral Documents

Lastly, EAO has been preparing the draft referral documents, including EAO's Technical Report/Assessment Report, Table of Conditions, and Certified Project Description. In the near future, EAO will provide the working group with the opportunity to review and comment on the various chapters of EAO's draft Technical Report and related referral documents.

EAO will continue to keep the working group apprised of the status of the EA, including when EAO determines that the information provided by Glencore is sufficient to address the issues related to caribou and water quality and when the suspension will be lifted.

If you have any questions about the EA for Sukunka, please contact me or David Grace, Project Lead, at 250-387-1417 or by email at David.Grace@gov.bc.ca.

Regards, Joanna

Joanna Tombs
Project Assessment Officer
250-387-2408
Joanna.Tombs@gov.bc.ca



From: Rezansoff, Kyle FLNR:EX

Sent: Thursday, May 5, 2016 1:53 PM

To: Harvey, Kerry FLNR:EX; Ritchie, Chris FLNR:EX; Addison, Christopher FLNR:EX; Seip,

Dale ENV:EX

Subject: RE: Indirect Disturbance Calculation - Sukunka Coal Project - Thoughts?

Follow Up Flag: Follow up Flag Status: Flagged

I agree with Kerry's concerns. If the 500m buffer used in the Application and resulting supplemental documentation was initially developed for LEWR, I don't know how well we can rely on that distance being suitable for HEWR. We have science stating that the caribou are negatively affected up to 4 km away from industrial activity, so a conservative 3 km buffer for the Sukunka project seems to be reasonable.

Kyle

From: Harvey, Kerry FLNR:EX

Sent: Thursday, May 5, 2016 1:38 PM

To: Ritchie, Chris FLNR:EX; Addison, Christopher FLNR:EX; Rezansoff, Kyle FLNR:EX; Seip, Dale ENV:EX

Subject: Indirect Disturbance Calculation - Sukunka Coal Project - Thoughts?

Good Afternoon All,

I've just been sitting here reflecting about the Sukunka caribou call we just participated in and have some concerns looking forward to tomorrows conversation with the proponent. As David suggests, this matter of a 500 m versus 3 km disturbance buffer to calculate indirect disturbance within HEWR will be on the table for tomorrows call. I acknowledge why the EAO requires a numerical value to inform the assessment report, but that said, it seems rather obvious in this circumstance, given the state of affairs for the Quintette caribou that a precautionary approach be taken and model this using the 3 km buffer. Since the matter appeared to be far from resolved after today's call, I am concerned how much time will be spent tomorrow rehashing the matter in a broader forum. That said, should/can we collectively agree to what FLNRO's preference is in this regard so that we can message it accordingly tomorrow? Am I missing anything from recent conversations within the higher ranks of government that would make this an unreasonable request? If not, then I would suggest we try to move this forward using the best science available which suggest a 3 km disturbance buffer. Any thoughts?

CHRIS A.: If you are around the office later today I can brief you on this issue in preparation for tomorrow's meeting.

Kerry Harvey, R.P. Bio.

A/ Ecosystems Section Head Senior Ecosystems Biologist | Northeast Region Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 Ph:250-787-3204 | Fax:250-787-3490

Site	HEWR / Quality	MV Closure	Area (ha)	Notes
1	No	No	2	On McNairn Ck
2	Yes, High	Yes	0.25	Moberly Herd, Low use surrounding site. Two individuals (closest ~470m) located near site in the summer of 2009. Edge of 90% Kernal approximately 1.8 km to the east
3	Yes, High	No	0.25	Moberly Herd, Very low use surrounding site, Located within Klin-se-za Provincial Park and a 90% Kernal.
4	No	No	0.499	No noted Moberly herd use near area.
5	No	No	0.501	No noted Moberly herd use near area. EXCLUDED
6	Yes, High	Yes	0.25	Moberly Herd, very low use surrounding site. One caribou near site in summer of 2011. Not in Kernal area.
7	No	No	0.25	Right on Carbon Creek, low use surrounding site
8	Yes, High	Yes	0.5	No noted Moberly herd use near area. Closest documented occurrence nearly 1km south.
9	No	No	0.5	No Caribou Activity
10	Yes, High	Yes	0.25	No noted Moberly herd use near area. Closest documented occurrence nearly 2km northeast.

From: Rezansoff, Kyle FLNR:EX

Sent: Thursday, May 12, 2016 2:32 PM

To: Rezansoff, Kyle FLNR:EX

Subject: FW: Mindermann

Follow Up Flag: Follow up **Flag Status:** Flagged

From: Farwell, Brian FLNR:EX

Sent: Monday, May 9, 2016 10:49 AM

To: Veller, Joyce C FLNR:EX Subject: FW: Mindermann

FYI

From: Rezansoff, Kyle FLNR:EX Sent: Friday, May 6, 2016 4:05 PM

To: Farwell, Brian FLNR:EX
Cc: Harvey, Kerry FLNR:EX
Subject: RE: Mindermann

Hi Brian,

I've completed the analysis as requested by Kerry (below) and this message is a brief summary of what I found.

Of the nine existing camp sites under the Pine River Outfitters tenure, five of them are located in mapped Quintette herd high elevation winter range (HEWR). Those are sites 2, 3, 6, 8, and 10 (HEWR camps); all of them are located in 'high' quality rated HEWR (as compared to 'very high' quality HEWR). Sites 1, 4, 7, and 9 are typically located adjacent to lower elevation rivers and lakes and therefore not in HEWR.

I compared the location of the five HEWR camps to historical caribou telemetry data and observed that collared caribou were not mapped near the five HEWR camps. Sites 2 and 6 had collared caribou within 500m of the sites on one or two occasions, but for sites 3, 8, and 10, the closest observations were between 1200m and 1800m away. Kernal density analysis (likelihood of finding a caribou in an area based on historical telemetry data) indicated that the camps were all located away from high use caribou areas.

It is entirely possible, and most likely, that non-collared caribou have been closer to the sites, but the data are indicating that the five HEWR sites are not popular spots to find caribou and likely aren't negatively affecting the animals.

Sites 2, 6, 8, and 10 are all located in Motor Vehicle Closure Areas and are subject to motor vehicle access restrictions under the *Motor Vehicle Prohibition Regulation*.

It should be said that although the footprint of the campsites are not in high use areas, care should be taken to reduce the impact on surrounding areas, particularly the creation of linear access roads and trails. These linear features create potential access avenues for predators and are problematic for the caribou.

I hope this helps with your request, and please contact me if you have any further questions or concerns.

Kyle

From: Harvey, Kerry FLNR:EX

Sent: Tuesday, May 3, 2016 2:06 PM

To: Rezansoff, Kyle FLNR:EX Cc: Farwell, Brian FLNR:EX Subject: FW: Mindermann

Kyle,

Brian approached me last week about this file and I am hoping you can close this out with him on behalf of Ecosystems.

Background:

The purpose of this application is to replace the existing Licence of Occupation for 9 existing sites for the purpose of Guide Outfitter camps. Pine River Outfitters Ltd. offers big game guiding by seasonally employed guides. The previous tenure covered 10 sites however Site 5 was tenured in error. This site is not in the guide outfitters territory and it will not be included in this replacement tenure. The 9 existing sites cover a total area of 5.25 hectares and are accessed by truck, horse, ATV or by foot. Drinking water will be brought in by containers and bottled water and garbage will be removed from sites every time a group leaves. There are existing outhouses at every site; grey water is disposed of in outhouse pits. There are no changes to existing infrastructure proposed and no development planned at this time. There are no fishing activities offered through this outfit.

The application and camp locations are available at: s.15

Issue:

It is my understanding that some of the camps may be located in HEWR. What I wanted to inform Brian of was the level of use by caribou where there are overlaps with HEWR. I would suggest looking at the seasonal telemetry for the overlaps and the kernel analysis work to make this determination. If you could please action this ASAP and advise Brian as to the risk of issuing the tenure that would be appreciated. As always, if you have any questions, please do not hesitate to ask.

Thanks.

Kerry Harvey, R.P. Bio.

Senior Ecosystems Biologist | Northeast Region Ministry of Forests, Lands and Natural Resource Operations 400-10003-110th Avenue, Fort St. John, BC, V1J 6M7 Ph:250-787-3204 | Fax:250-787-3490

From: Veller, Joyce C FLNR:EX Sent: Friday, April 29, 2016 7:12 AM

To: Harvey, Kerry FLNR:EX Subject: FW: Mindermann

Hi Kerry,

The Mindermann file is 7401301

Joyce C. Veller, P.Ag.

Licensed Authorizations Specialist 250-787-3438

From: Farwell, Brian FLNR:EX

Sent: Thursday, April 28, 2016 2:30 PM

To: Veller, Joyce C FLNR:EX Subject: Mindermann

Send Kerry the file number so she can review the locations against telemetry, etc.

В.

Sent from Samsung Mobile

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Withheld pursuant to/removed as

s.16;s.15

From: Rezansoff, Kyle FLNR:EX

Sent: Wednesday, June 15, 2016 9:00 AM

To: Harvey, Kerry FLNR:EX

Subject: RE: Murray River Coal - Caribou

Follow Up Flag: Follow up Flag Status: Flagged

Hi Kerry,

Here's a brief summary of the caribou issues for the Murray River project. I can tweak it but I have a meeting until noon. Please let me know if you need me to refine it at all.

Kyle

The Project is located in the range of the Quintette herd. A portion of a UWR overlaps with the southwest corner of the Local Study Area but does not overlap with the Mine Site Assessment Footprint as identified in current mine planning. No high quality caribou habitat occurred in the Project footprint, 27-52 ha occurred in the subsidence zone, 15 ha of habitat would be periodically disturbed by train noise, and no movement corridors would be affected for caribou. These areas are very small (<0.1% of caribou habitat) and the effects were considered by the Proponent to be of small magnitude (i.e., subsidence will have little effect on caribou habitat according to models). <u>Uncertainty around effects of subsidence is the 'great unknown'</u>.

After mitigation and reclamation, the Proponent predicts the effect of the Project on low elevation habitat to be negligible. Given the short mine life relative to the anticipated time required for caribou recovery, the integrity of low elevation habitat will be maintained and will be available to caribou as the southern mountain population recovers and potentially expands back into low elevation areas. As a consequence, no residual effects were predicted for caribou.

Uncertainty regarding potential impacts on caribou: potential of low elevation habitat in Project Area if high elevation habitat is lost, potential impacts caused by creation of seral habitat and subsequent movement of moose/wolves.

Mitigation and monitoring of habitat loss will be addressed in numerous plans including the Wildlife Management Plan (which will align with the PNCP) and Subsidence Management Plan.

The Feds requested information on cumulative effects and critical habitat for caribou.

From: Harvey, Kerry FLNR:EX

Sent: Tuesday, June 14, 2016 12:55 PM

To: Rezansoff, Kyle FLNR:EX

Subject: Murray River Coal - Caribou

Hi Kyle,

Chris is looking for a briefing about the caribou issues on the Murray Project. Can you please pull together a high level summary of the issues (I recall subsidence being a concern, and possibly how LEWR was considered as well etc.) and

send my way for consideration and distribution up? I think the assessment report will serve as a source of information to pull this ask together. If there was any comments from the feds. around caribou, please include those as well. If you could action this ASAP that would be great....nothing too long.....just short and concise!

Thanks for help KR!

Kerry Harvey, R.P. Bio.

A/Ecosystems Section Head
Senior Ecosystems Biologist | Northeast Region
Ministry of Forests, Lands and Natural Resource Operations
400-10003-110th Avenue, Fort St. John, BC, V1J 6M7
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