
Western Arctic Caribou Herd Working Group

Goal: To work together to ensure the long-term conservation of the Western Arctic Caribou Herd and the ecosystem on which it depends, to maintain traditional and other uses for the benefit of all people now and in the future.

Chair: Vern Cleveland, Sr. Vice-Chair: Cyrus Harris
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October 28, 2019

Tim La Marr
Central Yukon Field Office Manager
Bureau of Land Management
222 West 7th Avenue, Stop #13
Anchorage, AK 99513

Dear Mr. La Marr,

As the Bureau of Land Management (BLM) conducts its comment period for the Ambler Mining District Industrial Access Road Project (Ambler Road) Draft Environmental Impact Statement (DEIS), I would like to submit the following requests and comments on behalf of the Western Arctic Caribou Herd Working Group (Working Group). The Working Group is a permanent organization of stakeholders that works to ensure conservation of the Western Arctic Caribou Herd (WACH) and to maintain traditional and other uses now and into the future. The Working Group consists of subsistence users from communities within the range of the herd, other Alaska hunters, guides, transporters, conservationists and reindeer herders. Since its formation in 1997, the Working Group has submitted numerous advisory recommendations to government agencies, regulatory boards, and other bodies to support decisions that will ensure the long-term conservation of the WACH.

At our annual meeting in December 2018, the Working Group passed a motion by a vote of 17-1 opposing creation of the Ambler Road. **We therefore strongly request that BLM change its preferred alternative in the Final EIS (FEIS) to the No Action Alternative and not approve the Alaska Industrial Development and Export Authority's (AIDEA) application for a right-of-way authorization across federal land.** This decision will offer the best chance of protecting the WACH, its users, and its habitat.

During the scoping period for the Ambler Road, the Working Group submitted comments detailing six requests for both content and the approach that BLM take in completing the DEIS. We provide below our previous requests (in bold) and discussion of how they were handled in the DEIS, including additional requests that BLM should address during completion of the FEIS.

- 1. A statement be included in the Purpose and Need section of the project specifying that the project will minimize impacts to the WACH.**

This was not included in the DEIS. While we understand that the primary purpose of BLM in writing the EIS is to make a determination about AIDEA's right-of-way application, we still feel that inclusion of a statement about minimizing impacts to the WACH will demonstrate

recognition of the critical value of this caribou herd for subsistence users and for other interested parties and BLM's commitment to its protection. As we stated during scoping, such a statement will also ensure that such values remain at the forefront of consideration if the project moves forward. It is crucial that attention is taken to protect the WACH and its continued use throughout project routing, design, construction and operation, if the project moves ahead despite our opposition. We ask BLM to reconsider and to include a statement specifying that one purpose of the project is to minimize impacts to the WACH in the Purpose and Need section of the FEIS.

2. The best-available information, including both scientific studies and traditional knowledge, be used to analyze potential impacts to caribou.

We appreciate the efforts taken to describe potential impacts to caribou in the DEIS and that these statements included both citations of western science and of traditional knowledge holders, including several from the Working Group. We share the concerns voiced in the DEIS that "[a] road would fragment wildlife habitat" (DEIS p. 2-9) and the effects of such fragmentation "would be pronounced because the range [of the WACH] is currently largely unaltered from a natural state" (p. 3-74). We also share concerns that noise from construction, operation, and other human activities "would likely displace or divert subsistence resources such as caribou" (p. 3-112).

As we stated during scoping, the Working Group's primary focus is promotion of a viable and sustainable caribou herd, the habitat it requires, and the people who use and depend on it. As steps toward these goals, we request the following changes and additions be made to strengthen the descriptions and analysis of potential impacts to caribou in the DEIS.

The DEIS discusses changes to caribou behavior and displacement from infrastructure and disturbance, but fails to include the most recent studies, some of which indicate larger zones of influence – in which caribou are disturbed or displaced by human activity and infrastructure – than those referenced in the DEIS. For example, the DEIS says that studies have shown that caribou displacement may span up to 9.6 km from disturbance, citing papers published up to 2013 (p. 3-74). However, Plante et al. (2018) found displacement from roads up to 15 km and from human settlements up to 18 km. Similarly, Appendix H in the DEIS describes avoidance of mines. Citing a single study from 2007, it describes avoidance of mines by caribou up to 4 km away (p. H-51). More recent studies, not cited in the DEIS, however, have found larger areas of avoidance by caribou around mines, ranging from 11-14 km (Boulanger et al. 2012) to 20-23 km (Plante et al. 2018). Such studies should be included in the FEIS and the descriptions of potential impacts on caribou updated accordingly.

In addition to recognizing the larger potential displacement distances acknowledged in more recent studies, the FEIS should include an analysis of the potential effects of such displacement. In our scoping comments, we requested that impacts be analyzed of the physical footprint of

infrastructure, behavioral responses to infrastructure and traffic, and environmental effects that may extend beyond the footprint of development. While descriptions are made of effects in each of these categories, they do not translate into the impacts assessment depicted in Appendices E and H. Table 20 in Appendix E indicates the loss of caribou habitat in acres by herd and season under each alternative (p. E-22). It appears, however, that these are simply the physical footprint, not including any displacement effects. Similarly, Table 2-11 in Appendix H shows the hypothetical disturbance from each potential future mine in the Ambler Mining District (p. H-22). This, however, only appears to represent the physical footprint of potential mining development. As the citations above describe, the habitat area lost to caribou and other species in both cases is likely to be much larger, when including displacement. Displacement, altered movement and avoidance of high-quality habitat are expected to be project-area wide and long-term (Table 21, p. E-23). In light of this, displacement effects should also be reflected in the Appendix E and Appendix H tables.

The DEIS claims that “experience in the North Slope oil fields indicates that caribou may habituate to some industrial activities” (p. 3-74) and assumes habituation of caribou over time may reduce subsistence impacts (p. 3-112). While the DEIS notes that maternal caribou are an exception, BLM should also recognize and be clear that the scientific evidence for caribou habituation to infrastructure is limited at best. Notably, no citations are given for this statement in the DEIS. Even those studies that have been cited in other BLM EIS documents provide limited evidence for habituation. Comments by the United States Geological Survey (USGS) on the EIS for Coastal Plain Oil and Gas leasing in the Arctic National Wildlife Refuge point out that none of the references cited in the Arctic Refuge EIS demonstrate that caribou habituate to development (BLM 2019). They go on to state that,

Cronin et al. (1994) is a synthesis that includes an appendix with a detailed literature review on habituation in ungulates. It states that “Evidence for habituation to anthropogenic stimuli by the CAH [Central Arctic Caribou Herd] in and around the oil fields is fragmentary and anecdotal”. Murphy and Lawhead (2000) is a book chapter with a section on habituation that says, “Despite the importance of this issue, empirical evidence documenting habituation generally is lacking”. The chapter goes to say that “The CAH experience indicates that female caribou with newborn calves are not likely to habituate to oil-field activity and infrastructure”. Lawhead et al. (2006) writes that “Quantitative comparisons have not been conducted to compare the current reaction of CAH caribou with those recorded in the early 1980s. Habituation to human structure and activities likely depends on the perception of threat by caribou, and there is no evidence to suggest that maternal cows have habituated to vehicles when their calves are less than ~3 weeks old (Lawhead et al. 2004). This lack of habituation to predator-like stimuli is reasonable in an evolutionary context because animals that habituate to such stimuli are likely to have lower survival” (p.71).

These statements emphasize that there is not clear evidence for habituation to infrastructure and human activity in caribou. More recent studies also call into question assumptions about habituation. Boulanger et al. (2012) found variation over time in caribou disturbance responses near a diamond mine in Canada but no clear evidence of habituation. Another recent Canadian study found avoidance of long-established infrastructure, “suggesting that long-term habituation is unlikely.” (Plante et al. 2018, p. 138). Similarly, recent research on mule deer (*Odocoileus hemionus*) in the contiguous United States found a lack of habituation to energy development even after a 15-year period and intensive mitigation efforts (Sawyer et al. 2017). A study in Norway found no evidence of habituation by reindeer to ski resorts, trails, and recreational cabins over a 20-year study (Nellemann et al. 2010). The Ambler Road DEIS should not present greater confidence than that demonstrated in the scientific literature that caribou will habituate to infrastructure and other human disturbances. Relying on this to reduce impacts from the Ambler Road and associated mines is unwise and should be rephrased accordingly in the DEIS.

The DEIS states that “[m]oderate to high traffic volumes (more than 15 vehicles per hour) have been shown to delay or deflect large groups of caribou” (p.3-74). This is accurate, however it is also important that the DEIS recognizes that the same references they cite for this statement (e.g., Curatolo and Murphy 1986, Cronin et al. 1994) also show that caribou movement behavior may be altered at traffic levels below 15 vehicles per hour, and avoidance behaviors have been shown (cf., BLM 2019, p.151). BLM should clarify their statement to indicate that road disturbances are expected to increase at higher traffic volumes but likely will also be present for lower traffic volumes during Phases 1 and 2. Furthermore, the BLM-referenced studies were conducted on oilfield roads. The DEIS should be clarified to indicate that disturbances from large ore-hauling trucks like those depicted in Appendix A, Figure 2-2 may be greater than those from smaller vehicles.

The DEIS states that “[p]redators may use the road corridor to more efficiently gain access to caribou, which could increase predation” (p.3-76). This is of great concern and additional detail is needed. It has been recognized for over two decades that linear corridors like roads and seismic lines can alter the distribution of wolves (*Canis lupus*) and caribou (James and Stuart-Smith 2000). Recent work has shown that linear features can act like highways for wolves, allowing them to travel faster and farther, as well as altering their habitat selection patterns, increasing their contact with and predation of caribou (e.g., Dickie et al. 2017, DeMars and Boutin 2018). This is one factor thought to be behind recent declines in woodland caribou in Canada (Hebblewhite 2017). The BLM preferred alternatives, A and B, are relatively linear corridors from west-east, especially AIDEA’s preferred Alternative A. Wolf predation on caribou is frequently raised as a topic of concern by area residents at Working Group meetings. That this may be accentuated by creation of the Ambler Road should be clearly communicated. We ask that discussion of the above studies and other related research be better incorporated into the DEIS and the potential risks for caribou clarified.

One of the primary means proposed for avoidance of road impacts to caribou is employing similar mitigation protocols as those employed on the DeLong Mountain Transportation System that services the Red Dog Mine (e.g., p. 3-76, p. N-23). Unfortunately, a copy of these protocols is not included in the DEIS, preventing review of these measures and assessment of whether they are likely to be effective at minimizing disruption and displacement of caribou. We ask that BLM include these in an appendix, along with scientific justification for their effectiveness.

3. Analysis be made of the likely impact of the Ambler Road on hunting access for residents and non-residents, including the potential for increased conflicts between hunters.

In our scoping comments we raised that while the proposed road is currently specified as being commercial-only, history with the Dalton Highway and other projects suggests that once roads are established they eventually become used by the public. We asked BLM to conduct two analyses: one that reflects the impacts if the road remains commercial-only and another in which impacts are analyzed if the road becomes used for public hunting access. BLM did not meet this request. Instead, it acknowledged that many similar concerns had been raised during scoping but still determined that public access is not reasonably foreseeable (p. H-23). This seems short-sighted and ignoring of history and of BLM's own statement that "[t]he potential for increased access into the project area resulting from local and non-local use of the project road and ROW [right-of-way] (regardless of legality) may increase competition in the region for certain resources and decrease harvesting success for local hunters" (p. H-74). We urge BLM to reconsider and to run a second analysis of impacts of a road that is made publicly accessible in the future. This is a very important issue to the Working Group as the question of public versus private access played a strong influence in some members voting to oppose the project.

During scoping we raised concerns about the effects of multiple jurisdictions on road access restrictions. Content from the DEIS reinforced and expanded these concerns. The DEIS mentions concerns about hunting and fishing by construction workers. While it points to mitigation measures in Appendix N as potentially reducing such concerns, it also emphasizes that BLM could only enforce such measures on its lands (p. 3-112). Similarly, the DEIS raises the possibility that "once the area is known to more people, they may visit the area (via airplane, OHV, or snowmobile) and access public lands to engage in harvesting activities, which could increase the number of hunters in the area over time and reduce resource availability for local residents" (p.3-112). It again points to options in Appendix N as potential mitigation factors. But, multiple times the DEIS states that the Alaska Department of Natural Resources has stated that they must "separately evaluate questions related to use of the road and restrictions on use and cannot commit at this time regarding restrictions where the road would cross State of Alaska (State) lands" (p. 2-2). This raises concerns about whether the restrictions assumed in the DEIS will actually be present and enforced.

Furthermore, the DEIS describes how steep snow banks may hinder caribou movement and road crossings, "except on BLM-managed lands where this potential impact may be partially

mitigated” (p. 3-75). Even more concerning is the statement that “[r]estrictions on activity and cessation of traffic on BLM-managed lands would have little effectiveness due to the small amount of BLM-managed land on each [sic] alternatives A and B” (p. 3-75). Statements such as these call into question whether protections intended to protect caribou will actually be enforced. This reinforces our desire for BLM to select the No Action Alternative for its preferred alternative. Barring that, we ask that BLM secure agreements from the other land management agencies for consistent sets of caribou protections and access restrictions that will apply across the entire road, regardless of jurisdiction, and make these clear in the FEIS.

4. The social and economic costs/benefits of road access to previously roadless communities be analyzed.

We appreciate treatment of this in the DEIS. One area we would like to see additional information and analysis is on the effects of contaminated food sources on both species like caribou and the subsistence users who rely upon them. The DEIS mentions that concerns about contamination of subsistence resources may be especially high in areas of exposed naturally occurring asbestos and asbestos contained in gravel fill, but does not go into additional detail about the expected impacts and degree of risk (p. 3-112). Further information and quantification of potential impacts are needed.

5. Analyses of impacts on the WACH take into account not just the Ambler Road, but the cumulative effects of all road and other development projects within the WACH range on both the herd and people who depend upon it, especially subsistence hunters.

This request was partially addressed in the DEIS. While attention was given to some future effects like exploration and potential expansion of the Red Dog Mine, other proposed infrastructure, such as the Arctic Strategic Transportation and Resources (ASTAR) project, was not considered. While the ASTAR project has not yet secured funding to build infrastructure, it has acquired funding from the Alaska State Legislature to conduct planning and some Arctic data collection. The November 2, 2018 letter from the Alaska Department of Natural Resources and North Slope Borough to the DOI Assistant Secretary for Land and Minerals Management¹ requesting BLM revise the Integrated Activity Plan (IAP) for the National Petroleum Reserve – Alaska (NPR-A), in part because of the ASTAR process, seems to clearly indicate intention to proceed. Furthermore, since the ASTAR project first started posting maps displaying potential futures for the project, the maps have included potential roads that extend across WACH range, including through the herd’s calving grounds. These maps have changed multiple times since

¹ Available from https://eplanning.blm.gov/epl-front-office/projects/nepa/117408/162755/198560/11.2.18_Ltr_to_AsstSecDOI_Balash_NPRA_IAP_Coop_Agency_Req_est.pdf.

they were initially posted in 2017, but recent maps² still show roads passing through these areas. This warrants inclusion in the Ambler Road's cumulative effects analysis.

6. Future public comment processes engage all communities within the herd range and take into account the challenges of organizing comments in remote settings.

In our scoping comments, we emphasized the importance of providing adequate time and opportunities to engage with affected stakeholders and communities, including all communities in the WACH range and other stakeholders. We pointed out that a 45-day comment period for the DEIS is insufficient to allow organization of community meetings, thorough review of the DEIS, and a robust comment process. As is stated above, the Working Group includes representatives of stakeholder groups from across the state of Alaska. It takes time to inform our members of new documents and to organize discussion and feedback, especially for those living in some of the more remote villages where communication can be a challenge. For this reason, we requested a longer comment period for the DEIS. We appreciate BLM's willingness to extend the initially posted comment period by an extra two weeks, to just over two months. However, even this is a relatively short period of time in which to adequately discuss and provide comments, especially as the comment period on the DEIS overlapped the prime fall hunting period. We are disappointed and request that in the future BLM provide additional time for public comments.

Thank you for your review and consideration of these comments and requests. We look forward to your response.

On behalf of the Working Group,



Vern Cleveland, Sr., Chair

cc:

Tina McMaster-Goering, Project Manager, Bureau of Land Management
Greg Dudgeon, Superintendent, Gates of the Arctic National Park and Preserve, National Park Service
Western Arctic Caribou Herd Working Group Members & Alternates

² Arctic Strategic Transportation and Resources website.
<https://www.arcgis.com/apps/Cascade/index.html?appid=ab8be9349a08477ebfb66d017e0aec8d>. Accessed 2019-10-25.

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