Grandmothers Growing Goodness
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Submitted via eplanning and email

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Bureau of Land Management
222 University Ave.
Fairbanks, AK 99709

Comments re: ConocoPhillips Seismic Survey DOI-BLM-AK-R000-2024-0001-EA

Dear Ms. LaMarr:

Grandmothers Growing Goodness (Grandmothers) welcomes the opportunity to comment on the Environmental Assessment (EA) for the proposed seismic exploration this winter in the National Petroleum Reserve-Alaska (Reserve). Grandmothers is an Inupiat group dedicated to elevating the understanding and protection of Inupiat culture and people in the face of serious impacts from oil and gas development and climate change.

Grandmothers is opposed to the proposed seismic exploration due to the extensive impacts that will occur over a four-month period to caribou, subsistence hunting, and the land.[1] This large-scale project will consist of a moving front of continuous disturbance—a grid of source and receiver lines covering an area 4-6 miles wide by 8-10 miles long—traveling through the project area at a rate of about one mile a day, supported by 200 people, 40 camp trailers pulled by heavy equipment and over 100 vehicles in total, across 229,000 acres of land and water.[2] Much of this exploration would occur within the Teshekpuk Lake Special Area (TSLA) designated for maximum protection of its important environmental and subsistence values.

The EA does not recognize or consider the significant impacts that this project will entail, and the Bureau of Land Management (BLM) must do so in an Environmental Impact

[1] If the BLM is to allow any seismic surveys at all, they should be limited to surveys that are designed to better identify shallow gas hazards like the one that caused a gas blowout at CD1.
[2] EA at 1, 25.

Statement (EIS) before approving this seismic proposal. BLM has also failed to mitigate significantly adverse effects throughout the project area and ensure maximum protection in the TLSA, as required by the Naval Petroleum Reserves Production Act (NPRPA). BLM has the authority to delay approval of a seismic application when necessary to comply with statutory requirements such as the National Environmental Policy Act (NEPA) and the NPRPA, and the agency should delay approval of ConocoPhillips' seismic exploration until an EIS is completed and BLM has complied with these laws.[3] If BLM permits the activity to go forward this winter, we request that the agency impose additional mitigation measures to protect the caribou, subsistence use, and the land, as outlined in Appendix A.

I. BLM must conduct an EIS because the impacts from the seismic program are potentially significant.

The seismic exploration has the potential to cause significant impacts to caribou, subsistence, and vegetation which BLM has not previously analyzed. The agency must analyze these impacts in an EIS.

A. The impacts to the Teshekpuk Lake Caribou Herd are likely to be significant.

Caribou will be exposed to the traffic on the snow supply road, the trails to the camp and during camp moves, and seismic grid from January through April. They will also be exposed to demobilization traffic through early May. Many individuals in the Teshekpuk Caribou Herd population could be exposed because the project is in high density caribou habitat throughout the winter and spring.[4]

The impacts to caribou are potentially significant because they will be exposed to disturbances that reduce their opportunities to feed and because the activity will deflect the migration of pregnant cows trying to reach their calving grounds, both of which can lead to reductions in the population.

In the winter, most Teshekpuk Lake caribou stay on the coastal plain. These caribou endure harsher conditions than other herds that migrate south in the winter. Foraging opportunities are limited and therefore particularly important. The frequent industrial exposure increases daily energy needs and reduces time spent eating, and the caribou lose weight at a time when they are already depleted. This could lead to less successful reproduction.

The impacts to caribou are also likely to be significant because in April and May the activity will defect the spring migration of pregnant caribou headed to their calving grounds. These "[i]mportant migration pathways"[5] will be blocked by a steady stream of industrial traffic. In addition to this traffic, Willow construction traffic will require a continuous disturbance of more than 15 vehicles per hour throughout the same time. This is the rate at which BLM states that caribou react to traffic, although recent studies show reactions at less than five

[3] 43 C.F.R. § 3152.2(a).
[4] Figure 10, EA at 62.
[5] EA at 60.

vehicles per hour[6] and that the presence of any traffic at all could prevent almost half the caribou from crossing.[7] Adding to the disturbance caused by seismic and construction traffic will be the traffic involved in ConocoPhillips' borehole drilling program, which is also in the same area and during the same time. The EA states that Willow construction would be "adding to the potential disturbance of caribou" but provides no description of the extent or degree of these effects.

The EA acknowledges that deflection could result in the pregnant caribou going "to areas not as suitable for calving, potentially with greater predation and lower-nutrient forage options, factors which both have negative implications for cow and calf health and survival,"[8] and that "[c]aribou that do not reach preferred calving habitat could see increases in calf mortality due to predation, low birth weights, and malnourishment from lower quality forage.[9] These are significant impacts which BLM must analyze in an EIS.

BLM concludes, without analysis, that "the overall impacts to caribou during the winter would be expected to be temporary, cause moderate levels of disturbance, but not likely to result in long lasting or population-level effects."[10] This conclusion has no support. BLM recognizes that continued displacement from the Willow Development could have "enduring" impacts on productivity and abundance[11] but does not explain why more than a year of disturbance is necessary before such impacts would contribute to population-level effects. The conclusion that the impacts will be moderate is unexplained and does not address recent studies showing little or no traffic will cause significant impacts to caribou movements.[12] These conclusions are also unsupported by any analysis of monitoring results from caribou responses to previous seismic surveys.

To adequately assess the impacts of this project and support its conclusions, BLM must present and analyze information about the extent of activity and the degree of exposure to the herd. The EA provides no estimates for the number and frequency of vehicle or air trips that will occur during the winter and spring nor for the foot traffic associated with crews placing and retrieving the geophones. It is impossible for BLM to assess the potential impacts of this project without these estimates, both for this project and others in the same time and place. It is also impossible for BLM to assess the potential impacts of this project without providing the proportion of the herd likely to be exposed and the duration of the exposure, during both winter and summer activities. BLM's analysis of impacts BLM should provide this necessary information and analysis in an EIS.

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[6] J. Severson, *et al*., *Effects of vehicle traffic on space use and road crossings of caribou in the Arctic*.ECOLOGICAL APPLICATIONS (2023): e2923.
[7] Smith, Angus, and Chris J. Johnson. "Why didn't the caribou (Rangifer tarandus groenlandicus) cross the road? The barrier effect of traffic on industrial winter roads." (2023).
[8] EA at 64.
[9] *Id.* at 65.
[10] *Id*. at 67.
[11] *Id*.
[12] Severson, et al (2023); Smith and Johnson (2023).

In addition, BLM must analyze the cumulative impacts of aircraft in an EIS. Though limited to a two week period, the helicopter flights have the potential to cause serious impacts to the herd, because the timing overlaps with insect harassment, which increases the likelihood of large aggregations of caribou.

B. The impacts to subsistence, environmental justice, and sociocultural systems are likely to be significant.

As the EA correctly notes, "[t]he proposed project involves winter activity in an area with important subsistence value, utilized by residents of both Nuiqsut and Utqiagvik."[13] The EA also accurately explains that "[s]ubsistence users would likely avoid the project area because they believe either resources would avoid it or because they prefer not to harvest around seismic activities," and that this could cause people to travel further, which requires more "time, cost, and potentially risk due to very cold and dark winter travel conditions.[14] The disturbance can also cause hunters to be unsuccessful, and each time someone loses an opportunity to get a caribou, they return without food to a community that is already food-insecure.

Despite acknowledging these impacts, the EA concludes that this project would not significantly restrict subsistence hunting of caribou because of its timing, the density and distribution of the caribou, and historically stable harvest rates and low winter harvest.[15]

This conclusion is arbitrary. As explained above, the project will occur during a time when many caribou are in the area. Winter is not when we catch most of our caribou, but this point is irrelevant. What matters is how important these caribou are to us during the winter. They are essential since most of our other subsistence resources are not available during the winter. Caribou is the most important subsistence food we harvest in the winter. The EA also points to harvest rates in the past, but Willow is a much larger project that is closer to and within the Teshekpuk Lake Special Area, the core habitat for the herd. There's no reason for BLM to assume that the effects of past disturbance are going to stay the same when far more extensive activity spreads to the Willow area, as it will this winter.

C. The impacts to the land are potentially significant.

The impacts to vegetation and soils from the seismic exploration, including the camp trails, are likely to be long-lasting and significant. The EA identifies some of these impacts but provides no conclusion about their significance.

BLM claims that "[a]dhering to minimum snow depth criteria should minimize impacts in most instances" and notes that "It is critical that the access/resupply and camp trails maintain sufficient protective snow cover throughout operations."[16] The restrictions on tundra travel will not prevent these long-lasting impacts. The restrictions, based on climate

[13] EA at 41.
[14] *Id*. at 42.
[15] *Id*. at 43.
[16] *Id*. at 47.

information from over 20 years ago, are no longer appropriate or protective considering the changes to the climate that have occurred in the Reserve.[17] In addition, analyzing and designing measures based only snow depth and active layer temperatures is inadequate, because it does not account for snow-water equivalent—an important component for understanding the protective characteristics of snow.[18]

The EA's conclusion that impacts from seismic lines would be less than in the past is incorrect. Damage from the seismic surveys that occurred near Nuiqsut last year were visible this summer, and studies show that the equipment they use now is just as damaging as what they used in the past.[19]

Opening the tundra for travel once the snow reaches a certain depth is no longer an adequate way to protect the tundra because temperatures can warm up again after that, and the rain can melt the snow even after some activities have begun, as occurred last December. To account for the temperature fluctuations that occur in December, BLM should not allow any activities, including snow-packing, to begin prior to January.

D. BLM did not adequately analyze the significant impacts from this project in the IAP/EIS or the Willow SEIS

None of the significant impacts from seismic surveys to the caribou herd, subsistence, or land have been previously analyzed. BLM has consistently underestimated the seismic exploration that would take place in the Reserve. BLM made predictions in 2012 about the extent of seismic that would occur and the impacts this activity would cause. In 2020, when it drafted the EIS/IAP, BLM assumed these predictions were still true. One assumption was that seismic would affect a maximum of just 583,000 acres of land, [20] but the area already permitted by BLM for seismic surveys since 2012 has been much more than this.[21]

BLM also assumed that on-lease surveys would only occur 10-20 years after production began[22] and that source and receiver lines, which are carried by vehicles and create the footprint of surface disturbance, would be a minimum of 660 feet apart.[23] These assumptions were wrong. The 2020 analysis of impacts, including from seismic exploration, is based on this inaccurate scenario, and is thus outdated and inaccurate.[24]

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[17] *See* M.K. Raynolds *et al.*, *Landscape impacts of 3D-seismic survey in the Arctic National Wildlife Refuge, Alaska*, 30(7) ECOLOGICAL APPLICATIONS at 7 (Oct. 2020); ADNR, North Slope Tundra Travel and Ice Road Construction, presentation by Wyn Menefee & Gary Schultz (undated).
[18] *See* M.K. Raynolds *et al* at 7.
[19] *Id*. at 11.
[20] 2020 IAP/EIS at 3-93.
[21] *See, e.g.*, BLM, Environmental Assessment DOI-BLM-AK-R000-2020-0005EA (Jan. 2020) available at https://eplanning.blm.gov/eplanning-ui/project/1502646/570 (214,600 acres); BLM, Environmental Assessment, DOI-BLM-AKF01000-2015-002-EA (Dec. 2014).
[22] *Id*. at 68.
[23] *Id.* at 15.
[24] *See, e.g.*, I 2020 IAP at 3-60; II 2020 IAP Appendix B section B.3, *id.* App. F at 36, 39.

In addition, although the 2020 IAP/EIS provides general descriptions of the types of impacts to caribou, subsistence, and vegetation from oil and gas activities (which include seismic surveys), it does not provide an analysis of those impacts at a site-specific level. It provides no analysis, for example, of the impacts of seismic exploration in core caribou habitat, in high use subsistence areas, or in the Teshekpuk Lake Special Area. Instead, BLM assumed that seismic exploration would not occur in the Northeast NPR-A.[25]

The Willow SEIS also fails to analyze the impacts of this project. The SEIS does not identify seismic surveys as part of the drilling plan proposed activities. In fact, the decision explicitly states that "the Project does not include seismic activities."[26] Only the no action alternative mentions seismic, as an activity that would continue to occur in the Reserve – the other alternatives do not.[27] The SEIS identifies seismic on Willow and Harpoon prospects as reasonably foreseeable future activities but there is no analysis of the impacts of these activities.[28] In the analysis of cumulative impacts, the SEIS only mentions seismic activity associated with new oil and gas leasing, not with on-lease development.[29] The EA confirms that impacts from this program were not discussed in the SEIS.[30] BLM must analyze these impacts in an EIS before approving this or any others surveys.

E. The analysis of mitigation is inadequate.

BLM should describe mitigation in accordance with Council on Environmental Quality's (CEQ's) mitigation hierarchy.[31] Under the hierarchy, BLM must avoid, minimize, or – as a last resort – compensate for adverse impacts from the seismic exploration. The EA fails to describe this mitigation scheme or how individual mitigation actions such as Required Operating Procedures fit within the hierarchy.

The EA fails to consider, let alone provide, any mitigation for impacts to subsistence and caribou that will occur during the winter and spring. It also provides no analysis of the effectiveness of mitigation of summer activities. BLM must analyze the remaining impacts that occur even with mitigation before it can reasonably conclude that the seismic exploration will not cause significant impacts.

The EA assumes the Subsistence Plan will "prevent unreasonable conflicts between subsistence users and exploration and development activities,"[32] but the plan does not apply to the seismic exploration this winter. The plan was designed for the Willow Development project, which, as explained above, did not include seismic exploration. The Subsistence Plan does not describe seismic activities in the detailed description of activities

[25] II 2012 IAP/EIS at 17.
[26] Willow SEIS ROD, App. A at 1.
[27] Willow SEIS at 205.
[28] *Id*. at 403.
[29] *Id.* at 413, 415.
[30] *See, .e.g*, EA at 51 (noting that the "Proposed Action would add approximately 45 acres of long-term disturbance to those acres identified in the Willow Development EIS").
[31] 40 C.F.R. § 1508.20.
[32] EA at 29.

to take place – in fact, the plan does not mention the word "seismic" once.[33] The plan describes meetings for the 2022-2023 season, but not for this winter.[34] The plan does not identify any meetings where seismic activity was described or discussed.

For caribou, the EA contains two project-specific measures for the summer: activity would start in the south and move northward, and if caribou groups begin to divert, aircraft would leave the area.[35] The EA does not explain how or to what degree these measures would protect caribou.

In addition, the Wildlife Avoidance and Interaction Plan includes one measure to protect caribou during the summer and fall. However, the plan does not cover the area of this project, as it applies only to the road from CD5 to GMT-2. From mid-July through November, the measure imposes a speed limit of 15 miles per hour when caribou are within 0.5 mile of road, requires traffic to temporarily stop to allow crossing of 10 or more caribou, and requires that sections of road be evacuated whenever an attempted crossing by many caribou appears to be imminent.[36] The EA provides no analysis of the effectiveness of speed limits in mitigating disturbance to caribou. It also provides no definition of "many" or "imminent" or how long an "evacuation" will last. Caribou respond to vehicles by delaying their movement for days as they approach roads and assess the risks of the road crossings.[37] Stopping and waiting for caribou to cross is ineffective, especially when ConocoPhillips' Security will "take appropriate action" when the company believes it has been "unreasonably delayed."[38] In addition, caribou are deflected long before they come close to the road, and therefore stopping traffic when aggregations are near the road will not address the deflection that is occurring farther away.

For the spring migration and calving periods (April-June) and summer clean-up (July), the EA references ROP M-1, which states "[c]hasing wildlife with ground vehicles is prohibited. Particular attention will be given to avoid disturbing caribou." This measure is vague and therefore useless because it does not define disturbance or explain how disturbance to caribou must be avoided. The EA does not explain how this measure will protect the spring migration and calving from the impacts of the seismic program.

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[33] *Id*. App. H at 1.
[34] *Id*. at 2, 5.
[35] EA at 36-37.
[36] *Id.* App. E at 12.
[37] Poole, K.G., A. Gunn, & G. Pelchat (2021). Influence of the Ekati Diamond Mine on migratory tundra caribou movements. Report prepared for the Independent Environmental Monitoring Agency, Yellowknife, Northwest Territories. Downloaded https://monitoringagency.net/wp-content/uploads/2021/08/Poole-et-al-IEMA-Ekati-caribou-movements-final-August-2021.pdf; Boulanger, J., R. Kite, M. Campbell, J. Shaw and D.S. Lee. 2020. Analysis of Caribou Movements Relative to the Meadowbank Mine and Roads During Spring Migration. Government of Nunavut, Department of Environment, Technical Report Series – No:01-2020. 31 July 2020.
[38] EA App. E at 18.

II. BLM has not complied with the Naval Petroleum Reserves Production Act

BLM has affirmed the agency's authority to condition, delay action on, or deny activities.[39] BLM has also explained that if it determines that a proposed activity's effects on subsistence resources – when added to the effects of other past, present, and reasonably foreseeable actions – could be significantly adverse, BLM must mitigate those effects.[40] Yet BLM has imposed no mitigation to protect caribou or subsistence from the impacts that the seismic exploration will have this winter and spring.

BLM must also ensure maximum protection measures for each of the significant resource values in the Teshekpuk Lake Special Area. Yet the EA does not even acknowledge that the activity will be taking place within this special area, let alone analyze what mitigation is required to ensure maximum protection. Neither the IAP/EIS nor the Willow SEIS analyze or discuss mitigation of significantly adverse effects or maximum protections in the context of seismic exploration, either.

As we explained in our comments on the draft regulations for the Reserve, despite the years of environmental review and BLM's identification of various mitigation measures throughout this time, the impacts from oil and gas activities, including seismic, have only grown worse. BLM's engagement with Nuiqsut is consistently focused on how to allow projects to go forward—how to permit the continuous expansion and concentration of oil and gas activity on our traditional lands. We express our concerns, but BLM continues to weaken or waive mitigation measures, or fails to enforce them, and the impact to our daily life continues. People who state opposition to the endless expansion of oil development and the complete encirclement of our village face repercussions. BLM must uphold its responsibility to protect the Reserve's resources regardless of the strength of corporate-powered voices that BLM may hear from. To do so, BLM must consider, discuss, and require implementation of mitigation that will fulfill the requirements of the NPRPA.

To ensure adequate mitigation, BLM must require monitoring to establish a baseline for behavior and distribution, identify and apply pre-determined thresholds used to trigger mitigation, describe the effectiveness of mitigation, and measure residual effects.[41] Monitoring methods used at northern Canadian mine and roads typically include satellite-collared caribou data (locations are typically daily) as a sample of the herd and remote

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[39] 88 C.F.R. 62,025, 62,032 (Sept. 8, 2023).

[40] *Id.*

[41] For example, in Nunavut, mitigation plans are required by regulations and lay out details of monitoring and mitigation schemes for major activities (e.g., the mine site, roads, and aircraft flights). Hierarchical mitigation is implemented through a decision tree with levels of progressively intensified mitigation according to pre-agreed triggers based on monitoring. The triggers are caribou numbers in proximity to the site or road and group size and numbers/distance of satellite-collared caribou. The mitigation measures include progressive shutdown of most mine activities and daily closures and convoys for roads. Currently under review is the development of "letting the leaders pass" closure policies.

cameras to describe crossing rates and traffic frequency, and BLM should require the same of activities, including seismic, in the Reserve. If BLM approves the seismic activity this winter, which it should not, it should, at a minimum, the agency should require the monitoring and mitigation included as Appendix A to these comments.

As we also explained in our comments on the draft regulations, the process for identifying and imposing mitigation measures should be changed. The current approach requires us to advocate for mitigation measures in every decision-making process. This places an unfair burden on a village already overburdened by the impacts of industrial activity. In our comments on the draft NPRA regulations, we suggested that BLM should include a regular process for updating existing and identifying new measures, similar to the process for Special Area amendments proposed by the draft regulations. BLM should wait to complete the regulations and our recommended process for identifying mitigation before approving additional activity, to ensure the agency meets its obligations under the NPRPA.

Finally, as we also suggested in our comments on the draft regulations, BLM should create an NPRA Governing Commission with a role for Tribes in decision-making over land use management, including decisions such as this one. As an example, in Northwest Territories and Nunavut, co-management boards undertake environment assessments. The boards operate with a high degree of community input through reviews and public hearings. Typically for large mines, the operating conditions require annual monitoring reports and an oversight body. The oversight bodies are advisory and operate with both community and technical knowledge. In Nunavut, Terrestrial Advisory Groups advise on mitigation plans and their implementation.

Thank you for your consideration of these comments.

Sincerely,

Rosemary Ahtuangaruak, Executive Director
Grandmothers Growing Goodness

Cc:

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Appendix A: Suggested Mitigation Measures for Seismic Exploration 2023-2024

1. Timing

No activities will begin before January 1 and all spring activity, including demobilization, will be finished by March 30.

2. Snow supply road

Monitoring: BLM will require daily road surveys to count caribou within one mile both sides of road as a sighting rate (caribou/mile) and group sizes. BLM should use remote cameras to measure traffic frequency and caribou crossings. BLM should use information about the daily locations of collared caribou to index caribou distribution relative to the snow road and the Willow ice road.

Mitigation: Using pre-agreed criteria in a decision tree, caribou numbers and group size and proximity satellite-collared caribou will trigger increasing mitigation from speed restrictions to convoys and daily closures in winter. For example, a sighting rate of two caribou/mile should trigger speed restriction and ten caribou/mile should trigger road closure. At the beginning of the spring migration, these criteria should be more sensitive to protect the lead caribou. Monitoring and mitigation should be coordinated between the seismic snow road and the Willow ice and gravel road construction.

3. Seismic grid

Monitoring: If two or more collared caribou are in the vicinity of the area to be surveyed seven to ten days before the line and camp moves, an aerial survey should be required to map caribou distribution and estimate densities. Two to three days ahead of setting out the receiver and source lines, the area should be monitored by slowly driven tracked vehicles to record within 300' centred on the line center and size of caribou groups – a community observer is essential as well as a seismic employee (the lines are a grid and 660' apart). During the testing and after, daily caribou observations should be recorded within 300' of the lines.

Mitigation: If the mapped area of caribou distribution overlaps the seismic lines about to be surveyed, an alternate set of lines should be sampled. If the sighting rate of caribou along the lines exceeds a threshold (for example 10 caribou/mile), the lines will be delayed until the sighting rate is below the threshold.

4. Summer clean-up flights

Monitoring: The daily locations and distances between the collared caribou should be monitored. The distance between the collars reflects the likelihood of insect-harassment related aggregations. In addition, an aerial survey to map distribution and aggregations should precede the low-level clean-up flights.

Mitigation: If an aggregation of more than 50 caribou is within six miles the flight pathway, the flight should be delayed until at least the following day. If at least two collars are within 100m of each other and within six miles of the proposed flight pathway, the flight should be delayed until at least the following day.