

Phoonswadi-Brewer, Sean

From: NPL_AR
Subject: Comments of BCA on the Normally Pressured Lance project
Attachments: NormallyPressuredLanceScoping Final.pdf

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05/12/2011 02:56
 PM

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To

cc

Subject

Comments of BCA on the Normally
 Pressured Lance project

Dear Ms. Roadifer:

Attached please find BCA's scoping comments for the NPL project. Please put us on the list to receive a hardcopy of the Draft EIS when it is released.

Thanks,

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(See attached file: NormallyPressuredLanceScoping Final.pdf)



Working to Protect Native Species and Their Habitats

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May 12, 2011

Kellie Roadifer, Pinedale Field Office
1625 W. Pine St.
P.O. Box 768
Pinedale, WY 82941

Dear Ms. Roadifer:

The following are the scoping comments of Biodiversity Conservation Alliance on the Normally Pressured Lance project. Please address the issues raised in these comments through your forthcoming EIS for the project.

The Upper Green River Valley has already been impacted by the Pinedale Anticline and Jonah Fields two of the most intensive oil and gas fields in Wyoming. The result of these two projects is that sage grouse within their boundaries are declining markedly, and were expected to be extirpated by 2024 if conditions remained at 2005 levels (Holloran 2005). Conditions for sage grouse have not stayed the same, however; they have continued to deteriorate as more than 1,000 additional wells have been drilled in the Jonah Field since that time with hundreds more drilled in the Pinedale Anticline. The LaBarge Field has resulted in the blocking of an elk migration corridor, according to unpublished research by Dr. Fred Lindzey (Lindzey, pers. comm.). At the same time, mule deer populations wintering in the Pinedale Mesa area have declined by 60%, and pronghorn migrations have been forced to detour around the Jonah Field. Populations of white-tailed prairie dogs, a keystone species in sagebrush ecosystems, have been shrinking in the Pinedale Field Office in recent years. The direct loss and displacement of wildlife from these projects has been serious, but the operators of these fields have always insisted that these fields had a relatively compact footprint on the land, and because other surrounding areas (even though they may be of lower habitat quality, especially in the case of mule deer winter range) remain undeveloped and therefore the wildlife losses resulting from this drilling should be seen as acceptable.

Now, EnCana proposes an additional 3,500 wells across 141,800 acres of land surrounding the Jonah Field. This should trigger the BLM to fundamentally re-assess the scale and scope of oil and gas development in the Upper Green River Valley, and how much more full-field development can be sustained before the BLM can no longer fulfill its multiple use mandate pursuant to FLPMA to provide multiple uses, including wildlife, air quality, and watersheds. It is clear that the cumulative level of air quality impact from drilling and production operations in the Upper Green (without a 3,500-well expansion) is presently leading to levels of air pollution, particularly for ozone, that are illegal under the Clean Air Act. As noted above, wildlife populations have been harmed by the level of development that has already been seen (and maximum development has yet to be reached on both existing fields). Now it appears that the drilling will not indeed be limited to the Anticline and the land between the faults at Jonah, but is expanding into a major basin-centered play that could extend throughout the Upper Green on lands currently under lease or available for future lease. We are concerned that the cumulative level of development in the Upper Green is reaching a tipping point beyond which native wildlife, clean air, and water quality will no longer be maintained.

Phased Drilling

Given the cumulative level of expansion of gas drilling in this area, we recommend that a system of phased development be instituted, in which new lands are not opened to drilling until existing impacted

areas have at least completed final (not interim) reclamation. Leases involved in projects such as the NPL project could be suspended so that the Operator(s) would not have to pay lease rentals during the pendency of the delay. For the NPL project, no more than 25,000 acres should be committed to full-field development at any one time. New acres could be opened for development as a comparable acreage of previously produced lands reach the stage of final reclamation.

Directional Drilling

We are pleased to see that EnCana is proposing to drill this project entirely using directional drilling with multiple wells on a single pad. This company dishonestly told the public and the BLM that they could not do this in the Jonah Field, even after they had drilled 160 directional wells in Jonah. It appears that EnCana is willing to limit surface disturbance to one wellpad per square mile in sage grouse Cores Areas, an admission that this level of well clustering is feasible for the project. Since there is no difference geologically between Core and non-Core lands, the logical question then becomes, ‘Why should BLM permit EnCana four surface locations per square mile outside Core Areas when one wellpad will get the job done?’ While Core Areas contain the best sage grouse habitat for this particular project area, they do not encompass all of the sage grouse habitat, and sage grouse would benefit from capping the surface density to 640-acre spacing outside Core Areas, too. In addition, a myriad of other BLM Sensitive Species are expected to be present in non-Core lands of the NPL project area – pygmy rabbit, sage sparrow, sage thrasher, Brewer’s sparrow, ferruginous hawk, and white-tailed prairie dog, to name a few. Fewer surface locations mean a smaller mileage of roads and pipelines, less habitat fragmentation, less dust pollution, less acreage of disturbance to wildlife, regardless if they are avoiding lands within 0.5 mile of roads, like elk, or within 100m of roads, like sagebrush obligate songbirds.

We are also pleased to see that EnCana intends to do its directional drilling with natural gas powered drilling rigs, so that directional drilling can be accomplished without significant elevation of pollutant levels. This could have been done in the Jonah Field as well, but at the time of that project’s approval, the BLM never considered directional drilling paired with gas-powered drilling rigs, and indeed used the higher emissions of conventional drilling rigs as the excuse not to require directional drilling for that project, citing air quality concerns. We are pleased to see that the BLM is now taking a smarter approach to its permitting of oil and gas projects, at least on this count.

Wildlife

We are concerned that the proposed project will have major impacts to wildlife, over and above the impacts currently being suffered by wildlife populations as a result of current development. Specific concerns follow by species.

Sage grouse. The sage grouse is declining rangewide, and local studies in the Upper Green River Valley have shown that this species is heavily impacted by oil and gas development. Holloran (2005) found that not only do well densities greater than 1 well site per 699 acres have negative impacts on breeding populations at lek sites, but also that producing wells within 1.9 miles of a lek and well drilling activity within 3.1 miles of a lek also depressed lek populations for grouse. In addition, this study documented that oil and gas activity resulted in the depopulation of developed areas and that nesting sage grouse hens tended to disappear over time from developed areas. With this in mind, wellpad density should be capped at no greater than one well per square mile throughout the project area, and surface disturbing activities should be prohibited within 3 miles of active or recently active sage grouse lek sites.

White-tailed prairie dogs. White-tailed prairie dogs have declined markedly in the Upper Green River Valley over the course of recent decades, and remaining active prairie dog colonies should be zealously protected by BLM so that their recovery and expansion to historical levels can occur. Not only are they

BLM Sensitive Species, but they are also a keystone species upon which many other types of sensitive wildlife (such as mountain plover, burrowing owls, and ferruginous hawks) depend to a significant to almost total degree. Prairie dog colonies need to be mapped and population trends should be established in the forthcoming EIS to fulfill NEPA baseline information requirements, and mitigation measures should be applied preventing road construction or well development within ¼ mile of active colonies, and preventing powerline siting within ½ mile of active colonies.

Mountain plovers. BLM should map occurrences and nesting habitat for mountain plovers within the project area and avoid the development of roads or wellpads within ½ mile of identified nesting habitats. Roads and wellpads may become population sinks for mountain plover, which can be attracted to these as feeding sites to be killed by collisions with motor vehicles.

Pygmy rabbits. BLM should survey the project area for population size and trend as well as occurrences of burrows and scat in order to satisfy baseline information requirements. Identified pygmy rabbit habitat should be avoided by at least ¼ mile for the purpose of well siting, and the continuity of suitable pygmy rabbit habitat (i.e., tall sagebrush along draw bottoms and in other localities) should be maintained in an unfragmented state: road systems should be designed to minimize the number of crossings of pygmy rabbit potential habitat. This species is heavily affected by habitat fragmentation by roads, which may present complete barriers to movement, dispersal, and breeding connectivity.

Elk. BLM should evaluate areas in the NPL project area which are crucial winter range for elk, and these lands should be excluded from surface-disturbing activities.

Mule Deer. We are concerned that this project will have direct and cumulative impacts on mule deer herds, and that currently used winter ranges and migration corridors will suffer unacceptable impacts as a result. BLM should analyze mule deer habitat use throughout the project area and exempt crucial ranges and migration corridors from surface-disturbing activities.

Pronghorn. We are concerned that the expansion of the Jonah Field into the NPL project area will interrupt migrations and degrade the crucial habitats for pronghorn, particularly the herd that migrates from Grand Teton National Park to Seedskaadee NWR, the second-longest land mammal migration in North America. A great deal of effort has gone into the protection of other parts of this migration corridor, particularly in the Bridger-Teton national Forest and at Trapper's Point, in addition to private-lands conservation work north of U.S. Highway 191. It would be wasteful for BLM to approve a project that creates an industrial swath across the migration route, especially given that the pronghorn are already being displaced to detour around the Jonah Field. BLM should manage a swath at least two miles wide centered on the migration corridor for pronghorn migration, and exclude project roads and wellpads from this corridor. Simply shutting down human activity during the migration season is not enough. Wintering and fawning areas as well as migration corridors intersecting the project area should be mapped and analyzed, and these areas should be withdrawn from eligibility for surface-disturbing activities.

Raptors. The typical BLM stipulations for nesting raptors hinge upon Timing Limitations that extend from 800 to 1500 feet from raptor nests. These are inadequate to protect nesting raptors on two counts. First of all, the buffer size is too small: Two-mile buffers should be applied for nests used by the extremely sensitive ferruginous hawk, while one-mile buffers should be applied for other birds of prey. Secondly, the timing limitation stipulation is itself flawed because it allows wells to be constructed adjacent to raptor nest sites as long as construction/drilling activities are conducted outside the nesting season. Under these stipulations, once raptors return to nest sites following well construction, they are subjected to disturbance from vehicles and human presence likely to flush nesting birds from the nest and

expose eggs or nestlings to death by overheating, cooling, or dehydration. No Surface Occupancy measures are the appropriate mitigation measure in the case of lands in close proximity to active or recently active raptor nests

Native fishes. We are concerned about the direct and cumulative impact of the project on native fish populations, particularly Colorado River cutthroat trout, roundtail chub, bluehead sucker, and flannelmouth sucker. We are concerned that spills of chemicals will make their way into local waterways. We are concerned that construction of roads and wellpads in close proximity to streamcourses will result in sedimentation that will choke spawning gravels and change stream morphology. The impact of this project on Green River fisheries deserves careful analysis.

Rare plants

The project area should be surveyed for rare plants (BLM Sensitive, or labeled G1, G2, G3, S1, or S2 by NatureServe or the Wyoming Natural Diversity database). Mitigation measures should be put into place to prevent surface disturbance from destroying or reducing rare plant occurrences, or promoting an increase in dust pollution that would have an adverse effect on plants occurring directly adjacent to roads or wellpads.

Air Quality

BLM should do a complete analysis of direct and cumulative effects of the project to air quality in the project area and surrounding region. This analysis should incorporate all air quality monitoring and ongoing scientific experiments that are occurring in the Upper Green River Valley, including those underway in the Pinedale Anticline and Jonah Fields and the neighboring Bridger-Teton National Forest.

Ozone pollution is currently exceeding Clean Air Act standards in the developed fields to the east. The impact of additional ozone pollution and ozone precursors from the NPL project needs to be evaluated. We are concerned that the current Labarge Field may be a large source of methane leaks, volatile organics compounds (VOCs), and other pollutants due to the advanced age (and potentially poor repair) of oil and gas infrastructure there. Ozone precursors wafting off the condensate tanks to the Jonah and Pinedale Anticline Fields also pose problems. Mitigation measures for direct and cumulative impacts to air quality should include a complete evaluation of pollutant leaks in the existing fields and fixing present sources of pollutants so that overall airborne pollution is minimized.

We are concerned about visibility impairment due to additional pollutants in the Wyoming Range, the Wilderness Areas of the Wind River Range, the Red Desert BLM WSAs such as Buffalo Hump, Sand Dunes, Whithorse Creek, Oregon Buttes, Pinnacles, Honeycomb Buttes, and Alkali Draw (which are downwind of the project area) and also in Jackson Hole and the National Parks that border it. Mitigation measures that minimize these pollutants should be required.

The greenhouse gas emissions from this project, both direct and cumulative, need to be analyzed fully and mitigation measures will be needed to minimize these emissions. Such mitigation measures should include at minimum piping of condensate in order to minimize VOC emissions at condensate tanks.

Water Quality

We are concerned about impacts to water quality from chemical spills, runoff from roads and wellpads, disturbance on unstable soils and/or steep slopes leading to stream sedimentation, contamination from well blowouts or improper completions, and contamination of groundwater from toxic fracking fluids. In order to satisfy the 'hard look' analysis of impacts pursuant to NEPA, the BLM must fully disclose the

chemical constituency of any and all fracking fluids and drilling muds and their potential impacts on human health, vegetation, and wildlife.

Historic Trails

It is unclear how close this project comes to the Lander Cutoff of the Oregon Trail, and what other historic sites, such as rendezvous sites and prehistoric/protohistoric archaeological sites, may be involved with this project area. Historic trails and sites eligible for the National Register of Historic Places should be given a wide berth, and wellsites should not be sited within 5 miles of such sites (this is the foreground/middleground distance for the setting, which is federally protected under the NHPA). A variety of tribes, including the Shoshone, Arapaho, Lakota, Bannock, Comanche, and Ute should be consulted to identify Traditional Cultural Properties and strong and appropriate protections can be developed for such sites.

Habitat fragmentation

This project is proposed for a large swath of currently unfragmented sagebrush habitat. Serious habitat fragmentation resulted from the Jonah and Pinedale Anticline developments, and 4 wellpads per square mile in part of this project area would also amount to major habitat fragmentation. BLM should also be analyzing impacts of this project on a regional scale, analyzing core habitat areas and connecting wildlife corridors that maintain dispersal ability and migration routes.

Reclamation and invasive weeds

We are concerned that the reclamation track record in this area is very poor, and even reclaiming wellfield disturbances back to historic BLM standards (which are very weak) is not occurring in neighboring areas such as the Jonah Field. Returning sagebrush habitat to its natural state is likely to take 100 years or more, and that assumes that sagebrush takes root relatively immediately, which is not typically the case in this area. We are concerned that this project will contribute to the spread of noxious weeds including halogeton and kochia, which have a history of proliferating in oil and gas fields in this part of Wyoming. Once these weeds take root on roads and wellpads, they begin to spread into surrounding areas not subjected to surface disturbance. Mitigation measures will need to be provided to ensure that the threat of noxious weeds is minimized.

Cumulative Impacts

BLM will need to analyze cumulative impacts of the Normally Pressured Lance Project together with other industrial projects/impact sources in neighboring lands, including but not limited to: the existing Labarge oil field, the Riley Ridge field, scattered wildcatting wells along the flanks of the Wyoming range, the South Piney Coalbed Methane Project (which is reasonably foreseeable because it is also in the NEPA process), the Jonah and Pinedale Anticline Fields, the Moxa Arch Field, ExxonMobil's Shute Creek plant, and the Viva Naughton coal-fired power plant. Impacts to water quality and quantity should include potential impacts of coalbed methane development, water development and dam projects including the Million Conservation Resource Group transbasin diversion, and potential oil shale development in the area.

Range of Alternatives

The EIS should include a broad range of reasonable alternatives, including the following:

1. Capping the density of surface well sites at one wellsite per square mile. Directional drilling is in widespread use in the Upper Green River Valley, and Questar is drilling more than 50 wells directionally from a single wellpad. There is no excuse for the BLM to allow well surface densities greater than one pad per square mile, given the capabilities of the technology. It is true that in the Jonah Field, initial drilling results indicated that 13% of directional wells experienced some type of difficulty in drilling, and largely as a result of remediating these problems well costs were 10% higher for directional wells than for vertical wells. This is a small premium for oil and gas operators to pay to achieve something that more closely approaches multiple use in the context of full-field oil and gas development. Since EnCana is prepared to drill at this surface density in Core Area portions of the Project Area, why not set the bar at this level for the entire project?
2. Displacing surface disturbance from sensitive wildlife habitats. Sensitive wildlife habitats such as big game crucial ranges and sage grouse nesting habitats should be avoided; the gas and oil resources underneath them will still be available for production via the use of directional drilling.
3. Requiring green completions. Needless waste of natural gas through venting and flaring can be avoided by requiring green completions, thereby reducing air pollution and greenhouse gas production.
4. Require piping of condensate and central collection facilities rather than wellsite condensate tanks. This reduces truck traffic associated with trucking the condensate (thereby reducing to some degree disturbance to wildlife), and also reduces emissions of VOCs from condensate tanks.
5. Require well telemetry and reduce wellsite visits for the purpose of well tripping. The reduction of truck traffic would further reduce disturbance to wildlife and dust pollution.
6. Require closed-loop drilling in lieu of reserve pits. This reduces the size of individual wellpads and thereby reduces the overall surface disturbance of the project.

Thank you for addressing the issues raised in these comments, and we will look forward to seeing the forthcoming Draft EIS when it is released. Please send it to us in hardcopy rather than on CD-ROM.

Respectfully yours,

A handwritten signature in blue ink that reads "Erik Molvar". The signature is fluid and cursive, with a long horizontal stroke at the end.

Erik Molvar
Wildlife Biologist