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February 11, 2008

Submitted via email to: WYMail_PAPA_YRA@blm.gov

Mr. Caleb Hiner, Project Lead
 Bureau of Land Management
 Pinedale Field Office
 1625 West Pine Street
 P.O. Box 768
 Pinedale, WY 82941

Re: Comments on the Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project

Dear Mr. Hiner:

The following comments on the Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project (Revised DSEIS) are submitted on behalf of the National Wildlife Federation (NWF) and the Wyoming Wildlife Federation (WWF). In addition, as members of the Upper Green River Valley Coalition (UGRVC), NWF and WWF join in the comments filed by UGRVC.

INTRODUCTION

The Revised DSEIS includes two new alternative scenarios for expanded oil and gas development on the Pinedale Anticline. Alternative D, which is the result of “negotiations” between industry proponents and the Wyoming Game and Fish Department (WGFD), is now identified as the Bureau of Land Management’s (BLM’s) “Preferred Alternative”. Alternative E, which is a modification of Alternative D, is

described in the Revised DSEIS as the “Conservation Alternative”. NWF and WWF believe that neither of these alternatives meets the objective of conserving wildlife populations and habitat on public lands and other multiple uses in the face of intense energy development.

Wildlife, specifically mule deer, pronghorn, and sage-grouse, have already been severely harmed by the existing development within southwest Wyoming. For example, a study conducted on the Pinedale Anticline has shown that pronghorn exposed to oil and gas development had only 69.3 percent survival rates while those not exposed to natural gas development had 95 percent survival rates.¹ *Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project* (December 2006) [Pinedale Anticline DSEIS] at 3-108.

According to research by WEST, Inc. (Sawyer *et al.* 2005, Sawyer *et al.* 2006) there is a “consistently declining” mule deer population on crucial winter ranges on the Mesa portion of the Pinedale Anticline. Pinedale Anticline DSEIS at 3-111. There has been a “disconcerting” 46 percent decline in the mule deer abundance on the Pinedale Anticline since natural gas development intensified in about 2000, with no similar decline in the control area not subject to natural gas development. Sawyer *et al.* 2005 at 45. This decline is not explained by the deer simply “moving somewhere else.” Evidence shows the deer are not using alternative habitats and they are not emigrating in substantial numbers. *Id.* See also Sawyer *et al.* 2005 at 46 (reduced over-winter fawn survival and lower adult survival coupled with limited emigration likely explain the decline in mule deer abundance); Sawyer *et al.* 2006 at 6-18, 6-20 (same, and “The weight of the evidence suggests the observed deer decline in the treatment area was due primarily to reduced survival rates associated with [natural gas] development activities and secondarily to limited amounts of emigration”).²

The picture for sage-grouse is no less grim. There is evidence of a long-term declining sage-grouse population and of lek abandonment. Pinedale Anticline DSEIS at 3-115. The number of male birds attending leks that were heavily impacted by natural gas development “declined by 52 percent” from one year prior to well development through 2004. Pinedale Anticline DSEIS at 3-117.³ The work of Matthew Holloran on the Pinedale Anticline has also shown that existing oil and gas development is causing “yearling females [to] select nesting locations farther from haul roads and active drilling

¹ While this difference was not statistically significant, the magnitude of this difference cannot be ignored. It seems likely that if the sample sizes were increased or other experimental design features for the control or assessment of variation were implemented mean differences of this magnitude would almost certainly be deemed very real, that is, statistically significant. A difference in mean values of this magnitude cannot be dismissed just because statistical significance has not been shown yet.

² See Comments of A. William Alldredge on the Draft Resource Management Plan and Environmental Impact Statement for the Pinedale Resource Area (Pinedale RMP DEIS) at 4.

³ Citing the work of Matthew Holloran. See Pinedale Anticline DSEIS at 6-7. See also *id.* at 6-8 (providing citation to another study of sage-grouse on the Pinedale Anticline done by R.C. Kaiser).

rigs, suggesting the long-term response of nesting females is avoidance of development areas [].” Pinedale Anticline DSEIS at 3-118. BLM goes on to acknowledge that “[u]nder all alternatives, effectiveness of greater sage-grouse breeding (leks), nesting, and brood-rearing habitats would continue to decline, as they have through 2006.” *Id.* In fact, “it is uncertain if habitats would still provide some function to greater sage-grouse by 2023.” *Id.*

The wildlife impacts described above are the result of what BLM described as the “Resource Protection (RP) Alternative” for oil and gas extraction on the Pinedale Anticline. Development on the Pinedale Anticline was supposed to be a demonstration of how oil and gas production could be completed in a responsible manner that would conserve wildlife and wildlife habitat. In its Record of Decision, BLM promised that it would monitor the wildlife impacts on the Anticline and adapt its management of oil and gas operations accordingly. Despite the growing evidence that wildlife is suffering what may be irreparable losses, BLM’s “adaptive management” response thus far has been to propose authorizing more development on the Anticline.

The Preferred Alternatives in both the Pinedale Anticline DSEIS and the Revised DSEIS include “Best Management Practices” (BMPs), such as directional drilling, clustered infrastructure, and phased development that are intended to reduce the spatial footprint of energy development on the Anticline. They do so, however, at the expense of eliminating timing stipulations and allowing drilling to take place during the most vulnerable seasons of the year for big game and Greater sage-grouse.⁴ NWF and WWF are encouraged to see these BMPs included in development plans for the Anticline.⁵ However, NWF and WWF believe that these BMPs should be standard requirements for drilling on public lands, especially in important wildlife habitats. Under the Federal Land Policy and Management Act (FLPMA), BLM has an obligation to conserve wildlife habitat and to prevent “undue and unnecessary” degradation of other public lands resources. These BMPs represent reasonable measures to achieve those obligations. BLM should not be in the business of “horse-trading” with industry proponents for what BMPs they will or will not accept in exchange for relief from provisions in the leases

⁴ WGFD has submitted comments calling on BLM to grant exceptions to timing stipulations for raptors as well. NWF and WWF strongly urge BLM to retain the raptor stipulations. All raptors are protected under provisions of the Migratory Bird Treaty Act enforced by the United States Fish and Wildlife Service (USFWS); in addition, eagles are protected under the Bald and Golden Eagle Protection Act also enforced by USFWS. Neither BLM nor WGFD can waive compliance with these federal statutes and exempt the industry proponents from prosecution for violations.

In addition, BLM’s own strategy on raptor habitat management requires the development of “standardized raptor stipulations for various land-use actions that minimize effects of various multiple uses and projects on birds of prey.” BLM, *Raptor Habitat Management* (August 1992) at 25.

⁵ Thus far, not all of the industry proponents have agreed to participate in a liquids gathering system. NWF and WWF urge BLM to require this BMP project-wide. Thousands of vehicle trips on the Pinedale Anticline could be eliminated and reduce stresses on wildlife, particularly during critical times of the year for both big game and sage-grouse.

they once agreed to accept.⁶ NWF and WWF believe that given the wildlife losses already occurring on the Anticline, BLM should require these BMPs in addition to existing timing stipulations.⁷ See Comments submitted by A. William Alldredge, Ph.D. on the Revised DSEIS.

Also, in exchange for blanket exceptions from the timing stipulations contained in their leases on both the Core Development Area (CDA) and the Potential Development Area (PDA), the industry proponents have agreed to forego new drilling on approximately 49,903 acres on the flanks of the Anticline for five years. While five years may seem like an eternity to the industry proponents, it represents less than a tenth of the estimated time required to restore the sagebrush communities that will be bladed bare for roads, well pads, pipelines, and other infrastructure in the CDA and PDA.⁸ Moreover, not all drilling on the flanks will be suspended. Again, these are measures BLM has the authority to require without making trade-offs. BLM is authorized to suspend leases in the interest of conservation. 30 U.S.C. § 209. There is no requirement that industry proponents consent to lease suspensions and there is no legal impediment to suspension of producing leases. The courts have recognized BLM's broad authority in this regard. See *Copper Valley Machine Works, Inc. v. Andrus*,² 653 F.2d 595 (D.C. Cir. 1981); *Getty Oil Co. v. Clark*,² 614 F. Supp. 904 (D. Wyo. 1985). Moreover, suspending all leases on the flanks would be more consistent with the phased development scenario proposed in Alternative D. Allowing a patchwork of suspensions that leave many areas of the flanks open to development while the CDA and PDA undergo massive development is not in keeping with the stated goals of BLM's Preferred Alternative. In addition, provision should be made to ensure that lease suspensions are in place for more than five years. Lease suspensions should remain until drilling is complete in the CDA and PDA and at a minimum until all habitat functions there have been restored.⁹

⁶ The industry bids on these leases were discounted to reflect the stipulations BLM now proposes to waive.

⁷ Industry proponents argue that the BMPs cannot work in conjunction with timing stipulations. While NWF and WWF agree that the proponents' drilling plan for the Anticline will take longer and will require moving drill rigs on and off pads more frequently if timing stipulations remain in effect, it is unclear why this renders the other components of the plan (phased development, directional drilling, and clustered facilities) inoperable. One explanation provided to NWF is that the industry proponents "cannot lease the best drill rigs" without entering into two and three year contracts. However, the fact that the current gas boom has outstripped the availability of rigs should not be the determining factor in whether wildlife receives adequate protection on the Pinedale Anticline.

⁸ The five-year suspensions are even inconsistent with final reclamation criteria for forbs. Those criteria require that density and diversity of forbs be equal to the "reference site" within eight years. Revised DSEIS at 8D-4. Does BLM intend to release lease suspensions before coneflower and vetch, much less sagebrush, are restored to the CDA?

⁹ NWF and WWF note that the Revised DSEIS suggests that the lease suspensions may continue for longer than five years. See, e.g., Revised DSEIS at 4-161 ("The federal suspended and term NSO leases coincide with 16,954 acres of big game crucial winter range and 37,019 acres within 2-mile buffers of greater sage-grouse leks. In these areas, impacts to big game and greater sage-grouse would be reduced at least for the first five years and would continue until habitat function is again available in the Alternative D Core Area, as determined during the Annual Planning Meeting."); see also *id.* at 8D-5. However, the document lacks a set of defined criteria for habitat function. Appendix 8D, for example, appears to state that the availability

SPECIFIC COMMENTS

In addition to the request that BLM's final decision include the proposed BMPs in addition to timing stipulations and suspension of all leases on the flanks, NWF and WWF also urge BLM to incorporate several other changes in its Preferred Alternative including additional protections for Greater sage-grouse and improvements in the monitoring and off-site mitigation plan for this project as well as elimination of the PDA.

Greater Sage-grouse Protections

BLM itself has designated the Greater sage-grouse as a "sensitive" species.¹⁰ In doing so, the agency made a commitment to use "all methods and procedures which are necessary to improve the condition of special status species and their habitats to a point where their special status recognition is no longer warranted." BLM Manual 6840 at .01. The Preferred Alternative fails to meet these commitments. Indeed BLM admits that:

[c]ontinued loss of habitat function is likely with levels of development under all Alternatives Under all Alternatives, the effectiveness of greater sage-grouse breeding (leks), nesting, and brood-rearing habitats would continue to decline, as they have through 2007 With the declines in greater sage-grouse use of the [Pinedale Anticline Project Area], it is uncertain if habitats would still provide some function to greater sage-grouse by the end of the development phase under all action Alternatives.

Revised DSEIS at 4-153.

Scientific data has shown that even a minimal level of development within 3-5 km of a sage-grouse lek negatively influences breeding activity. In fact, recent information from a doctorate dissertation on the impacts of oil and gas development to Greater sage-grouse in the Pinedale Anticline revealed that, as development increased, lek activity declined up

of sustainable forage for livestock is sufficient to release the lease suspensions. *Id.* at 8D-5.

¹⁰ Sensitive species are those species that:

(1) could become endangered in or extirpated from a State, or within a significant portion of its distribution; (2) are under status review by the FWS and/or NMFS; (3) are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution; (4) are undergoing significant current or predicted downward trends in population or density such that federal listed, proposed, candidate, or State listed status may become necessary; (5) typically have small and widely dispersed populations; (6) inhabit ecological refugia or other specialized or unique habitats; or (7) are State listed but which may be better conserved through application of BLM sensitive species status.

BLM Manual 6840 (Glossary of Terms at 8).

to 100%. Holloran (2005). Based on these findings, both Holloran (2005) and Connelly *et al.* (2000) recommend implementing at least a 5 km buffer around active sage-grouse leks.¹¹

Despite these recommendations, a ¼-mile NSO buffer around known sage-grouse leks remains BLM’s mitigation measure of choice in Wyoming. NWF and WWF do not believe that this buffer is adequate to conserve Greater sage-grouse and their habitat. The United States Fish and Wildlife Service repeatedly has stated that this ¼-mile buffer should not be considered as appropriate mitigation for sage-grouse.¹²

W-3
EG-3-3
We strongly suggest that BLM review the sage-grouse mitigation measures proposed in other western states. For example, the State of Colorado is revising its sage-grouse conservation strategy. The ¼-mile NSO buffer for leks is not part of that proposal.¹³ Instead, Colorado’s Division of Wildlife has proposed a buffer of 0.6 miles. *See* Draft Colorado Greater Sage-grouse Conservation Plan, Appendix B at B-6 (June 15, 2007) [available at <http://wildlife.state.co.us/WildlifeSpecies/SpeciesOfConcern/Birds/GreaterSagegrouseConservationPlan.htm>]. The State of Montana’s Fish Wildlife and Parks Department has pushed to expand closed areas to four miles for the seasonal restrictions and one mile for the year-round closures.

W-4
W-5
EG-3-4
Based upon the recent memorandum analyzing the most recent research on sage-grouse written by Tom Christiansen and Joe Bohne of the Wyoming Game and Fish Department (WGFD), no more than one well pad per section should be permitted within two miles of sage-grouse leks. In addition, seasonal stipulations should apply from March through June in mapped breeding habitats or within four miles of active leks and NSO buffers should be applied to wintering habitats. Memorandum on Multi-State Sage-Grouse Coordination and Research-Based Recommendations (January 29, 2008) [copy attached to these comments].

Monitoring Matrix

BLM has now provided in Appendix 10 a “Wildlife Monitoring and Mitigation Matrix” (Matrix) that would establish thresholds and management responses if impacts from development in the CDA and PDA overwhelm the initial level of required mitigation.

¹¹ While NWF and WWF support the efforts of the Sage-grouse Working Groups, BLM’s management of this sensitive species ultimately must be guided by the best science.

¹² *See* Comments filed by the United States Fish and Wildlife Service on the Decision Record for the Red Rim POD (Quarter mile NSO “should not be considered a mitigation measure.”).

¹³ Included in the Colorado’s draft Greater Sage-grouse Conservation Plan is an interesting discussion of the history of the ¼-mile buffer. According to this document, “[t]he BLM started using the ¼ mile distance, for lack of anything better . . . back in the 1960’s.” Colorado Greater Sage-grouse Conservation Plan, Appendix B at B-6 (June 15, 2007). In the four decades since this guideline was adopted, sage-grouse populations have continued to drop.

W-6

EG-3-5

However, this Matrix is still too bare-boned. There should be additional thresholds measured and those thresholds should be more incremental. *See* Comments of A. William Alldredge, Ph.D. on the Revised DSEIS. Waiting for an additional fifteen percent across-the-board drop in mule deer populations before acting will be too late.¹⁴

Potential Development Area

In Alternative D, BLM has added a half-mile wide expansion of the CDA referred to as the Potential Development Area (PDA). Revised DSEIS at 4-46 (Map 2.4-7). This provision would potentially add 24,875 acres to the 45,415 acres of the CDA, making the total area of intense disturbance 70,290 acres or thirty five percent of the Pinedale Anticline Project Area.¹⁵ The sole explanation provided for the inclusion of this additional acreage is to avoid “a second development pass” through the PDA. NWF and WWF would be more inclined to accept this explanation if there was any indication in the document that during this first “pass” the gas beneath the Anticline would be substantially produced. However, industry proponents estimate that this “pass” will extract only about 50 percent of the gas reserve. So, when the industry proponents figure out how to get the other half, NWF and WWF anticipate the proponents will be back seeking to drill again. Nothing in the document or in BLM’s past behavior leads NWF and WWF to believe that the industry proponents will be precluded from doing so.

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EG-3-6

Although the document states that for purposes of the analysis of environmental impacts, “it is assumed that year-round development would occur in the PDA,” Revised DSEIS at 2-45, the Revised DSEIS utterly fails to assess the impacts of including the PDA. For example, the document repeatedly states that the amount of surface disturbance will be the same for Alternative D as for Alternatives B and C which do not include the PDA.¹⁶ The Revised DSEIS states that number of well pads, the well pad perimeters, and the road miles will be exactly the same with or without the PDA. Revised DSEIS at 4-147 (Table 4.20-1). According to BLM, “[l]evels of habitat fragmentation (edge length) and disturbance in sagebrush steppe would also be the same” Revised DSEIS at 4-161. It is difficult to imagine how this can be an accurate description of the impact of

¹⁴ *See also* Comments of the Wyoming Fish and Game Department on the Draft Environmental Impact Statement for the Atlantic Rim Natural Gas Development Project at 2 stating that a similar wildlife monitoring plan “will not be effective in detecting changes to the various wildlife populations.”

¹⁵ The CDA under Alternative D is already 23 percent larger than was proposed in BLM’s Preferred Alternative in the Pinedale Anticline DSEIS (45,415 acres versus 39,678 acres).

¹⁶ NWF and WWF note that the Revised DSEIS appears to try to avoid mentioning the additional acreage potentially impacted in the PDA by including figures for “initial” surface disturbance only. *See, e.g.*, Revised DSEIS at 4-149 (Table 4.20-2 “Initial Surface Disturbance in Relation to Pronghorn Seasonal Ranges by Alternative” and Table 4.20-3 “Initial Surface Disturbance in Relation to Mule Deer Seasonal Ranges by Alternative”); *id.* at 4-152 (Table 4.20-4 “Initial Surface Disturbance to Moose and Elk Seasonal Ranges by Alternative”); *id.* at 4-153 (Table 4.20-5 “Initial Surface Disturbance to Greater Sage-Grouse Lek Buffers by Alternative”).

increasing the permitted area of intensive year-round development on the Anticline by more than 50 percent.¹⁷

Monitoring and Mitigation Fund

Alternative D assumes the creation of a “Monitoring and Mitigation Fund” of up to \$36 million for the purpose of “monitoring and mitigation”. While NWF and WWF appreciate this gesture on the part of the industry proponents, there is not enough information in the Revised DSEIS to determine whether this fund can or will accomplish anything on the ground for wildlife.

NWF and WWF are concerned about the reliance on off-site mitigation and trust accounts as a way to authorize the habitat losses associated with intensive energy development. The Revised DSEIS should acknowledge that off-site mitigation is inappropriate for some habitat losses. There is no “effective” mitigation for some habitat losses resulting from the “unavoidable” impacts of oil and gas development. BLM acknowledges in the Final Environmental Impact Statement for the Jack Morrow Hills Coordinated Activity Plan (JMHCAP FEIS), for example, that it may be impossible to reclaim some sagebrush habitats. JMHCAP FEIS at 4-74. Migration corridors for big game have been lost permanently to development. Animals are driven off of crucial ranges onto habitats that will not support them. Moreover, no off-site mitigation proposal should be accepted without a thorough assessment of: 1) the availability of other habitat, 2) the feasibility of long-term restoration/enhancement/protection of alternative habitat, and 3) the adequacy of funding to sustain the alternative habitat for the life of the project (including time required for final reclamation standards to be achieved). We have seen other examples where industry has offered to “throw some money” at the problem without any analysis of the extent of the wildlife impacts or the availability of effective mitigation remedies.

NWF and WWF are particularly concerned about the mitigation fund proposed in the Revised DSEIS. As presently described, the money could be spent merely monitoring the continued decline of wildlife species on the Pinedale Anticline. See Revised DSEIS at 2-52. Monitoring the impacts of this project is the responsibility of BLM and the industry proponents so that adaptive changes in management can be pursued. The money in this fund should be used instead to achieve on-the-ground long-term improvements in wildlife habitat in order to compensate for the unavoidable losses resulting from this project. The final decision on this project must include a much more detailed discussion of what can and should be accomplished with this fund. BLM needs to conduct a thorough analysis of the availability and cost of effective compensatory mitigation for the impacts of this project on the Anticline’s wildlife. Based upon the amount of energy development, both existing and proposed, within southwest Wyoming as well as other stresses on wildlife habitat such as livestock grazing, subdivisions, and invasive species,

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MF-2

MF-3

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MF-4

¹⁷ Nothing in Alternative D requires the industry proponents to drill the PDA directionally via well pads already located in the CDA.

it cannot be assumed that suitable alternative habitats will be available over the life of this project and its long-term impacts.

NWF and WWF are encouraged to see land and lease acquisitions as potential mitigation measures funded under the Preferred Alternative. The preservation of wildlife habitat by acquisition of fee title, conservation easements, grazing leases, and existing oil and gas leases are important elements of any effective long-term strategy to preserve wildlife habitat. In many cases, these may provide the only permanent solution to conflicts between the needs of wildlife and other uses. Where an agreement can be reached with willing sellers that will benefit wildlife and help mitigate impacts to habitat, this should be an available option.

CONCLUSION

The underlying premise on which BLM's Preferred Alternative is based is that intense, concentrated, year-round development will have fewer impacts than a more moderate, tempered pace of development that limits activities in wildlife crucial areas or during critical periods of time for wildlife. There is, however, nothing in the Revised DSEIS, nor does BLM cite to any science, that supports this premise. NWF and WWF do believe that current research clearly indicates that reducing the spatial footprint of energy development is an important factor in whether wildlife can be conserved. NWF and WWF strongly support the BMPs in Alternative D that phase development and cluster infrastructure. We urge BLM to include these measures in its final Record of Decision.

Thank you for considering these comments.

Sincerely,



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