



Working to Protect Native Species and Their Habitats

P.O. Box 1512, Laramie, WY 82073 (307) 742-7978 fax: 742-7989

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State Director
Bureau of Land Management
P.O. Box 1828
Cheyenne, WY 82003-1828

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BY: LB 3:34

(307)-775-6203

VIA FAX 307-775-6203.

Protest of BCA et al. on the High Plains and Bighorn basin August 2011 Lease Sale

Dear State Director:

The following is the protest of Biodiversity Conservation Alliance, Natural Resources Defense Council, and Californians for Western Wilderness on the August 2011 Lease Sale for the Wind River/Bighorn Basin District and the High Plains District. Please address these issues prior to rendering a decision as to which parcels to include and which to defer under the August 2011 Competitive Oil and Gas Lease Sale.

Wilderness

Parcels 82 and 83 fall within the Cedar Mountain South proposed addition to the Cedar Mountain WSA. BLM has determined this area to possess size and naturalness but not solitude or outstanding opportunities for primitive or unconfined recreation. Because BLM's rationale for reaching the determination that the area does not have solitude or outstanding primitive recreation was flawed, BLM needs to revisit this analysis and defer these parcels during the pendency of that reanalysis. This unit was found to contain naturalness and size but not solitude/outstanding primitive recreation opportunities by the BLM's Inventory of Multiple Use Lands with Wilderness Characteristics (Worland Field Office). However, BLM as much as concedes that these parcels do in fact contain either solitude or outstanding opportunities for primitive and unconfined recreation for much of the year, and given that this unit adjoins the existing Cedar Mountain WSA, the presence/absence of these qualities should be mapped prior to leasing in this unit, so that areas that may possess the full suite of wilderness qualities can be deferred pending analysis for 'Wild Lands' eligibility. The deferral of parts of Parcel 82 that fall within a sage grouse Core Area does not address these concerns about potential impacts to lands that possess wilderness character.

In fact, BLM's analysis for the parcel indicates for solitude that it has "Intense hunting, seasonal ATV use." BLM Inventory at unnumbered 6. This indicates that for most of the year, outside the hunting season, solitude is likely to be found in abundant supply. The idea that heavy use during one part of the year would disqualify an area for wilderness protection is unsupportable – indeed, many designated wilderness areas experience very heavy use (e.g., Mistymoon Lake in the neighboring Cloud Peak Wilderness), yet are legally recognized to possess wilderness qualities. It is also unclear for BLM's wilderness analysis the nature of the "seasonal ATV use." Is this legal ATV use, on existing vehicle routes? The map provided with the BLM's wilderness inventory shows only routes that might potentially be open to motorized use; if there is illegal ATV use occurring in this area, it would be preferable for BLM to enforce its own regulations restricting motorized use to existing routes, rather than use any illegal ATV activity that is occurring in the absence of enforcement as a justification for discounting the solitude of the area for even part of the year. If this is the case, BLM should enforce its regulations, and with ATVs restricted to existing routes, there are vast areas of this unit where a visitor on foot or horseback could find solitude (indeed, the entire Coal Draw and Freeman Draw watersheds appear to have no existing motorized routes at all). In any event, if as it appears from BLM's inventory the intense hunting and ATV use in this area are only occurring for a couple of months out of the year, leaving the area filled with solitude during the remaining months, then solitude is indeed present in the unit, completing the full complement of wilderness characteristics required to consider the area for Wild Lands designation (or indeed, any other administrative designation that protects the area's wilderness character). On this basis alone, the parcels in question should be deferred.

The BLM's analysis of this unit also possesses a second fatal flaw: Under "outstanding opportunities for primitive and unconfined recreation," BLM concluded "No." Id. However, under "Solitude," BLM lists "Intense hunting," indicating that this area possesses extremely high levels of hunting activity. Hunters "vote with their feet," congregating in greatest numbers in areas that have the most outstanding hunting opportunities. Hunting can be (and often is) considered a form of primitive and unconfined recreation; witness the substantial numbers of hunters who employ guides at thousands of dollars per week for the experience of hunting inside designated wilderness areas, as well as the popularity of "walk-in" areas designated by WGFD in cooperation with private landowners for hunting in a primitive and unconfined manner. Clearly, this unit does offer outstanding opportunities for hunting, a form of primitive and unconfined recreation, or else the "intense" level of recreational activity noted by BLM in its inventory during hunting season would not occur. These parcels should be deferred pending RMP revision.

We appreciate BLM's intention not to lease portions of Parcels 60, 79, and 86 that intersect with lands with wilderness character according to BLM's inventory. BLM has determined that these units possess the full suite of wilderness characteristics in its Inventory of Multiple Use Lands with Wilderness Characteristics (Worland Field Office). The removal of portions of these parcels that intersect with this citizens' proposed wilderness unit pending analysis and consideration for "Wild Land" status under the RMP is warranted. We strongly agree with BLM's proposal to do just that. Even though Secretary Salazar has directed BLM not to make any "Wild Land" designations, BLM has the authority to protect wilderness characteristics and should do so here.

These parcels will hereinafter be referred to as the Special Values Parcels. Because all of these parcels lie in or very near Citizens Proposed Wilderness areas or BLM Wilderness Study Areas they clearly have special values, such a wildness and remoteness characteristics and the ecological services typical of such areas (such as greater biological diversity and better water quality), even if BLM does not recommend them for wilderness designation. The fact that BLM did not recommend CWP areas for wilderness designation does not change these special and unique wilderness values. We are certain BLM is well aware of these special values, as well as the WSA areas it has recommended for wilderness designation.

The impacts to these wilderness-quality lands has not been analyzed thoroughly, either in the EA, or in RMP-level NEPA documents thus far. If the EA had come with an adequate field analysis, these issues with BLM's initial wilderness inventory, listed above, would have come to light and have had an opportunity to have been dealt with. However, the BLM's description of Affected Environment lists these parcels only tangentially as being in proximity to the Cedar Mountain WSA, but does not discuss the wilderness qualities they possess (size and naturalness), or the wilderness qualities in dispute (solitude or outstanding opportunities for primitive or unconfined recreation). Second Worland EA at 30. Similarly, under Environmental Effects, proximity of Parcel 82 to the WSA is once again mentioned, but as far as impacts to wilderness characteristics, there is no discussion at all. Second Worland EA at 46. BLM has in fact identified that these parcels are in an area that possesses the wilderness characteristics of size and naturalness. BLM Wilderness Inventory at unnumbered 6. BLM deals dismissively with these concerns in its response to comments, merely stating that according to BLM's analysis these lands do not possess wilderness character. Second Worland EA at 122. Yet there is no specific discussion of these differences regarding wilderness characteristics, nor does the EA undertake a parcel-by-parcel analysis that would be the logical place to examine these differences in claims (as indeed, subsequent leasing EAs have done to some extent, see, e.g., November 2011 Leasing EA). This lack of a 'hard look' at potential impacts to lands that have been stated variously by BLM and commentators to possess some or all of the recognized wilderness characteristics presents a violation of NEPA's requirement to analyze impacts to resources which BLM has the responsibility to manage.

Leasing these parcels without No Surface Occupancy (NSO) stipulations could irretrievably destroy the wilderness character of these areas. Therefore, BLM will violate NEPA if these lands are leased in this sale. Before leasing these parcels, BLM must analyze impacts to visitors' experiences, recreation values, and scenic values. See e.g., *Pennaco Energy, Inc. v. Department of the Interior*, 377 F.3d 1147 (10th Cir. 2004). The regulations implementing NEPA provide that federal agencies shall, to the fullest extent possible, "[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." 40 C.F.R. § 1500.2(e). Such alternatives should include reasonable alternatives to a proposed action that will accomplish the intended purpose, are technically and economically feasible, and yet have a lesser impact. *Id.*; *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180-81 (9th Cir. 1990); *City of Aurora v. Hunt*, 749 F.2d 1457, 1466-67 (10th Cir. 1984). The purpose of NEPA's alternatives requirement is to ensure agencies do not undertake projects "without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same

result by entirely different means.” *Envnt'l Defense Fund, Inc. v. U.S. Army Corps of Eng'rs*, 492 F.2d 1123, 1135 (5th Cir. 1974); *see also Or. Env'tl. Council v. Kunzman*, 614 F.Supp. 657, 660 (D. Or. 1985) (stating that the alternatives that must be considered under NEPA are those that would “avoid or minimize” adverse environmental effects).

The Cody and Grass Creek RMPs were adopted substantially before BLM's latest analysis of lands with wilderness character. These RMPs are quite old and the NEPA analysis that was conducted is even older than the plans. These plans were approved *before* oil and natural gas of the current scale and impact was on the BLM's radar screen. While there has been light oil and gas development in Wyoming for decades, today's pace of leasing and drilling wasn't foreseen, indeed, couldn't have even been contemplated, at the time these management plans were developed. It is undeniable that BLM has been under intense pressure to lease every acre of public land which has any potential for future oil and gas development.

In its initial inventorying of the CWP proposed lands in the 1970s under the Wilderness Act of 1964, BLM determined that they did not possess wilderness qualities. Since that time, new information has been provided to BLM regarding these proposed wilderness areas. In approximately 1992 the Sierra Club submitted a citizens' wilderness proposal to BLM which included the Cedar Mountain and Honeycombs areas. In 2004 a more comprehensive citizens' proposal for wilderness areas was submitted to BLM by the Wyoming Wilderness Association. BLM has reassessed these areas for their wilderness qualities since receiving the Wyoming Wilderness Association submission, and now has its own analysis on record. Many years have passed since the initial assessment and inventory by BLM in the 1970s.

Under the Federal Land Policy and Management Act (FLPMA) BLM was required to inventory all roadless areas on public lands over 5000 acres under its jurisdiction and to identify lands which have wilderness characteristics as described in the Wilderness Act of 1964. 43 U.S.C. § 1782(a). In addition, under 43 U.S.C. 1711(a), BLM is required to maintain an inventory of all public lands and their resource and other values, which is to be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values. BLM has undertaken such an inventory for the Bighorn basin, but in the case of this particular unit, the Cedar Mountain South parcel, that inventory was flawed, leading to an improper conclusion that some of the characteristics of wilderness were not present (see above).

It is imperative that these parcels be withdrawn from the lease sale until such time as BLM has met its legal obligation under FLPMA to re-evaluate these lands for potential inclusion as 'Wild Lands.' At the very least, BLM should consider a “no action” alternative before selling these leases. At the lease stage, the “no action” alternative is, of course, the option of not selling the lease. 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1502.14(d). Alternatively, BLM should consider an alternative whereby BLM subjects these lease parcels to NSO stipulations. In both situations, BLM would preserve its ability to preclude surface use of these parcels and thereby preserve its ability to properly account for wilderness values through site-specific NEPA analysis.

IM 2004-110 Change 1 requires BLM to “evaluate the application of BMPs when taking leasing actions.” (See also WO IM 2004-194.) The Documentation of Land Use Plan Conformance and

NEPA Adequacy (DNA) prepared by the Field Offices where these parcels are located give no indication there was any evaluation of applying BMPs to the CWP and WSA parcels in order to protect their values. Because neither the DNAs nor the underlying Resource Management Plans (RMPs) evaluated the application of BMPs to these parcels, IM 2004-110 Change 1 (Change IM) was violated. No evaluation of the potential application of BMPs has occurred prior to offering the parcels for sale.

The leases at issue here contain a number of stipulations intended to protect resources. Many of them are timing limitation stipulations intended to protect big game, sage grouse, or raptors. While these stipulations may help protect these specific resources temporarily, they do not prohibit development; as IM 2004-110 Change 1 recognizes, "[O]ften BMPs, applied as either stipulations or conditions of approval, are more effective in mitigating impacts to wildlife resources than stipulations such as timing limitations or seasonal closures." Thus, the existing stipulations attached to these parcels are not enough, standing alone, to meet the requirements of the Change IM. *BMPs* must also be *evaluated* before leases are offered for sale, and there is no indication this occurred for these parcels. Without identifying and evaluating the efficacy of BMPs before leases are offered for sale, BLM has no idea whether BMPs would be able to mitigate impacts within acceptable limits. See e.g., 43 U.S.C. § 1732(b) (requiring BLM to prevent unnecessary or undue degradation.).

There is no indication BLM identified or evaluated the BMPs referenced in IM 2004-194 in the context of the site-specific conditions and circumstances presented by the delineated lease parcels being offered for sale. BLM did not even evaluate the application of BMPs that should be "considered in nearly all circumstances," such as requirements for camouflage painting and construction of roads to a standard "no higher than necessary." Certainly such BMPs can be identified, evaluated, and required, as effectively at the leasing stage as the application for permit to drill (APD) stage. Indeed, a front-end analysis of BMPs provides a measure of certainty for the lessee and, most importantly, may reveal that BMPs, alone, may be inadequate to mitigate impacts within acceptable limits, thus indicating the need for more robust lease stipulations. Moreover, it may behoove BLM to require the BMPs as a lease stipulation rather than as a condition of approval. Additionally, front-end evaluation of BMPs may indicate that BLM may be unable to mitigate impacts within acceptable limits and, therefore, the lease should either be subject to an NSO stipulation or withdrawn from sale (i.e., through selection of a "no action" alternative).

There is no doubt that IM 2004-110 Change 1 is intended to apply to leasing. The IM specifically applies to fluid minerals *leasing* actions. It is not the intent of the Change IM with respect to BMP evaluation, that it be applied at the APD stage. That had already been very specifically accomplished with IM 2004-194 issued on June 22, 2004. The Change IM was issued on August 16, 2004, *after* IM 2004-194, to fill in gaps in the *leasing* program guidance provided by IM 2004-110. Thus, while BLM may further consider and refine BMPs at the APD stage, it nevertheless *must* evaluate their application at the leasing stage. There is no indication in the Documentations this was done for any of the parcels listed in the table above, despite the clear language in the Change IM that BLM "shall also evaluate the application of BMPs" at the leasing stage.

Additionally, there is no question that BLM has ongoing authority and responsibility to consider the wilderness values of an area, especially where an area has been proposed for wilderness consideration by private citizens. IM 2003-275 recognizes this authority and that citizen wilderness proposal areas may contain a number of values that are not protected by the above stipulations, such as providing solitude and preserving areas that do not have significant signs of human use or development. The stipulations which would be applied to these parcels do not protect these kinds of values which clearly exist in the CWP parcels. BLM's failure to evaluate BMPs as a way to protect these values violated IM 2004-110 Change 1 and IM 2003-275.

BLM has the ongoing authority and responsibility to consider the wilderness values of an area before it authorizes the sale of leases which intrude upon Citizen Wilderness Proposal areas. The U.S. District Court for the District of Utah recently underscored this duty with its decision in *Southern Utah Wilderness Alliance v. Norton*, Case No. 2:04CV574 DAK. The Court held that BLM violated NEPA by issuing leases in areas proposed for wilderness without taking a hard look at the no-leasing alternative and by failing to consider significant new information about wilderness values and characteristics of the parcels. The State Office should take the hard look at implementing the no-leasing alternative for these parcels (or at least deferring them pending further analysis) and give adequate consideration to the wilderness values and characteristics of the parcels. The parcels should be withdrawn from the sale.

Sage Grouse

Parcels 53, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 69, 70, 71, 72, 73, 74, 78, 79, and 82 are in sage grouse Core Areas according to our maps (note that this differs from the disclosure in BLM's EA, see EA at 21, and we would like to understand why BLM came up with a different list that we did). It is very clear given the large, blocked-up nature of the proposed leases that this area has few if any oil and gas leases currently in effect which will not soon expire. Under Instruction Memorandum No. WY-2010-013, lands falling within sage grouse Core Areas that are primarily under BLM ownership and are not extensively leased should not be offered for oil and gas leasing. Of the Bighorn Basin parcels, Parcels 56, 69, 70, 71, 72, 73, 74, 75, 78, 79, and 82 are slated for deferral in whole or in part from the lease sale, leaving Parcels 53, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, and 66 slated to be offered for lease. In the High Plains lease list, Parcels 11, 32, 38, 39, 42, 43, and 44 appear to be within Core Areas and Parcels 8 and 14 are in Connectivity Areas. Of these, only Parcels 11 and 14 are proposed for deferral on sage grouse grounds; Parcel 32 is proposed for deferral pending tribal consultation on cultural resource issues.

In the High Plains Second EA, BLM notes that Parcels 41, 42, 43, 44, and 46 are located in sage grouse Core Areas but do not include suitable nesting habitat. High Plains Second EA at 44. This may not be the biologically most significant criterion. Oil and gas facilities have impacts that radiate outward from roads and wellsites into the surrounding habitats, causing impacts to sage grouse using these habitats; impacts of active drilling cause negative effects to lekking grouse populations at a distance of up to 3 miles, and post-drilling, producing well sites have negative

impacts that extend 1.9 miles from the wellpad (Holloran 2005).¹ The scientifically significant question is therefore whether these leases have any drilling locations within 3 miles and/or 1.9 miles of leks, and if so, they should be treated the same as parcels inside Core Areas and deferred if they meet the other criteria for deferral. We therefore protest these parcels and ask BLM to defer them from the lease sale pending this analysis.

We request that all parcels listed as occurring in sage grouse Core Areas be deferred from the lease sale. Wyoming sage-grouse populations are some of the largest left in the nation and were relatively stable until the last decade, when sage-grouse populations experienced major declines range-wide. The Wyoming Game and Fish Department reported that since 1952, there has been a 20% decline in the overall Wyoming sage-grouse population, with some fragmented populations declining more than 80%,² one of WGF's biologists reported a 40% statewide decline over the last 20 years.³ These declines are attributable at least in part to habitat loss due to mining and energy development and associated roads, and to habitat fragmentation due to roads and well fields. Oil and gas development poses perhaps the greatest threat to sage-grouse viability in the region. The area within 2 to 3 miles of a sage-grouse lek is crucial to both the breeding activities and nesting success of local sage-grouse populations. In a study near Pinedale, sage-grouse from disturbed leks where gas development occurred within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks.⁴ According to this study, impacts of oil and gas development to sage-grouse include (1) direct habitat loss from new construction, (2) increased human activity and pumping noise causing displacement, (3) increased legal and illegal harvest, (4) direct mortality associated with reserve pits, and (5) lowered water tables resulting in herbaceous vegetation loss. These impacts have not been thoroughly evaluated with full NEPA analysis.

BLM should not issue these sage grouse parcels unless a rigorous set of stipulations, far stronger than those provided in the EA, are applied to the parcels. This should include, at minimum:

- 2-mile No Surface Occupancy buffers surrounding leks;
- 3-mile Timing Limitation Stipulations surrounding leks during the breeding and nesting season prohibiting not just construction and drilling activities but also production-related vehicle traffic and human presence;
- No overhead powerlines within 5 miles of leks.

¹ M. Holloran. Dec. 2005. Greater Sage-Grouse Population Response to Natural Gas Field Development in Western Wyoming, at 57. This study is attached to the BCA June 2008 Lease Protest as Exhibit 35.

² WGF. 2000. Minutes of the Sage-Grouse Conservation Plan meeting, June 21, 2000, Casper, WY. Cheyenne: Wyoming Game and Fish Department. A copy is attached to the BCA June 2008 Lease Protest as Exhibit 32.

³ Christiansen, T. 2000. Sage-grouse in Wyoming: What happened to all the sage-grouse? Wyoming Wildlife News 9(5), Cheyenne: Wyoming Game and Fish Department. A copy is attached to the BCA June 2008 Lease Protest as Exhibit 33.

⁴ Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (*Centrocercus urophasianus*) near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp. A copy is attached to the BCA June 2008 Lease Protest as Exhibit 34.

If these stipulations are implemented together with even stronger measures for Core and Connectivity Areas, the BLM could make a credible case that impacts from leasing would not result in significant impacts. At this point, sage grouse stipulations have been written in a very vague manner, and it is unclear that sufficiently strong stipulations are being attached. If BLM is unwilling to attach and implement these more stringent protections to ensure that sage grouse populations in Core Areas receive biologically meaningful and scientifically sound protections, then these parcels should be deferred from the lease auction.

Sage Grouse lease stipulations provide an NSO stipulation of 0.6 mile around active sage grouse leks. This is an inadequate amount of protection for the lekking grouse during the breeding period, nevermind for hens nesting on lands surrounding the lek. Studies have shown that the majority of hens nest within 3 miles of a lek, and that a 5.3-mile buffer would encompass almost all nesting birds in some cases. For Core Areas, the most scientifically supportable metric for NSO buffers would be 2 miles from the lek to protect breeding birds (after Holloran 2005, finding impacts from post-drilling production extend 1.9 miles from the wellsite)⁴ and 5.3 miles to protect nesting birds, with the understanding that the impacts of drilling and production activity would extend into the NSO buffer area from wells arrayed along its edge.

Because leks sites are used traditionally year after year and represent selection for optimal breeding and nesting habitat, it is crucially important to protect the area surrounding lek sites from impacts. In his University of Wyoming dissertation on the impacts of oil and gas development on sage grouse, Matthew Holloran stated, "current development stipulations are inadequate to maintain greater sage-grouse breeding populations in natural gas fields."⁵ The area within 2 or 3 miles of a sage-grouse lek is crucial to both the breeding activities and nesting success of local sage-grouse populations. Dr. Clait Braun, the world's most eminent expert on sage-grouse, has recommended NSO buffers of 3 miles from lek sites, based on the uncertainty of protecting sage-grouse nesting habitat with smaller buffers.⁶ At minimum, an NSO stipulation of 1.9 miles and an additional TLS stipulation for breeding and nesting should extend out to 3 miles from active sage grouse leks.

Other important findings on the negative impacts of oil and gas operations on sage-grouse and their implications for the species are contained in three studies recently accepted for publication.⁷

⁵ M. Holloran. Dec. 2005. Greater Sage-Grouse Population Response to Natural Gas Field Development in Western Wyoming, at 57. This study is attached to the BCA June 2008 Lease Protest as Exhibit 35.

⁶ C. Braun. May 2006. A Blueprint for Sage-grouse Conservation and Recovery. Grouse, Inc. This study is available online at <http://www.voiceforthewild.org/SageGrouseStudies/Braunblueprint2006.pdf>.

⁷ Doherty, K.E., D.E. Naugle, B.L. Walker, and J.M. Graham. Greater sage-grouse winter habitat selection and energy development. *Journal of Wildlife Management*: In Press. Attached to the BCA June 2008 Lease Protest as Exhibit 37.

Walker, B.L., D.E. Naugle, and K.E. Doherty. Greater sage-grouse population response to energy development and habitat loss. *Journal of Wildlife Management*: In Press. Attached to the BCA June 2008 Lease Protest as Exhibit 38.

Walker, B.L., D.E. Naugle, K.E. Doherty, and T.E. Cornish. 2007. West Nile virus and greater sage-grouse: estimating infection rate in a wild bird population. *Avian Diseases* 51: In Press. Attached to the BCA June 2008 Lease Protest as Exhibit 39.

Sage-grouse mitigation measures have been demonstrated to be ineffective at maintaining this species at pre-development levels in the face of oil and gas development by Holloran (2005) and Naugle et al. (2006). Naugle found an 85% decline of sage-grouse populations in the Powder River Basin of northeastern Wyoming since the onset of coalbed methane development there. BLM has repeatedly failed to provide any analysis, through field experiments or literature reviews, examining the effectiveness of the standard quarter-mile buffers where disturbance would be "avoided." There is substantial new information in recent studies to warrant supplemental NEPA analysis of the impacts of oil and gas development to sage-grouse. It is incumbent upon BLM to consider the most recent scientific evidence regarding the status of this species and to develop mitigation measures which will ensure the species is not moved toward listing under the Endangered Species Act. It is clear from the scientific evidence that the current protections are inadequate and are contributing to the further decline of the bird's populations. This information constitutes significant new information that requires amendment of the Resource Management Plans before additional oil and gas leasing can move forward.

Game and Fish biologists across the West have reached a consensus that the Timing Limitation Stipulations proposed for sage-grouse in this lease sale are ineffective in the face of standard oil and gas development practices. See Attachment A. These stipulations have likewise been condemned as inadequate by the U.S. Fish and Wildlife Service and renowned sage-grouse expert Dr. Clait Braun. The BLM itself has been forced to admit that "New information from monitoring and studies indicate that current RMP decisions/actions may move the species toward listing...conflicts with current BLM decision to implement BLM's sensitive species policy" and "New information and science indicate 1985 RMP Decisions, as amended, may not be adequate for sage grouse."⁸ Continued application of stipulations known to be ineffective in the face of strong evidence that they do not work, and continuing to drive the sage-grouse toward ESA listing in violation of BLM Sensitive Species policy, is arbitrary and capricious and an abuse of discretion under the Administrative Procedures Act.

The restrictions contained in IM No. WY-2010-012 come nowhere close to offering sufficient on-the-ground protection to sage-grouse leks. Within Core Areas, the IM allows surface disturbing activity and surface occupancy just six tenths (0.6) of a mile from "occupied or undetermined" leks,⁹ a far cry from the science-based 3-mile buffer recommended by field biologists. Even less protective, restrictions outside Core Areas allow surface disturbing activities and surface occupancy as close as one quarter (0.25) of a mile from leks.¹⁰ BLM has too great an abundance of data to the contrary to continue with scientifically unsound stipulations as used in IM WY-2010-012 and the current Notice of Competitive Oil and Gas Lease Sale. This is especially clear in light of the U.S. Fish and Wildlife Service's recent finding that listing the greater sage-grouse as endangered or threatened under the Endangered Species Act is warranted, but precluded by other priorities. If the BLM and other federal agencies intend to

⁸ Sage-grouse plan amendment land user information meeting PowerPoint, available online at http://www.blm.gov/pgdata/etc/medialib/blm/wy/information/NEPA/bfodocs/sagegrouse.Par.94571.File.dat/May28_InfoMtg.pdf. Site last visited 7/16/2008.

⁹ Instruction Memorandum No. WY-2010-012, available at <http://www.blm.gov/pgdata/etc/medialib/blm/wy/resources/efoia/IMs/2010.Par.61358.File.dat/wy2010-012.pdf>.

¹⁰ *Id.*

keep the sage-grouse from accelerating beyond other listing priorities, more protective measures, in adherence with the scientific recommendations of Hollaran, Braun, and others, must be undertaken now.

The vague stipulations included in BLM's Notice of Competitive Oil and Gas Lease Sale for particular parcels do little to clarify to the interested public or potential lessees what restrictions might actually apply to protect sage-grouse populations. For example, for some parcels, BLM imposes a Timing Limitation Stipulation and a Controlled Surface Use Stipulation. Such acceptable plans for mitigation of anticipated impacts must be prepared prior to issuing the lease in order to give the public full opportunity to comment, and to abide by the Department of Interior's stated new policy to complete site-specific environmental review at the leasing stage, not the APD stage. Without site-specific review and opportunity for comment, neither the public nor potential lessees can clearly gauge how restrictive or lax "acceptable plans for mitigation" might be, and whether they comply with federal laws, regulations, and agency guidelines and policies. Thus, absent such review, the leases should not issue at all.

BLM has the scientific information needed to recognize that any use of these parcels will result in further population declines, propelling the sage-grouse ahead of other "priorities" on the ESA "candidate list." Again, it is in all interested parties favor (conservation groups, potential lessees, BLM and other federal agencies) for BLM to determine specific "modifications" prior to issuing leases, such as NSO restrictions. If the BLM fails to do so through site-specific environmental review before the APD stage, the agency will violate the "jeopardy" prohibition in the Endangered Species Act and will not adhere to the directive of Secretary Salazar and the Department of Interior's announced leasing reforms.

BCA recommends against the sale of any lease parcels in Core Areas which contain sage-grouse leks, nesting habitat, breeding habitat, wintering habitat and brood-rearing habitat. We request that these parcels be withdrawn from the lease sale. Failing withdrawal of the parcels, NSO stipulations extending at least 1.9 miles, and more optimally 3.0 miles, must be placed on all lease parcels with sage-grouse leks. In addition, three-mile buffers must be placed around all leks. It is critical that these stipulations be attached at the leasing stage, when BLM has the maximum authority to restrict activities on these crucial habitats for the protection of the species, and that no exceptions to the stipulations be granted. BLM's failure to do so will permit oil and gas development activities which will contribute to declining sage-grouse populations and ultimately listing by the U.S. Fish and Wildlife Service as a threatened or endangered species.

Endangered Species

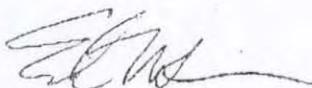
As pointed out by USFWS, there are 22 parcels with an Endangered Species nexus for which BLM was able to perform no NEPA analysis. See Buffalo Second EA at 112. BLM, in its response to this comment, stated that it was unable to get access to the surface of these split-estate private lands due to an inability to gain permission from the landowner. Id. BLM pointed out that if they waited for permission to do the analysis, the lands might never be leased. Id. This may be, but BLM is bound by NEPA and the new Leasing Reform policy to perform impacts analyses before leasing these parcels. If the analyses cannot be performed, the leases should not be sold; the potential for impacts to Endangered Species is simply too important to allow BLM to

blindly issue leases without understanding the consequences for Endangered plants and animals. We therefore protest these parcels and ask BLM to defer them from the lease sale.

Conclusion

Thank you for reconsidering the protested parcels listed above. Please notify us at your earliest convenience as to the final disposition of lease parcels to be offered, withdrawn, and/or deferred at the August 2011 lease auction.

Sincerely yours,



Erik Molvar
Wildlife Biologist

Signing on behalf of

Amy Mall
Senior Policy Analyst
Natural Resources Defense Council
1200 New York Avenue, N.W., Suite 400
Washington, D.C. 20005
202-513-6266

Michael J. Painter
Coordinator
Californians for Western Wilderness
P.O. Box 210474
San Francisco, CA 94121-0474
415-752-3911



WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-6500 Fax: (307) 777-4610

Web site: <http://g.state.wy.us>

GOVERNOR
DAVE FREUDENTHAL
DIRECTOR
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CLARE ALLAN
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GDMIGHERY

January 29, 2008

MEMORANDUM

TO: Terry Cleveland and John Emmerich
FROM: Tom Christiansen and Joe Bohne
COPY TO: Jay Lawson, Bill Rudd, Reg Rothwell, Bob Oakleaf
SUBJECT: Multi-State Sage-Grouse Coordination and Research-based Recommendations

As assigned by Assistant Director Emmerich, we have been working with other state fish and wildlife agencies in WAFWA Sage-Grouse Management Zones 1 and 2 (MT, CO, UT, SD, ND, WY) in order to coordinate interpretation of recent sage-grouse research related to oil and gas development.

Attached for your review, please find the latest and final document capturing the multi-state interpretation of the recent science related to sage-grouse conservation and oil and gas development. It has been well scrutinized by staff from MT, WY, CO, ND and UT and there is consensus on the content by the participants. South Dakota was unable to attend the initial meeting in Salt Lake City on January 8-9, but they have been provided with meeting notes and the resulting document.

It is our recommendation that WGFD acknowledge this document as the correct interpretation of the recently published sage-grouse research and use this information to update and augment department documents and policies. It should be used in the forthcoming discussions with the BLM regarding their update to their sage-grouse Instruction Memorandum. In addition, we suggest that in order for this document to serve the broadest purpose for sage-grouse conservation four additional actions are needed. First, the document should be shared with Governor Freudenthal's staff. Second, we recommend that the Director's Office enter into discussions with MT FWP Director Jeff Hagener to ensure consistency in the application of these recommendations between our border states, and especially with the WY and MT BLM State Field Offices. Third, we recommend the document be submitted to WAFWA's Sage-Grouse Technical Committee as well as the WAFWA Executive Committee for their consideration and use. Finally, we recommend this document be included with other materials sent to the USFWS for consideration in their review of the status of sage-grouse and measures in place to conserve those populations.

We look forward to your direction on how to proceed.

"Conserving Wildlife - Serving People"

Attachment A

Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil & Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)

Background

Greater Sage-grouse are widely considered in scientific and public policy arenas to be a species of significant conservation concern. Loss, degradation and fragmentation of important sagebrush grassland habitats have negatively impacted sage-grouse populations. Much of this loss of habitat function is occurring in Sage-grouse Management Zones (MZ) 1 and 2 (Stiver et al. 2006) in Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming as a result of oil and gas development (Connelly et al. 2004). Oil and gas development is rapidly increasing within these areas. In response to those concerns, states and provinces are in various stages of completing or updating management plans in order to provide for long-term sage-grouse conservation. Special emphasis is being placed on oil and gas development as it rapidly spreads across much of the eastern range of sage-grouse.

The recent decision by B. Lynn Winnill, Chief U.S. District Judge (2007), which remands the original 2005 not warranted decision back to the USFWS for reconsideration, has highlighted the need for States to coordinate their application of best available science. Representatives from the state agencies with authority for managing fish and wildlife from the major sage-grouse and energy producing states comprising MZ 1 and 2 and sage-grouse researchers who have published new findings, met on January 8 and 9, 2008 in Salt Lake City. The objectives of the meeting were to better understand the application of most recent peer-reviewed science within the context of oil and gas development and coordinate and compare implementation of conservation actions utilizing that information.

Review Process

The participants at this meeting represented technical science and management advisors from each of the states. Researchers having the most recently peer reviewed and published articles concerning sage grouse and oil and gas development were invited to present their findings and answer questions. State agency participants agreed that the goal was not to establish state or regional policy or to determine the management actions that will be implemented in any or all states within MZ 1 or 2. Rather, the goal was to reach agreement on the conservation concepts and strategies related to oil and gas development that are supported by current published peer-reviewed and unpublished literature. If implemented, these concepts and strategies likely will not eliminate impacts to sage-grouse populations that result from energy development. However, when used in combination with other conservation measures, these actions may enhance the likelihood that sage-grouse populations will persist at levels that allow historical uses such as grazing and agriculture and maintain their current distribution and abundance, thereby avoiding the need to list sage-grouse under the federal Endangered Species Act.

Each researcher was invited to present their findings and to answer questions posed by the states. Following this, each state provided an overview of their review of the science and their resulting management actions and recommendations. The group then collectively reviewed, debated and agreed on the concepts and strategies supported by that science. The focus of the meeting was on five key issues: core areas, no-surface-occupancy zones, phased development, timing stipulations, well-pad densities, and restoration. Scientific data are available to inform many other issues related to sage-grouse management and conservation that were not reviewed (e.g., BMPs).

Core Areas

Identification and protection of core areas, sometimes also referred to as crucial areas, will help maintain or achieve target goals for populations including distribution and abundance.

Full field energy development appears to have severe negative impacts on sage-grouse populations under current lease stipulations (Lyon and Anderson 2003, Holloran 2005, Kaiser 2006, Holloran et al. 2007, Aldridge and Boyce 2007, Walker et al 2007, Doherty et al. 2008). Much of greater sage-grouse habitat in MZ 1 and 2 has already been leased for oil and gas development. These leases carry stipulations that have been shown to be inadequate for protecting breeding and wintering sage-grouse populations during full field development. (Holloran 2005, Walker et. al. 2007, Doherty et al. 2008) New leases continue to be issued utilizing these same stipulations. To ensure long-term persistence of populations and meet goals set by the states for sage-grouse, identifying and implementing greater protection within core areas from impacts of oil and gas development is a high priority.

In order to conserve core areas it is essential that they be identified and delineated. Sage-grouse populations occur over large landscapes comprising a series of leks and lek complexes with associated seasonal habitats. Therefore, core areas should capture the range required by a defined population to maintain itself. This concept is consistent with Crucial Wildlife Habitats recently endorsed by the Western Governor's Association (2007). Criteria that could be used to identify and map core areas include, but are not limited to: (1) lek densities, (2) displaying male densities, (3) sagebrush patch sizes, (4) seasonal habitats (breeding, summering, wintering areas), (5) seasonal linkages, or (6) appropriate buffers around important seasonal habitats.

Research indicates that oil or gas development exceeding approximately 1 well pad per square mile with the associated infrastructure, results in calculable impacts on breeding populations, as measured by the number of male sage-grouse attending leks (Holloran 2005, Naugle et al. 2006). Because breeding, summer, and winter habitats are essential to populations, development within these areas should be avoided. If development cannot be avoided within core areas, infrastructure should be minimized and the area should be managed in a manner that effectively conserves sagebrush habitats within that area.

No Surface Occupancy (NSO)

At the scale that NSOs are established, they alone will not conserve sage-grouse populations without being used in combination with core areas. The intent of NSOs is to maintain sage-grouse distribution and a semblance of habitat integrity as an area is developed.

Breeding Habitat - Leaks

Research in Montana and Wyoming in coal-bed methane natural gas (CBNG) and deep-well fields suggests that impacts to leaks from energy development are discernable out to a minimum of 4 miles, and that some leaks within this radius have been extirpated as a direct result of energy development (Holloran 2005, Walker et al. 2007). Walker et al. (2007) indicates that the current 0.25-mile buffer lease stipulation is insufficient to adequately conserve breeding sage-grouse populations in areas having full CBNG development. A 0.25-mi. buffer leaves 98% of the landscape within 2 miles open to full-scale energy development. In a typical landscape in the Powder River Basin, 98% CBNG development within 2 miles of leaks is projected to reduce the average probability of lek persistence from 87% to 5% (Walker et al. 2007). Only 38% of 26 leaks inside of CBNG development remained active compared to 84% of 250 leaks outside of development (Walker et al. 2007). Of leaks that persisted, the numbers of attending males were reduced by approximately 50% when compared to those outside of CBNG development (Walker et al. 2007).

The impact analyses provided in Walker et al. (2007) are based on a 7-year dataset where probability of lek persistence is strongly related to extent of sagebrush habitat and the extent of energy development within 4 miles of the lek and the extent of agricultural tillage in the surrounding landscape. The estimated probabilities of lek persistence are only reliable for the length of the dataset, and it is not understood how other stressors (e.g., West Nile virus [Naugle et al. 2004], invasive weeds [Bergquist et al. 2007]) will cumulatively impact sage-grouse over longer time periods. While increased NSO buffers alone are unlikely to conserve sage-grouse populations, results from Walker et al. 2007 suggest they will increase the likelihood of maintaining the distribution and abundance of grouse and should increase the likelihood of successful restoration following energy development.

Additional information provided in Walker et al. (2007) allows managers and policy makers to estimate trade-offs associated with allowing development within a range of different distances from leaks (Figures 1a and 1b). These probabilities will also need to be applied over larger landscapes in future analyses to better understand projected region- and state-wide population impacts under current and future development scenarios. Walker et al. (2007) studied lek persistence from 1997-2005 in relation to coal bed natural gas (CBNG) development in the Powder River Basin. These models are based on projected impacts of full-field development within (a) 2 miles and (b) 4 miles of the lek. We present results from these models (rather than models with impacts at smaller scales)

because development within 2 and 4 miles of leks are known to decrease breeding populations as measured by the number of displaying males (Holloran et al. 2005, Walker et al. 2007), and 52% and 74-80% of hens are known to nest within 2 and 4 miles of leks, respectively (Holloran and Anderson 2005, Colorado Greater Sage-Grouse Conservation Plan Steering Committee 2008). Sizes of NSO buffers required to protect breeding populations may be underestimated because leks in CBNG fields have fewer males per lek and a time lag occurs (avg. 3-4 years) between development and when leks go inactive. As a result, it is expected that not only will lek persistence decline, the number of males per lek will also decline. In contrast, sizes may be overestimated where high lek densities cause buffers from adjacent leks to overlap. Additional time is required to develop models demonstrating the probabilities of lek persistence at well-pad densities less than full development.

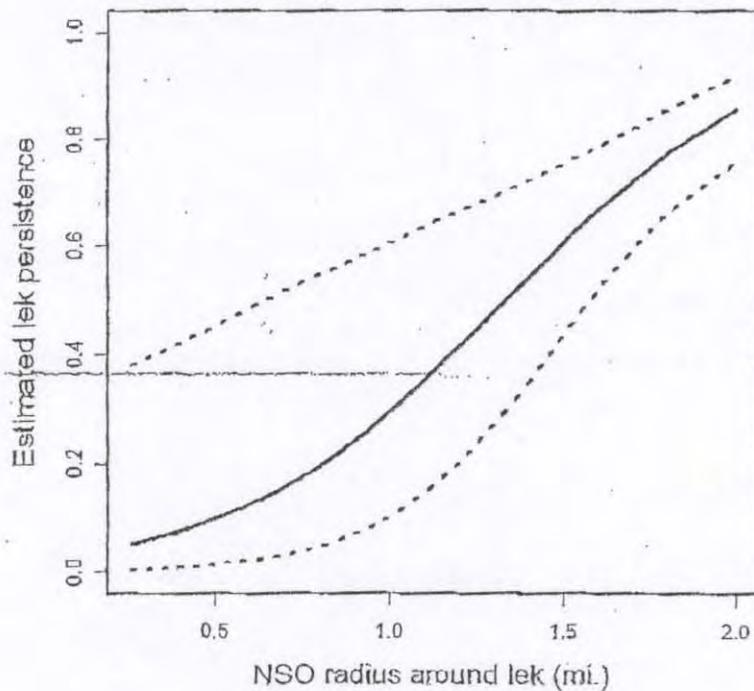


Figure 1a. Estimated probability of lek persistence (dashed lines represent 95% CIs) in fully-developed¹ coal-bed natural gas fields within an average landscape in the Powder River Basin (74% sagebrush habitat, 26% other habitats types) with different sizes of no-surface-occupancy (NSO) buffers around leks, assuming that only CBNG within 2 miles of the lek affects persistence. Buffer sizes of 0.25 mi., 0.5 mi., 0.6 mi., and 1.0 mi. result in estimated lek persistence of 5%, 11%, 14%, and 30%. Lek persistence in the absence of CBNG averages ~85%.

¹ Defined as entire area outside the NSO buffer, but within 2 miles, being within 350 meters of a well.

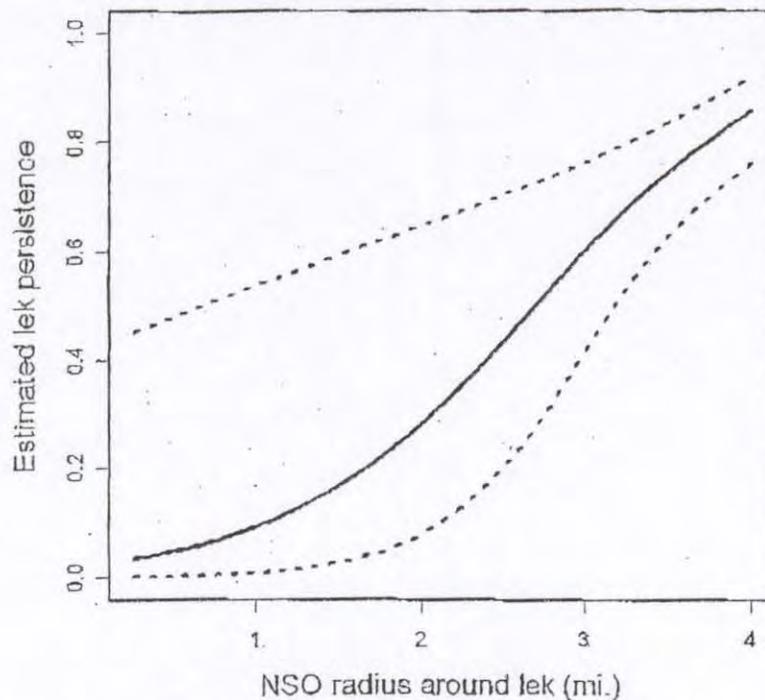


Figure 1b. Estimated probability of lek persistence (dashed lines represent 95% CIs) in fully-developed² coal-bed natural-gas-fields within an average landscape in the Powder River Basin (74% sagebrush habitat, 26% other habitats types) with different sizes of no-surface-occupancy (NSO) buffers around leks, assuming that only CBNG within 4 miles of the lek affects persistence. Buffer sizes of 0.25 mi., 0.5 mi., 0.6 mi., 1.0 mi., and 2.0 mi. result in estimated lek persistence of 4%, 5%, 6%, 10%, and 28%. Lek persistence in the absence of CBNG averages ~85%.

Figures 1a and 1b provide an illustration of the trade-offs between differing NSO buffers in relation to lek persistence in developing CBNG fields. The group does not offer a specific NSO recommendation but provides these graphs to guide decision-making.

Breeding Habitat - Nesting and Early Brood-rearing

Yearling female greater sage-grouse avoid nesting in areas within 0.6 miles of producing well pads (Holloran et al. 2007), and brood-rearing females avoid areas within 0.6 miles of producing wells (Aldridge and Boyce 2007). This suggests a 0.6-mile NSO around all suitable nesting and brood-rearing habitats is required to minimize impacts to females during these seasonal periods. In areas where nesting habitats have not been delineated, research suggests that greater sage-grouse nests are not randomly distributed. Rather, they are spatially associated with lek location within 3.1 miles in Wyoming (Holloran and Anderson 2005). However, a 4-mile buffer is needed to encompass 74-80% (Moynahan

² Defined as entire area outside the NSO buffer, but within 4 miles, being within 350 meters of a well.

2004, Holloran and Anderson 2005, Colorado Greater Sage-Grouse Conservation Plan Steering Committee 2008). These suggest that all areas within at least 4-miles of a lek should be considered nesting and brood-rearing habitats in the absence of mapping.

Winter Habitat

NSO or other protections may also need to be considered for crucial winter range. Survival of juvenile, yearling, and adult females are the three most important vital rates that drive population growth in greater sage-grouse (Holloran 2005, Colorado Greater Sage-Grouse Conservation Plan Steering Committee 2008). Although overwinter survival in sage-grouse is typically high, severe winter conditions can decrease hen survival (Moynahan et al 2006). Crucial wintering habitats can constitute a small part of the overall landscape (Beck 1977, Hupp and Braun 1989). Doherty et al. (2008) demonstrated that sage-grouse avoided otherwise suitable wintering habitats once they have been developed for energy production, even after timing and lek buffer stipulations had been applied (Doherty et al. 2008). For this reason, increased levels of protection may need to be considered in crucial winter habitats.

Phased Development

Population-level impacts and avoidance associated with energy development have been documented (Braun et al. 2002, Lyon and Anderson 2003, Holloran 2005, Kaiser 2006, Holloran et al. 2007, Aldridge and Boyce 2007, Walker et al 2007, Doherty et al. 2008). Phased development maximizes the amount of area within a landscape that is not being impacted by development at any one time, and can occur at multiple spatial scales (e.g., phased development of separate fields in a landscape, phased development of infrastructure within a single unit or field, or phased development within a single lease). Unitization, clustering, and geographically staggered development are all forms of phased development. As a tool to minimize impacts to sage-grouse, developing oil and gas resources by employing one of these phased methods may help maintain large, functional blocks of sage-grouse habitat.

Timing Stipulations

As with NSOs, at the scale that timing stipulations are established, they alone will not conserve sage-grouse populations without being used in combination with core areas. The intent of timing stipulations is to help maintain sage-grouse distribution and a semblance of habitat integrity as an area is developed. Timing stipulations are of lesser value at the scale of full-field development.

Breeding Habitat - Leks

Traffic during the strutting period when males are on a lek results in declines in male attendance when road-related disturbance is within 0.8 miles (Holloran 2005). The distance traveled by males from the lek during the breeding season has been reported in varying ways but generally averages 0.6 miles from a lek (Colorado Greater Sage-Grouse

Conservation Plan Steering Committee 2008 - see Appendix B). Additionally, females breeding on leks within 1.9 miles of natural gas development had lower nest initiation rates and nested farther from the lek compared to non-impacted individuals (Lyon and Anderson 2003), suggesting disturbance to leks influence females as well. Local variations may influence the application of specific dates, which are typically within a window of March 1 and May 31.

Breeding Habitat - Nesting and Early Brood-rearing

Often, timing stipulations (periods where no activity that creates disturbance are allowed) for breeding habitat have been applied using a radius around a lek. However, nesting and brood-rearing habitat is not uniformly distributed around the lek. Mapping of habitat would allow for more accurate application of this stipulation. Research on the distribution of nests relative to leks and on the timing of nesting indicates that timing stipulations to protect nesting hens and their habitat should be in place from March through June in mapped breeding habitat or (when nesting habitat has not been mapped) within 4 miles of active lek sites (Moynahan 2004, Holloran et al. 2005, Colorado Greater Sage-Grouse Conservation Plan Steering Committee 2008).

Winter Habitat

Research suggests that no surface occupancy should also be applied to important wintering habitats (Doherty et al. 2008), but if development occurs, impacts would be reduced if development activities were avoided between December 1 and March 15.

Well-Pad Densities

Leks tend to remain active when well-pad densities within 1.9 miles of leks are less than 1 pad per square mile (Holloran 2005) but leks tend to go inactive at higher pad densities (Holloran 2005, Naugle et al. 2006).

Restoration

The purpose of restoration in sage-grouse habitat should be the removal of infrastructure associated with energy development from the land surface and subsequent re-establishment of native grasses, forbs, and shrubs, including sagebrush, to promote natural ecological function. Restoration should reestablish functionality of seasonal habitats for sage-grouse. Thus a field should not be considered restored until sagebrush-grassland habitats have been reestablished.

Future Needs

Time did not allow for a detailed discussion of specific Best Management Practices for oil and gas development and restoration, seasonal habitat mapping, or future research. These topics are all recognized as needing action in the immediate future.

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Appendix 1.

Participants (Alphabetical)

Dr. Tony Apa, Colorado Division of Wildlife
Mr. Joe Bohne, Wyoming Game and Fish Department
Mr. Tom Christiansen, Wyoming Game and Fish Department
Mr. Jeff Herbert, Montana Department of Fish, Wildlife and Parks
Mr. Bill James, Utah Division of Wildlife Resources
Mr. Rick Northrup, Montana Department of Fish, Wildlife and Parks
Mr. Dave Olsen, Utah Division of Wildlife Resources
Mr. Aaron Robinson, North Dakota Game and Fish
Ms. Pam Schnurr, Colorado Division of Wildlife
Mr. T.O. Smith, Montana Department of Fish, Wildlife and Parks
Mr. Brett Walker, Colorado Division of Wildlife

Invited Guests

Dr. Matt Holloran, Wyoming Wildlife Consultants, LLC
Dr. David Naugle, University of Montana