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June 27, 2008

CERTIFIED MAIL

Honorable Dirk Kempthorne
Secretary
United States Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

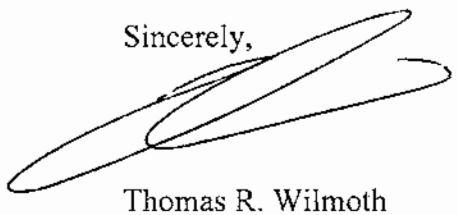
Re: Petition for Rulemaking; Greater sage grouse

Dear Secretary Kempthorne:

Please find enclosed a Petition filed on behalf of the Theodore Roosevelt Conservation Partnership and the North American Grouse Partnership pursuant to 5 U.S.C. § 553 (Rulemaking) and 43 C.F.R. § 14.2 (Filing of petitions). The Petition requests initiation of a rulemaking proceeding to adopt rules designed to protect the Greater sage grouse on public lands administered by the Bureau of Land Management, and thereby minimize the risk that the species will be placed on the list of threatened and endangered species maintained under the Endangered Species Act, 16 U.S.C. § 1531 *et seq*.

Thank you for your prompt consideration of the Petition.

Sincerely,



Thomas R. Wilmoth

Enclosures
cc: David Bernhardt, Esq. (Office of the Solicitor)
Jim Caswell (Director, Bureau of Land Management)

BEFORE THE SECRETARY OF THE DEPARTMENT OF THE INTERIOR

THEODORE ROOSEVELT CONSERVATION PARTNERSHIP 555 Eleventh St. N.W., 6th Floor Washington, DC 20004 (202) 654-4600, and NORTH AMERICAN GROUSE PARTNERSHIP c/o C. Sealing 1670 N 1/2 Rd Fruita, CO 81521 (970) 858-9659 Petitioners,	)	**PETITION FOR RULEMAKING TO PROTECT GREATER SAGE GROUSE ON LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT**

Pursuant to 5 U.S.C. § 553(e) and 43 C.F.R. Part 14, Petitioners, the Theodore Roosevelt Conservation Partnership ("TRCP") and the North American Grouse Partnership ("NAGP") hereby petition the Secretary of the Interior ("Secretary") to issue the proposed rule attached hereto as Exhibit A. Such a rule is necessary to protect Greater sage grouse from documented adverse impacts of energy development on lands administered by the Bureau of Land Management ("BLM") and to minimize the likelihood that the species will need to be listed as threatened or endangered pursuant to the Endangered Species Act, 16 U.S.C. §§ 1531 *et seq.* This Petition begins with an explanation of the Petitioners' interest in the subject matter. Petitioners next identify overwhelming evidence demonstrating the inadequacy of existing measures employed by BLM to protect sage grouse in energy fields. The Petition then shows why the rule Petitioners propose is fully consistent with existing BLM authorities and that the spirit of the proposed rule already is being observed in at least one BLM Field Office. Petitioners conclude the Petition with a request to the Secretary to commence formal rule making and adopt the proposed rule or its substantive equivalent.

BACKGROUND ON THE PETITIONERS' INTEREST

TRCP is a national non-profit (26 U.S.C. § 501(c)(3)) conservation organization dedicated to guaranteeing every American a place to hunt and fish, particularly on public lands. TRCP accomplishes its goal three ways: 1) Ensuring access to public lands, 2) ensuring adequate funding for natural resource agencies, and 3) helping to conserve fish and wildlife

habitats. TRCP has formed, with various partners, a Fish, Wildlife, and Energy Working Group, comprised of some of the country's oldest and most respected hunting, fishing, and conservation organizations. TRCP is working hard to ensure that energy development on public lands is balanced with the needs of fish and wildlife resources, but is concerned that the rapid pace of development is precluding BLM from managing these resources as required by the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. § 1701 *et seq.*

NAGP is an Idaho incorporated 501(c)3 organization whose mission is to promote the conservation of grouse and the habitats necessary for their survival and reproduction. NAGP has state chapters in multiple states, including Montana, Wyoming, New Mexico, Colorado and Idaho, all licensed under a national charter. NAGP works to bring the plight of declining grouse species and their habitats to the attention of the public, provides oversight for the health of grouse populations, implements solutions to problems causing grouse declines and encourages public policies and management decisions that will enhance important habitats and grouse populations.

"Sage-grouse historically inhabited much of the sagebrush-dominated ecosystems of North America. Today, sage-grouse population abundance and extent have declined throughout most of their historical range." BLM National Sage-Grouse Habitat Conservation Strategy (Nov. 2004) at 6. "Large-scale modification of sagebrush habitats associated with energy development may have important impacts on habitat use or vital rates of sagebrush-dependent wildlife species." Naugle et al., *Sage-grouse Population Response to Coal-bed Natural Gas Development in the Powder River Basin: Interim Progress Report on Region-wide Lek-count Analyses* (May 26, 2006). *See also Naugle et al, Sage-Grouse Winter Habitat Selection And Energy Development In The Powder River Basin: Completion Report* (June 24, 2006). "Knowledge that sage-grouse avoid energy development in breeding (Naugle et al. 2006) and wintering seasons (this report) shows that conservation strategies to date to protect the species have been largely ineffective." *Id.* at 1. *Compare* Holloran et al., *Population Response of Yearling Greater Sage-Grouse to the Infrastructure of Natural Gas Fields in Southwestern Wyoming, Completion Report* (Aug. 2007) at 2 ("Our results suggest that development of natural gas fields will result in the loss of leks within developed areas and in the functional loss of nesting habitat within 930 m [0.58 mi] of infrastructure).

On December 4, 2007, the Federal District Court for the District of Idaho reversed and remanded the U.S. Fish and Wildlife Service's ("FWS") decision not to list the sage grouse as "threatened" or "endangered" under the ESA. *Western Watersheds Project v. U.S. Forest Service*, 535 F. Supp. 2d 1173 (D. Idaho 2007). The court explained the perilous condition of the sage grouse and the impact suffered by its habitats to date. *Id.* at 1173. Further elaborating on the current state of grouse habitat, the court noted: "Nowhere is sage-grouse habitat described as stable. By all accounts, it is deteriorating, and that deterioration is caused by factors that are on the increase." *Id.* at 1186. The court specifically focused on the impact of oil and gas development on grouse habitat as identified by an independent expert team. *Id.* at 1179. The court noted "a singular lack of data on measures taken by the BLM to protect the sage grouse from energy development, the single largest risk in the eastern region." *Id.* at 1188.

Petitioners are especially concerned with the fate of Greater sage grouse and the recreational opportunities they provide tens of thousands of sportsmen each year in the western

states. Without comprehensive habitat management planning, leasing and development of energy resources within sage grouse habitat can have a devastating impact on this wildlife resource and the hunting opportunities it affords. In light of the concerns expressed by the Idaho court, as well as its acute recognition of the impact of oil and gas development on sage grouse and the inadequacy of information concerning BLM efforts to mitigate the same, it is incumbent on the Secretary to protect sage grouse on the public lands. If the Secretary fails to act, the protections of the ESA will likely preclude even controlled hunting of sage grouse throughout its range, a result the sporting community wants to avoid. In light of the foregoing, Petitioners are "interested persons" for purposes of the Administrative Procedure Act. *See* 5 U.S.C. § 553(e) (requiring agencies to provide "interested persons" the right to petition for rulemaking).

NEW RESEARCH UNEQUIVOCALLY DEMONSTRATES THE INADEQUACY OF EXISTING REGULATORY MEASURES

Biologists from the Western Association of Fish and Wildlife Agencies ("WAFWA") recently authored a memorandum entitled: *Using the Best Available Science to Coordinate Conservation Actions that Benefit Sage-Grouse Across States Affected by Oil and Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming)* (29 January 2008) (Copy attached as Exhibit B). The memorandum states:

> Full field energy development appears to have negative impacts on sage-grouse populations under current lease stipulations (Lyon and Anderson 2003, Holloran 2005, Kaiser 2006, Holloran et al. 2007, Aldridge and Buyce 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 using the same stipulations. To ensure the 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.*
>
> ... ...
>
> Research indicates that oil and gas development exceeding approximately 1 well pad per square mile with 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.

(Emphasis supplied).

WAFWA reviewed available literature from 2003 – 2008 and identified the following persistence levels resulting from the application of different "no surface occupancy" or "NSO" buffer sizes:

NSO Buffer Size	Lek Persistence	Lek Loss
0.25 mi	4%	96%
0.5 mi	5%	95%
1.0 mi	10%	90%
2.0 mi	28%	72%

WAFWA's principle concern was directed at current stipulations BLM places on oil and gas leases (and also applies as a condition of approval on Applications for Permits to Drill and Right of Ways). Those stipulations are not based on science, but instead on compromises from the "late 1960's" as stated in the attached Affidavit by BLM Biologist David A. Roberts (July 20, 1998). *See* Exhibit C attached (filed in *Wyoming Audubon et al.*, 151 IBLA 42, 49 (Oct. 22, 1999)). As WAFWA correctly notes, those stipulations have been determined to be ineffective in accomplishing their purpose.

Notably, FWS agrees that existing BLM measures are inadequate. In commenting on the use of these standard stipulations on Wyoming's Atlantic Rim, FWS stated it "does not support a 0.25 mile protective buffer around sage-grouse leks as a mitigation measure, nor does [FWS] support a 2-mile [seasonal] buffer to protect nesting habitat." Rather, FWS "strongly recommend[] minimum protection measures as described by Connelly et al. (2000)." *See* Letter from FWS to BLM dated January 26, 2006 (copy attached as Exhibit D). Those measures include precluding surface disturbance within at least two miles of an active lek. Connelly et al., *Guidelines to Manage Sage Grouse Population and Their Habitats*, Wildlife Society Bulletin 2000, 28(4): 967-985.

The western states agree. For example, the Colorado Division of Wildlife ("CDOW") recently observed: "Research in Montana and Wyoming has indicated that traditional oil and gas stipulations designed to protect sage-grouse (primarily timing restrictions and no surface occupancy surrounding leks) are inadequate on a landscape scale (Lyon and Anderson 2003, Holloran 2005, Naugle et al. 2006a and 2006b)." CDOW, *Greater Sage-grouse Conservation Plan* (06/15/07 draft) at 300. On October 24, 2007, CDOW expressed sincere concern about BLM's plans for managing sage grouse populations in Colorado. Among other things, CDOW noted that resource management plans ("RMP") governing management of public lands in that state are outdated and based on unsound science. CDOW explained its view that "significant new information" has developed since 2005 that explains the true impact of oil and gas development on wildlife, and that this information suggests a "much greater impact on wildlife than previously thought." CDOW suggested that leasing be deferred until the RMPs could be updated to reflect current science. In particular, CDOW explained "all the recent studies on the effects of oil and gas development on greater sage-grouse ... demonstrate that impacts on greater sage grouse substantially exceed previous thinking." *See* attached Exhibit E. Like WAFWA and FWS, CDOW observed existing stipulations do not prevent substantial declines in sage grouse populations.

THE PROPOSED RULE IS CONSISTENT WITH EXISTING OBLIGATIONS AND POLICIES

The National Environmental Policy Act ("NEPA"), 42 U.S.C. §4321 *et seq.*, requires federal agencies to take a "hard look" at new information or circumstances concerning the environmental effects of a federal action even after an initial environmental analysis has been prepared. Agencies must supplement existing environmental analyses if new circumstances "raise[ ] significant new information relevant to environmental concerns[.]" *Portland Audubon Soc'y v. Babbitt*, 998 F.2d 705, 708-709 (9th Cir. 2000). Moreover, an "agency must be alert to new information that may alter the results of its original environmental analysis, and continue to take a 'hard look at the environmental effects of [its] planned action, even after a proposal has received initial approval.'" *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 557 (9th Cir. 2000) quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 374 (1989).

NEPA's implementing regulations further underscore this obligation. An agency "shall prepare supplements to either draft or final environmental impact statements if ... there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. §1502.9(c)(1)(ii). Even where an environmental impact statement ("EIS") has been previously prepared, "[i]f there remains 'major Federal actio[n]' to occur, and if the new information is sufficient to show that the remaining action will 'affec[t] the quality of the human environment' in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared." *Marsh v. Oregon Natural Resources Council*, 109 S.Ct. 1851, 1859 (1989). As CDOW correctly observed, today's sage grouse information was not available at the time NEPA analyses supporting most RMPs were conducted. Therefore, "these NEPA analyses are not adequate" to support management decisions today.

FLPMA directs BLM to manage the public lands "under principles of multiple use and sustained yield." 43 U.S.C. § 1732(a).[1] The public lands must be managed in a manner that will, among other things, "provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use." 43 U.S.C. § 1701(a)(8). FLPMA further provides that "[i]n managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). Similarly, 43 U.S.C. § 1740 provides that the Secretary "shall promulgate rules and regulations to carry out the purposes of [FLPMA] and of other laws applicable to the public lands ... ."

[1] "Multiple" use may be explained as "resource allocation for the greatest good for the greatest number over the long run." G. C. Coggins and Robert L. Glicksman, *Public Natural Resources Law* § 30:1 (2nd ed. 2007). While BLM possesses discretion in managing for multiple use, three "concrete guidelines" apply: 1) "Congress rejected economic optimality as the governing criterion," 2) multiple use management cannot "permanently impair land productivity," and 3) BLM must ensure a mix of uses. Coggins and Glicksman, *supra*, § 30:3. "Sustained yield" refers to BLM's duty "to control depleting uses over time, so as to ensure a high level of valuable uses in the future," *Mount Royal Joint Venture v. Kempthorne*, 477 F.3d 745, 757 (D.C. Cir. 2007) (citations omitted); 43 U.S.C. § 1702(h).

Beyond NEPA's analytical requirements and FLPMA's multiple use and sustained yield mandates, the rule proposed today is consistent with multiple obligations and ancillary statements of policy codified in Department and BLM regulations. *See, e.g.*, 43 C.F.R. § 24.1 ("The [Secretary] reaffirms that fish and wildlife must be maintained for their ecological, cultural, educational, historical, aesthetic, scientific, recreational, economic, and social values to the people of the United States, and that these resources are held in public trust by the Federal and State governments for the benefit of present and future generations of Americans."); 43 C.F.R. § 3162.1(a) (requiring oil and gas operators to conduct operations in a manner "which protects other natural resources and environmental quality"); 43 C.F.R. § 3162.5-1(a) (same) and § 3162.5-1(b) (requiring operators to avoid "undue damage" to surface resources).

The proposed rule also comports with BLM policy regarding the management of so-called "special status species" such as sage grouse. Greater sage grouse is listed in all western states as a special (or comparable) status species. For example, the State of Wyoming lists sage grouse as a "Status 2 Species of Special Concern", which means "[p]opulations are declining" and experiencing "[o]n-going significant loss of habitat." http://gf.state.wy.us/wildlife/nongame/SpeciesofSpecialConcern/index.asp. Section 6840.06.D of the BLM Manual (Special Status Species Management) provides "BLM *shall carry out management* for the conservation of State listed plants and animals." (Emphasis supplied). In this context, the term "conservation" means "the use of 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 § 6840.01. The Manual further directs "[a]ctions authorized by BLM shall further the conservation of ... special status species and *shall not contribute to the need to list any special status species under provisions of the ESA*, ..." BLM Manual § 6840.12 (emphasis supplied). *See also* BLM Manual § 6840.22.C. Existing measures employed by BLM are not adequate to meet this obligation.

Finally, the proposed rule is consistent with Executive Order 13443, Facilitation of Hunting Heritage and Wildlife Conservation, (August 16, 2007), the purpose of which is "to direct Federal agencies that have programs and activities that have a measurable effect on public land management, outdoor recreation, and wildlife management, including the Department of the Interior ..., to facilitate the expansion and enhancement of hunting opportunities and the management of game species and their habitat." *See* EO 13443 reprinted at 72 Fed. Reg. 46,537 (Aug. 20, 2007). Among other things, EO 13443 requires BLM to:

- Evaluate the effect of agency actions on trends in hunting participation and, where appropriate to address declining trends, implement actions that expand and enhance hunting opportunities for the public;
- Manage wildlife and wildlife habitats on public lands in a manner that expands and enhances hunting opportunities, including through the use of hunting in wildlife management planning; and
- Establish short and long term goals, in cooperation with State and tribal governments, and consistent with agency missions, to foster healthy and productive populations of game species and appropriate opportunities for the public to hunt those species.

In short, the rule Petitioners propose is fully in line with executive, congressional and administrative intent concerning the value presented to sportsmen by this iconic upland game bird.

AT LEAST ONE BLM OFFICE ALREADY IS IMPLEMENTING WHAT PETITIONERS PROPOSE TODAY

BLM's Buffalo, Wyoming Field Office is preparing an amendment to the 1985 Buffalo RMP based on new information from recent sage-grouse inventories and scientific studies. The Buffalo Field Office has acknowledged, "Current management practices may be insufficient to sustain local sage-grouse populations." *See* Fact Sheet, Greater Sage-Grouse Buffalo Field Office RMP Amendment (May 28, 2008). Indeed, the Buffalo Field Office concluded: "New information from monitoring and studies indicate that current RMP decisions/actions may move the species toward listing[, which] conflicts with current BLM decision to implement BLM's sensitive species policy." Sage Grouse Plan Amendment, Land User Information Meeting (May 28, 2008, Buffalo, WY).

Notably, BLM has explained that uniformity of action between its offices is critical to successful wildlife management – particularly in the context of managing sage grouse habitat at the landscape level. BLM's National Sage Grouse Habitat Conservation Strategy provides:

> FLPMA gave BLM the legal authority and mandate to manage and regulate the uses on the public lands "so that their various resource values are utilized in a combination that will best meet the present and future needs of the American people" (Section 103 (c)). *Consistency and coordination* in identifying and addressing threats to sage-grouse and sagebrush habitat in context of the multitude of programs that BLM manages *is required*. Addressing these threats throughout the range of the sage-grouse is *critical* to achieving the mandate of FLPMA and threat reduction, mitigation, and elimination to sage-grouse and sagebrush habitats.

Id. at 4 (emphasis supplied).

THE PROPOSED RULE IS NEEDED TO ENSURE THE GREATER SAGE GROUSE DOES NOT BECOME THREATENED OR ENDANGERED

"BLM-administered lands comprise in excess of 300 million acres that support significant and diverse populations of fish and wildlife." 43 C.F.R. § 24.4(c). BLM manages approximately half the remaining sage brush habitat in the United States. Its ability to contribute – or not – to the conservation of sage grouse is unprecedented and unparalleled. However, informal statements about the importance of sagebrush conservation and the role of habitat management in protecting sage grouse is not enough to prevent the sage grouse from being listed under the ESA.

FWS is required to determine whether the "inadequacy of existing regulatory mechanisms" warrants listing the sage-grouse. *See* 16 U.S.C. § 1533(a)(1)(D). When making this determination, FWS may not rely on voluntary measures or statements of management

intent. *See, e.g., Federation of Fly Fishers v. Daley*, 131 F. Supp. 2d 1158 (N.D. Cal. 2000). Indeed, in setting aside FWS' refusal to list the sage grouse, the court explained the problem presented by FWS' initial analysis of existing regulatory mechanisms:

> ... [A]bout 46% of sage-grouse habitat is on BLM administered land. The principal threat in the eastern region was energy development, and so the FWS reviewed how the BLM was protecting sage-grouse from energy development. *The FWS concluded that it had no information* on (1) how many "older" oil and gas leases had stipulations that addressed sage-grouse protections; (2) how many more-recent leases were granted exceptions, modifications, or waivers of stipulations pertaining to sage-grouse protections; and (3) the results of Best Management Practices that were designed by the BLM to improve sage-grouse habitat.
>
> Despite these gaps of information ... [the FWS Director] never explained why the information gap did not matter. And he never explained what had changed since his 90-day finding, which concluded that habitat degradation and population declines indicated that existing regulatory mechanisms, particularly at the federal level, "may be inadequate with regard to addressing threats to the species."

Western Watersheds, supra at 1187 (emphasis supplied).

The Secretary, through BLM, has an opportunity to commit affirmatively to the protection of Greater sage grouse. If BLM codifies the protections afforded by Petitioners' proposed rule, FWS will be able to take such measures into account when considering whether additional protections under ESA are necessary.

CONCLUSION

In light of the imperiled status of Greater sage grouse throughout the western United States, and the unique role BLM can play in the conservation of this species, Petitioners hereby request that the Secretary immediately commence formal rulemaking procedures to codify the proposed rule attached hereto as Exhibit A or its substantive equivalent. The Secretary must act today to preserve sportsmen's privilege to pursue this fantastic game species. A failure to act in the face of the information presented would be inexcusable and would likely lead to listing of the Greater sage grouse under the ESA. Such a result would be contrary to the obligations and policies identified by Congress, the President, and the Secretary to date.

Respectfully submitted,

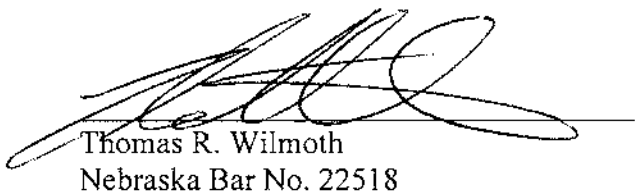


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Exhibit A

TEXT OF PROPOSED RULE

TRCP hereby proposes the following rule to be included in 43 C.F.R. Part 2090 Special Laws and Rules:

43 C.F.R. Subpart 2095 -- Special Wildlife Resource Values; Greater Sage Grouse

§ 2095.1. In recognition of the special status of Greater sage grouse, the peculiar threats presented to that species by energy development on the public lands, and BLM's unique ability to promote conservation of this species, all BLM Field Offices shall immediately review the adequacy of existing regulatory measures (e.g., stipulations and conditions of approval) employed to protect Greater sage grouse within their administrative boundaries and shall update, through a land use plan amendment, those measures found to be inadequate.

§ 2095.2. When performing the review and update required by § 2095.1, the authorized officer shall employ the best scientific and commercial data available, with special deference to peer-reviewed materials, concerning the status of Greater sage grouse and the impacts of oil and gas development on the species and its habitat.

§ 2095.3. Pending completion of the review and update required by § 2095.1, authorizing officers shall preclude surface disturbance within two miles of an active Greater sage grouse lek in any development approval.

Exhibit B

WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006
Phone: (307) 777-4600 Fax: (307) 777-4610
Web site: http://gf.state. wy.us

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.

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 Winmill, 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 - Leks

Research in Montana and Wyoming in coal-bed methane natural gas (CBNG) and deep-well fields suggests that impacts to leks from energy development are discernable out to a minimum of 4 miles, and that some leks 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 leks is projected to reduce the average probability of lek persistence from 87% to 5% (Walker et al. 2007). Only 38% of 26 leks inside of CBNG development remained active compared to 84% of 250 leks outside of development (Walker et al. 2007). Of leks 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 leks (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.

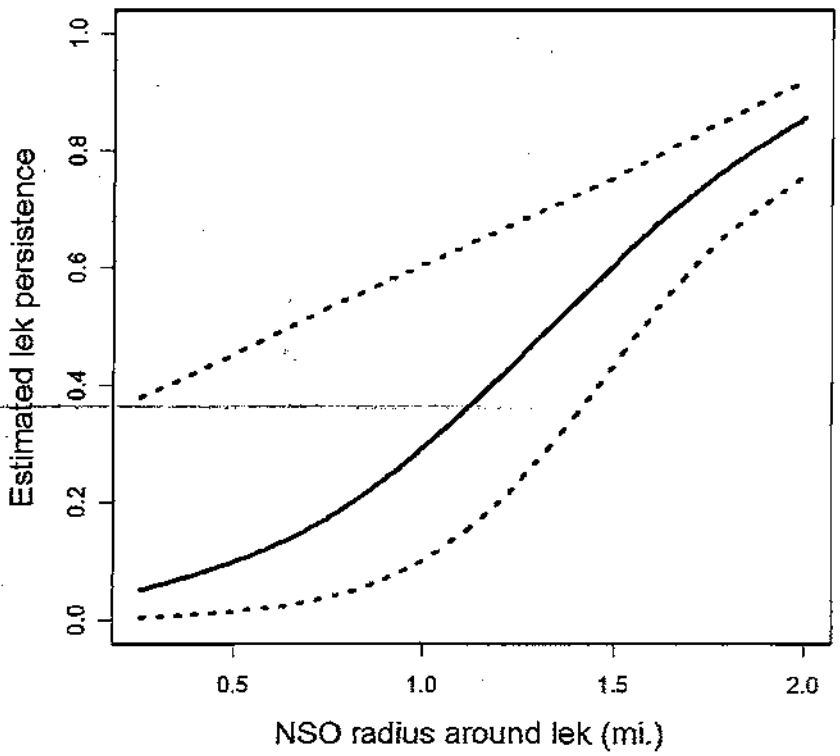

Figure 1a. Estimated probability of lek persistence (dashed lines represent 95% CIs) in fully-developed[1] coal-bed natural gas fields within an average landscape in the Powder River Basin (74% sagebrush habitat, 26% other habitats types) with different sizes of no-surface-occupancy (NSO) buffers around 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.

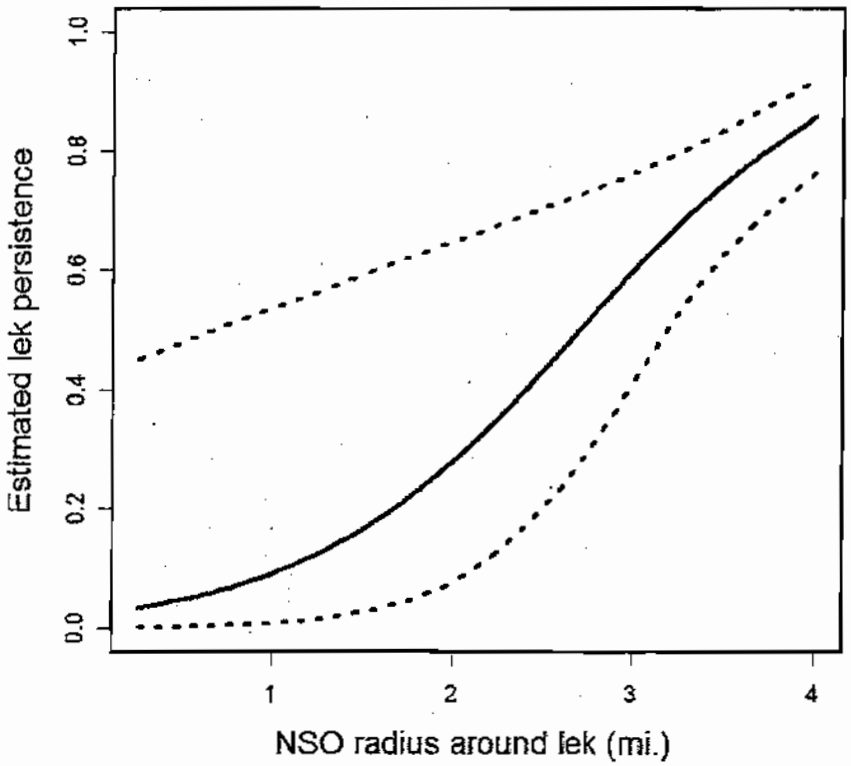

Figure 1b. Estimated probability of lek persistence (dashed lines represent 95% CIs) in fully-developed[2] coal-bed natural gas fields within an average landscape in the Powder River Basin (74% sagebrush habitat, 26% other habitats types) with different sizes of no-surface-occupancy (NSO) buffers around 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

Exhibit C

AFFIDAVIT OF DAVID A. ROBERTS

DAVID A. ROBERTS, being first duly sworn, deposes and states of his own knowledge:

1. I am a U.S. citizen and a resident of Laramie County, Wyoming. I reside at 7126 Cordova Drive, Cheyenne, Wyoming 82009-2615. My home phone # is (307) 637-3848.

2. I am of sufficient age (DOB: 12/19/46, = 51 1/2 yrs.) to testify, and to the best of my knowledge, I have no physical or psychological dysfunctions that affect my mental capacity.

3. I received a Bachelors of Science degree in Fish and Wildlife Management from Montana State University (MSU) in Bozeman, Montana, in June, 1968. I also received a Masters of Science degree in Fish and Wildlife Management from MSU in June, 1970. The focus of my Master's field work was pronghorn antelope range use and food habits in the Yellowwater Triangle of east-central Montana. Prior to coming to work for the BLM, I worked in temporary biological positions for the USDA-Forest Service and the Montana Fish and Game Department. I also worked in a permanent biologist position for a consulting firm (Ecological Consulting Service of Helena, Montana) for two+ years in eastern Montana before hiring on with the Bureau of Land Management.

4. I am currently a wildlife biologist (wildlife program leader) for the U.S. Department of the Interior-Bureau of Land Management (BLM), Wyoming State Office, in Cheyenne, Wyoming. My work address is: 5353 Yellowstone Road, P.O. Box 1828, Cheyenne, Wyoming 82003-1828. My work phone # is: (307) 775-6099. I have been employed in this capacity since July 5, 1985. I was first employed by the BLM in the Miles City District, Miles City, Montana, in December, 1974. I served in 3 biologist/ecologist positions in Miles City, then moved to the Worland BLM District in Worland, Wyoming, in December, 1978 (1 biologist position), prior to moving to Cheyenne in July of 1985. I have nearly 24 years of professional, biological experience with the BLM, much of it in the areas of question.

5. I am aware Wyoming Audubon and Linda B. Rawlins have appealed the Record of Decision (ROD) for the Jonah II Field Natural Gas Development Project Environmental Impact Statement (EIS) in southwestern Wyoming to the Interior Board of Land Appeals (IBLA). I have read the appellants' Statement Of Reasons and Request For Stay, and I am generally familiar with the stated grounds for their action. In summary, it seems to me the appellants have two major contentions: 1.) they believe the BLM has not complied with its own land use plan decisions, and 2.) they believe the BLM's sage grouse protective stipulations/restrictions on development activities on the public lands are too lax and scientifically unsupportable.

6. The purpose of this affidavit is for me to state my professional knowledge, experience, and opinion as a wildlife biologist routinely dealing with wildlife resource management issues and policy. Most specifically, I will address the matter of the origin and use of the 1/4 mile surface use restriction around sage grouse breeding grounds (variously termed strutting grounds, or leks).

7. The sage grouse strutting ground has been recognized for many years as a key habitat component of the species. The species survival strategies and behavior have evolved over the eons to incorporate the strutting ground as the central focus of the breeding activities. For this reason, the BLM has long felt that special protection from habitat loss and human disturbance should be provided to the leks for the welfare of the sage grouse.

   Several questions have existed for a long time. What kinds of impacts result to sage grouse as a result of various kinds of development activities? and, What kind of protection can be provided to sage grouse to protect them from these other impacts? Neither one of these questions have been very well investigated from a scientific standpoint, in my opinion, nor have they been definitively resolved. Setback distances and/or timing restrictions have been commonly used to protect leks from disturbance, but their real effectiveness is largely unknown.

   In a review of the readily available literature, I have been able to find very little reference to a 1/4 mile buffer guideline for protection of sage grouse leks from disturbance. The one reference that I have been able to locate came out of an early (draft) edition (circa 1965) of the sagebrush management guidelines. The final guidelines did not contain the 1/4 mile reference. In checking with a number of other biologists, both in Wyoming and in other neighboring states, they also were unable to tell me of any ***scientific*** origin for the 1/4 mile buffer. Yet, Wyoming and most of the other states BLM offices I checked, have used the 1/4 mile buffer now or at one time or another in the past. I have enclosed some responses that show this.

   Though this was before my time, I suspect this is the way the 1/4 mile distance came into use:

   > During the late 1950's and early 1960's, the land management agencies of the Federal government (especially the BLM and FS) were doing a lot of sagebrush eradication (vegetation control) as a form of "range improvement". Most biologists at that time recognized this practice could be quite detrimental to sage grouse populations. As a result, the Western States Sage Grouse Committee was formed to address some of these impact issues. By the mid 1960's, the committee had developed some initial sagebrush management guidelines. The amount of impacts information was small at that point, however, so the initial guidelines were largely a guess at what would be appropriate protection for sage grouse. The 1/4 mile distance was mutually,

though not scientifically, accepted as a buffer distance from sage grouse leks to protect them from vegetation manipulations. Several editions of the guidelines were created from their initiation in the mid 1960's until their final publication in The Wildlife Society Bulletin in 1977. The 1/4 mile distance dropped out somewhere along the way. The BLM started using the 1/4 mile distance, for lack of anything better, along with the rest of the guidelines, back in the late 1960's. Over a period of time (now, 3 decades) the 1/4 mile distance just evolved into a de facto "guideline" or "standard" through routine, everyday usage, even though there was not any real, empirical, scientific evidence to either support or refute its usage.

The 1/4 mile setback around leks has been used in Wyoming at least since the late 1970's, and maybe before. I do know that a statewide BLM standard stipulation for sage grouse protection in oil fields was developed and officially adopted in 1980-1981 (see attachments). While I have not been able to establish a scientific basis for the 1/4 mile setback around leks, I believe the memos corroborate that a number of people in several offices were consulted, and that this guideline was at least acceptable, if not entirely 100% consensual at that time.

8. While there is very little or no empirical, scientific data out there to either support or refute the 1/4 mile no surface disturbance standard, there does seem to be an increasingly larger "pile" of anecdotal data accumulating to suggest a 1/4 mile setback may not be adequate. Some more recent (within the last 5-8 years) studies and anecdotal observations would suggest that a greater distance (possibly 1/2 mile) would be a more appropriate protective buffer around sage grouse leks. Even these more recent studies, however, have not really been designed to empirically ascertain an appropriate setback distance. I personally believe it would be inappropriate, however, to leap to some other guideline/standard until this whole impacts situation is scientifically investigated further.

FURTHER AFFIANT SAYS NOT.

Dated this 20th day of July, 1998.

David A. Roberts

David A. Roberts

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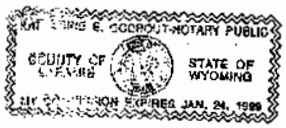
Subscribed and sworn to before me by David A. Roberts this 20th day of July, 1998.

Witness my hand and official seal.

SEAL



Katherine E. Godbout
Notary Public

My Commission Expires: Jan. 24, 1999

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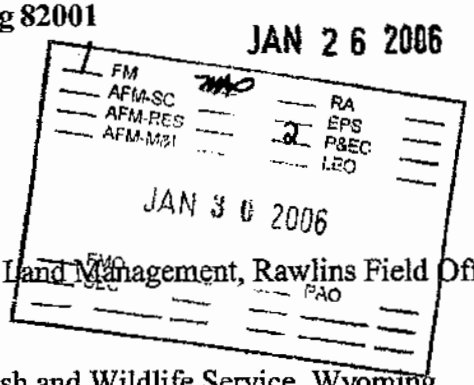
Exhibit D

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001



In Reply Refer To:
ES-61411/W.02/WY10031

Memorandum

To: Mark Storzer, Field Manager, Bureau of Land Management, Rawlins Field Office, Rawlins, Wyoming

From: Brian T. Kelly, Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, Cheyenne, Wyoming

Subject: Atlantic Rim Natural Gas Project Draft Environmental Impact Statement

This is regarding the December 2005 Draft Environmental Impact Statement (DEIS), for the proposed Atlantic Rim Natural Gas Project located in T13-20N, R89-92W, in Carbon County, Wyoming. Anadarko Petroleum Corporation (proponent) proposes to drill 1800 coal bed natural gas wells and 200 deep conventional wells on 270,080 acres of combined federal, state and private lands. The wells are proposed at 80-acre spacing and will be developed over a 20-year period with an estimated life of project of 30 to 50 years. The U.S. Fish and Wildlife Service (Service) has reviewed the DEIS and we are providing you with the following comments.

General Comments

The Service has responsibility, under a number of federal laws, treaties, Executive Orders, and memoranda of agreement, for the conservation and management of fish and wildlife resources. Some of these same authorities also require other federal agencies to consider, avoid, or prevent adverse impacts to fish, wildlife, and wetland resources. We provide comments on (1) threatened, endangered and candidate species, (2) migratory birds, (3) wetlands and riparian areas, and (4) sensitive species. The Service provides recommendations for protective measures for threatened and endangered species in accordance with the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Protective measures for migratory birds are provided in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703 and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668. Wetlands are afforded protection under Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act, 48 Stat. 401, as amended, 16 U.S.C. 661 et seq, and the Fish and Wildlife Act of 1956, as amended, 70 Stat. 1119, 16 U.S.C. 742a-742j.

The DEIS states that drilling is proposed on nine Plan of Development (POD) areas. However, six of the PODs are currently partially developed under an Interim Drilling Policy established by the Bureau of Land Management (Bureau) in January 2002. The Interim Drilling Policy allowed up to 200 exploration coal bed natural gas wells within the project area while the Environmental Impact Statement was being prepared. National Environmental Policy Act (NEPA) analysis of this interim development was documented in an individual Environmental Assessment (EA) for each POD.

384-1-1 384-1 The Service previously reviewed the six individual EAs and provided comments to the Bureau expressing our concern that the cumulative effects of full field development would not be adequately analyzed with individual EAs. We recommended that the Bureau complete the EIS before any drilling was permitted to ensure that decisions made by the Bureau considered the consequences of the full field development; however, to date, 116 wells have been drilled under the Interim Drilling Policy.

384-2-1 384-2 During our review, the DEIS indicates that the project area's vegetation composition consists of nearly 95 percent sagebrush species. It also states that the project may have significant effects on sagebrush obligates such as greater sage-grouse, pygmy rabbit, Baird's sparrow, sage thrasher, Brewer's sparrow, and sage sparrow. The Service is concerned that the effects to habitats important to the above species may be irreversible and no amount of mitigation can restore or replace what is lost. As several of these species are known to be in decline from loss of habitat, the Service recommends that the Bureau not authorize an action that may exacerbate their decline and possibly result in listing of one or more of these species under the Act.

Specific Comments

384-3-1 384-3 384-3-2

1. Page 2-1, section 2.2.1, The Proposed Action, Bullets 5 & 6: The DEIS states that initial (short-term) disturbance will total approximately 15,800 but with reclamation the disturbance may be reduced by 9,500 acres for a total long term disturbance of 6,241 acres. *The Service is concerned that the long term disturbance figures may not reflect on-the-ground difficulties with reclamation as are discussed on page 3-48 of the DEIS (current POD conditions). The DEIS states that several of the PODs where drilling has taken place are experiencing hampered reclamation due to poor soils and poor vegetation, ineffective seeding due to wind erosion and lack of moisture, riling and gullying, excessive erosion due to inadequate road design, and well pads developed too close to drainages. Additionally, Appendix M (map 13) indicates that the soils within the project area have high run off potential which may further hinder reclamation. The Service recommends that the Bureau consider phasing in the completion of each POD based on the reclamation success of the previous POD. The Bureau should also work closely with the project proponent during the siting of well pads, roads and other facilities to minimize erosion problems.*

384-4 2. Page 3-72, Greater Sage-grouse Page 4-65, Upland Game Birds: Page 3-72 of the DEIS states that there are 88 lek locations in and within two miles of the project area. It also states that 85 percent of the project area consists of Wyoming and mountain big sagebrush habitat which sage-grouse are dependant on year-round. The DEIS goes on to state that the Bureau protects sage-grouse by requiring a 0.25-mile controlled surface use

buffer around identified leks as well as a 2-mile seasonal buffer around leks to protect nesting habitat. Page *4-65* states that sage-grouse are abundant within the project area with approximately 92 percent of the area consisting of nesting habitat. *The Service is very concerned that authorization of this project, as proposed, will significantly affect the population of greater sage-grouse that occurs in this area of Wyoming. Adverse affects to sage-grouse may occur through the long-term loss of sagebrush habitat, fragmentation of habitat, and noise associated with project activities. The Service does not support a 0.25-mile protective buffer around sage-grouse leks as a mitigation measure, nor do we support a 2-mile buffer to protect nesting habitat. As you know, Lyon et al. (2003) found that disturbance can increase the distance from leks to nest sites and that the majority of hens from disturbed leks (as may be the case here), nested greater than 2-miles from the lek, while the majority of hens from undisturbed leks nested within 2-miles of the lek.*

Additionally, recent information from a doctoral dissertation on the impacts of oil and gas development to greater sage-grouse in the Pinedale Anticline found that as development increased, lek activity declined up to 100 percent (Holloran 2005). Negative impacts to active leks extended to a distance of 5 km from an active drilling rig. Similarly, juvenile male recruitment to impacted leks also fell. Nesting females also avoided areas with high well densities, although site fidelity to previous nesting locations may result in delayedpopulation response to the habitat changes associated with development. While some birds were displaced by the disturbance, Holloran (2005) also found that many sage-grouse discontinued breeding attempts, and others died at a higher rate than birds from unaffected areas. His conclusions suggest that natural gas field development contributes to local sage-grouse extirpations. Additionally, Holloran concluded that stipulations placed on oil and gas development in the Pinedale Anticline, which are identical to those proposed for the Atlantic Rim development, were insufficient to maintain sage-grouse breeding populations in natural gas fields.

The Service strongly recommends minimum protection measures as described by Connelly et al. (2000). The Service also encourages the Bureau to use its authority and not grant exceptions to protection measures for sage-grouse.

Finally, the Service would like to remind the Bureau of the 2001 Memorandum of Understanding (MOU) that the U.S. Forest Service, the Bureau, and the Service signed on with the Western Association of Fish and Wildlife Agencies to conserve the greater sage-grouse and its habitat. This MOU outlined the participation of Federal and State wildlife agencies, including the Wyoming Game and Fish Department, in greater sage-grouse conservation, and these commitments should be considered in project planning in sage-grouse habitat.

3. Page *3-83*, Sensitive Wildlife Species, Page *4-61* and Page *4-68*, General Wildlife Species, Page *4-73*, Impacts Summary, Page *4-81*, Sagebrush Obligate Songbirds, and Pane *4-89*, Sensitive Species: The pages of the DEIS listed above briefly discuss sagebrush obligate songbird species and state how impacts from this project would significantly affect nesting and foraging habitats exceeding the significance criteria as established in the Draft Resource Management Plan for the Rawlins Field Office. *The Service is concerned that the DEIS does not discuss the Bureau's obligation to protect*

384-4-2 384-4-1 384-4-3 384-4 384-4-4 384-4-5 384-4-6 384-5 384-5-1

384-5-1 384-5-2 384-5

migratory birds under the MBTA. Although the DEIS states that the effects exceed the established criteria threshold, it does not state what measures will be implemented to directly protect migratory birds, especially Brewer's sparrow, sage sparrow, sage thrasher and Baird's sparrow, all known to occur within the project area. To avoid further decline of sagebrush obligate songbirds we recommend that the Bureau identzfi habitats within the project area important to migratory birds and clearly identify measures that will be implemented to reduce the effects so that they fall below the Bureau's significant effects criteria.

384-6-1 384-6

4. Page 4-77, Proposed Action: The DEIS states that blowout penstemon and Ute ladies'-tresses would not be impacted by the project. However, the biological assessment (Appendix G) states that the project "may affect, but is not likely to adversely affect" both species. *The Service recommends that the final EIS clarify whether these species may be affected by the project. In the event that listed species may be affected, the Bureau should initiate section 7 consultation under the Act and request Service concurrence their determinations.*

384-7

5. ~~Pane 5-16, Greater Sage-grouse and Columbian Sharp-tailed Grouse~~: The DEIS's cumulative effects analysis for the greater sage-grouse states that direct and indirect impacts from habitat fragmentation, dust, noise and long term loss of sagebrush habitat would be cumulatively significant leading to long-term decline in the population of sage-grouse. *Please see comment #2 above. The Service reminds the Bureau of their commitment to conserve the greater sage-grouse and its habitat.*

We encourage the Bureau to ensure the conservation of endangered, threatened, and candidate species, migratory birds and sensitive species. If you have further questions regarding our comments or your responsibilities under the Act, please contact Kathleen Erwin of my staff at the letterhead address or phone (307)772-2374, extension 28.

References

Connelly J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4): 967 - 985.

Holloran M.J. 2005. Greater sage-grouse (*Centrocercus urophasianus*) population response to natural gas field development in western Wyoming. Ph.D. Dissertation, University of Wyoming, Laramie, WY. 115 pp., plus appendices.

Lyon A.G., S.H. Anderson. 2003. Potential gas development impacts on sage grouse nest initiation and movement. Wildlife Society Bulletin 31(2): 486-491.

cc: BLM, State Office, State Director, Cheyenne (B. Bennett)
FWS, Regional Office R6, Energy Coordinator, Lakewood, Colorado (B. Dach)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne (V. Stelter)
WGFD, Non-Game Coordinator, Lander (B. Oakleaf)

Exhibit E

STATE OF COLORADO

Bill Ritter, Jr., Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
AN EQUAL OPPORTUNITY EMPLOYER

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For Wildlife-
For People

October 24, 2007

Ms. Sally Wisely
State Director
Colorado State Office
U.S. Department of Interior, Bureau of Land Management
2850 Youngfield Street
Lakewood, CO 80215

Re: November Lease Sale for Oil and Gas for the State of Colorado

Dear Sally,

The Colorado Division of Wildlife (CDOW) would like to express our sincere appreciation to the Colorado State Office of the Bureau of Land Management (BLM) for meeting with CDOW and Department of Natural Resources staff on October 17, 2007. We feel that this meeting was highly productive and we appreciate your attention to our concerns. Thank you as well for the productive follow up conversation with Roxanne Falise on October 24, 2007. Our understanding based on those discussions is that BLM will defer the leasing of parcels in North Park that occur in greater sage-grouse core areas west of State Highway 125. This area encompasses a majority of the greater sage-grouse core areas that we discussed as being a high priority for sage-grouse during the meeting on October 17, 2007. We also understand that the remaining lease parcels in greater sage-grouse core areas will have lease notices attached that advise lease buyers of the possibility that additional conditions of approval may be attached following Resource Management Plan (RMP) revision.

We also understand that BLM will defer the leasing of the large block of parcels located north of U.S. Highway 40 and west of State Highway 125. This area contains greater sage-grouse habitat and is important to wintering and migrating big game. We appreciate your attention to the concerns that were raised with regard to this area, and we recommend that BLM attach lease notices to the non-deferred leases in this area as well.

We feel that our meeting on October 17 was very successful and hope to be able to continue to work with Field Office and State Office staff to resolve concerns. There is no substitute for a close working relationship between our agencies. We appreciate your attention to these concerns and your flexibility and willingness to work with the State of Colorado on these issues. There are additional wildlife issues with the November lease sale parcels that we did not have the opportunity to discuss in detail during the

October 17, 2007 meeting. The remainder of this letter addresses additional concerns that we would like to bring to your attention.

CDOW is concerned that most of the RMPs which define land management prescriptions for areas covered by this lease sale are one or more decades old and are all undergoing revision. Some of the RMP revisions were initiated because the reasonable foreseeable development scenario for oil and gas development (RFD) has been or is nearly being exceeded. CDOW believes that significant new information has developed since 2005 which provides information on impacts of oil and gas development on wildlife. Increased levels of development have been shown to have much greater impact on wildlife than previously thought. Many of the proposed lease parcels are located in important wildlife habitats, where impacts are expanding and cumulative, challenging land managers to find new ways to conserve wildlife. The current RMPs do not fully analyze the effects of oil and gas development on wildlife. Our recommendation is that BLM defer leasing until the RMPs have been revised which will likely result in modernization of the land management prescriptions. At minimum, new leases should have lease notices alerting the lessee of potential changes resulting from RMP revision.

RMP Revision Status:

- Almost all of the proposed leases are within BLM Field Offices that are either in the process of re-writing their RMPs or that are about to begin the process. **Stipulations applied to leases in the November sale would be limited to those from the existing RMP or the statewide oil and gas Environmental Impact Statement (EIS).**
    - All of the RMP/EISs in question are very dated. Little Snake RMP 1989, Kremmling RMP 1984, White River RMP 1997, San Juan/San Miguel RMP 1985, and Uncompahgre Basin RMP 1989. All of these field offices are operating under the statewide oil and gas leasing EIS dated 1991.
    - BLM has already held that each of the RMPs scheduled for review is inadequate in some fashion, in several cases because the oil and gas RFD substantially underestimates the amount and/or intensity of development.
    - None of the RMP/EISs have adequately quantified cumulative impacts of development, either within a single extractive technique (e.g. deep natural gas) or between industries (e.g. natural gas and coal bed methane in North Park, natural gas and uranium in Middle Park and southwestern Colorado, natural gas and coal or coal bed methane in Little Snake).
    - Oil and gas development on these proposed leases in North Park, and potentially Middle Park, will likely include drilling for coal-bed methane (CBM). CBM can create high well densities, which may lead to measurably different impacts than traditional natural gas development.

November Lease Sale Concerns:

- Leasing these areas under the provisions of outdated planning documents ignores the body of scientific literature that has been accumulated in recent years and precludes the application of adaptive management strategies in oil and gas development areas.
- The proposed lease blocks are concentrated in some of the most important remaining unleased wildlife habitats. Affected wildlife species include three Federally listed big river fishes and

several sensitive species/species of special concern for BLM/CDOW. Some of these species have been recently petitioned and are either in court or likely to be repetitioned for federal protection under the Endangered Species Act (ESA). Many of these lease areas also provide important habitats for big game. The protection of large blocks of habitat for big game will also protect a variety of other wildlife species.

- BLM's proposal to lease these areas, based on inadequate analysis of development potential and wildlife impacts, puts CDOW in a difficult position with respect to the statutory obligation to sustain wildlife species and wildlife habitats.
- For species such as greater sage-grouse, Gunnison sage-grouse and Gunnison's prairie dog, additional leasing of important habitats will make defending against future ESA listing petitions more difficult and may ultimately contribute to ESA listing and Federal protection for these species.

Impacts to Wildlife:

- BLM maintains that the opportunity to add sufficient wildlife protections remains once leases are issued. CDOW's experience has been that conditions of approval placed on leases after they are issued can be inadequate to protect wildlife habitats from the effects of oil and gas development.
- It is anticipated that wildlife protection measures will be substantially expanded when these RMP documents are revised and records of decision are approved.

Species Specific Concerns:

Greater Sage-Grouse/Gunnison Sage-Grouse:
Both species are considered sensitive species by BLM and species of special concern by CDOW. Both have been petitioned for listing under the ESA in recent years. U.S. Fish and Wildlife Service (USFWS) listing decisions for greater and Gunnison sage-grouse have been or are still in court. Additional petitions are expected in the future. Neither greater nor Gunnison sage-grouse became a major conservation issue until approximately 1995—well after almost all of the RMP/EIS documents governing this lease sale were written. BLM participated in the development of and is a signatory to the Gunnison sage-grouse rangewide conservation plan, completed in 2005. The statewide greater sage-grouse plan is in final draft preparation for signature. Both plans call for expansion of current sage-grouse protections (e.g., 0.6 mile no surface occupancy (NSO) around leks, expansion of nesting habitat timing limitations to 4-mile radii).

All of the recent studies on the effects of oil and gas development on greater sage-grouse in Wyoming and Montana (Braun et al. 2002, Lyons and Anderson 2003, Holloran 2005, Naugle et al. 2006 (two reports), Kaiser 2006, Walker et al. 2007, Doherty et al. in press) demonstrate that impacts on greater sage-grouse substantially exceed previous thinking. Several studies go on to state that existing stipulations to protect sage-grouse (those that would be attached to these proposed leases under the existing outdated RMPs) are inadequate to prevent substantial declines in affected greater sage-grouse populations. Gunnison sage-grouse can be expected to react similarly to oil and gas development. These studies are all more recent than any of the current BLM RMP/EIS documents.

This significant and substantial information was not available for the NEPA analysis on any of the existing RMPs and demonstrates much higher risk of impact than was previously thought. Therefore,

the original NEPA analyses are not adequate to support these lease proposals. CDOW analyzed and developed greater sage-grouse core areas (that area encompassing 50% of the breeding males in each population) and proposed using these areas as temporary refuges to maintain sage-grouse populations while oil and gas development proceeded in less important adjacent habitats (CDOW 2006). At a minimum, these core areas represent the most important habitats for greater sage-grouse in each population in Colorado.

- Most of the leases offered in the Little Snake Field Office are located within greater sage-grouse overall range. CDOW recently recommended that greater sage-grouse core areas not be leased in the Little Snake Field Office, that oil and gas development in core areas be held to a restrictive surface disturbance cap (1% surface disturbance), and that lek protection (NSO) expand to 0.6 mile in the new RMP. Several of the proposed leases in Little Snake are located within sage-grouse core areas and would preclude the application of these existing recommendations.
- Proposed leases in North Park are concentrated within occupied greater sage-grouse habitat, including core areas, production areas, and winter range. North Park is the second largest greater sage-grouse population in Colorado.
    - Most of the leases offered in North Park are within greater sage-grouse overall range.
    - Many lease parcels are located within core areas and the vast majority is located within 4 miles of a lek site. Lease deferrals in greater sage-grouse core areas west of Highway 125 will substantially, but not completely, address this concern.
    - Leks potentially affected by development contain more than one-third of the 910 male greater sage-grouse counted in North Park in 2007.
    - Many of the leases are also located in greater sage-grouse winter range. Given the climate and topography of North Park, winter ranges are particularly important.
- Only 80 acres of the proposed leases in Middle Park are located within core areas, but several overlay a significant portion of the Parshall Divide occupied by greater sage-grouse.
    - This area supports important greater sage-grouse habitat and serves as a linkage between the core areas in western Grand County and the peripheral population around Granby.
    - Some of the proposed leases are severed minerals underlying private lands where CDOW is attempting to protect greater sage-grouse habitat with conservation easements. Mineral development will largely nullify the benefits of easements for greater sage-grouse.
- Proposed leases in the San Juan/San Miguel RMP area contains several parcels within occupied Gunnison sage-grouse habitat, including areas classified as nesting or production areas and winter range.
- While we note and appreciate the removal of many of the proposed leases within Gunnison sage-grouse occupied habitat from this lease sale, numerous leases remain along the boundary of occupied habitat. Additional leases are located between patches of occupied habitat. The Wyoming greater sage-grouse research demonstrates that impacts of oil and gas development can extend a mile or more out from the development. These peripheral leases will have impacts into occupied Gunnison sage-grouse range and could preclude efforts to reconnect patches of occupied habitat.
- Development of these leases in important greater sage-grouse and Gunnison sage-grouse habitat will materially harm CDOW's ability to defend against listing petitions and moves the species substantially closer to a successful listing action.

Columbian Sharp-tailed Grouse:
Columbian sharp-tailed grouse in Colorado are located only in Routt, eastern Moffat, and northern Rio Blanco counties. The species has twice been petitioned for federal protection under the ESA. Additional listing petitions are likely. The Columbian sharp-tailed grouse conservation plan is currently being updated to develop strategies to reduce impacts from unexpected levels of oil and gas development.

- Most of the large lease block in the Little Snake Field Office is located in occupied Columbian sharp-tailed grouse habitat.
- The lease block includes three lek sites and affects nesting habitat for a number of adjacent leks.

Big Game:
Many of the proposed leases are located within mule deer, elk and/or pronghorn antelope winter range and migratory corridors, particularly sensitive habitats for these economically and recreationally important species. Development impacts in migratory corridors have magnified effects beyond the local area due to use by migrating animals from considerable distances away. As has been demonstrated in the Pinedale Anticline field, development in migratory corridors can affect an entire herd unit. Hall Sawyer reports displacement of as much as 40% of the wintering deer herd due to oil and gas development in the Pinedale Anticline field.

- The large lease block located west of Hamilton in the Little Snake Field Office is located coincident with a major mule deer and elk migratory route between the upper Williams Fork drainage and the Piceance Basin. A significant portion of the migrating deer and elk in the largest deer and elk units in Colorado use this migratory path through the Williams Fork canyon and across Isles and Duffy mountains. The northern portions of this lease area also provide important mule deer and elk winter range for large numbers of animals.
- The Middle Park lease block (both north and south of Highway 40) also stands to block a narrow, heavily traveled migratory route for mule deer, elk and antelope moving from high elevation summer ranges in eastern Grand County to winter ranges in western Grand County. This movement is topographically constrained into the area where the leases are offered. This concern will be largely addressed by deferral of leases north of Highway 40 and west of Highway 125.
- North Park leases substantially overlay big game severe winter ranges and winter concentration areas. As noted above for greater sage-grouse, winter ranges are particularly important in North Park. Lease deferrals in greater sage-grouse core areas west of Highway 125 will substantially, but not completely, address this concern, due to overlap with important big game winter ranges.
- San Juan/San Miguel leases encompass large acreages of severe winter range and winter concentration areas for mule deer and elk, as well as substantial elk production (calving) areas and migration corridors.
- Development of several of the offered lease blocks will also affect bighorn sheep populations in North Park and in the Dolores River Canyon. Rocky Mountain and desert bighorn sheep occupy small ranges with limited options to seek habitat elsewhere if disturbed. Desert bighorn sheep ranges are particularly constrained. Bighorn sheep have been demonstrated to be highly sensitive to construction disturbance (e.g. Waterton Canyon/Strontia Springs Dam).
    - Significant acreage of desert bighorn range in Dolores Canyon is proposed for leasing, including winter concentration and lambing areas. Dolores River sheep are a BLM species of concern and are particularly sensitive to disturbance due to their limited distribution.

- Two sections in North Park overlay a proposed bighorn sheep winter range burn treatment planned to help sustain a recently re-established bighorn sheep population.

Gunnison's Prairie Dog and Allied Species:

- Gunnison's prairie dog has been petitioned for federal protection under the ESA. The USFWS is currently conducting a court mandated 12-month finding on the petition, due in February of 2008.
- Leasing a large area of Gunnison's prairie dog habitat while the petition review is underway may affect the outcome of the review.
- Leasing under antiquated stipulations could preclude application of necessary conservation actions to avoid listing.

Colorado Pikeminnow, Razorback Sucker, Humpback Chub, Bonytail Chub:

- The Yampa River downstream of the Colorado State Highway 394 Bridge is Federally listed critical habitat for the Federally endangered, state threatened Colorado pikeminnow *Ptychocheilus lucius*. The formal listing criteria for pikeminnow critical habitat includes the river and its 100 year floodplain from the Colorado State Highway 394 bridge downstream to the confluence with the Green River.
- The Yampa River and its 100-year flood plain from the mouth of Cross Mountain Canyon downstream to the confluence with the Green River is Federally listed critical habitat for the Federally endangered, state endangered razorback sucker *Xyrauchen texanus*.
- The Yampa River from the boundary of Dinosaur National Monument downstream to the confluence with the Green River is Federally listed critical habitat for the Federally endangered, state threatened humpback chub *Gila cypha*.
- The Yampa River from the boundary of Dinosaur National Monument downstream to the confluence with the Green River is Federally listed critical habitat for the Federally endangered, state endangered bonytail chub *Gila elegans*.
- The Yampa River is extremely important to the recovery of these Federally and State listed fish. The State of Colorado has invested heavily to ensure the suitability of the Yampa River for this purpose. The CDOW is concerned that the cumulative impacts of energy development and extraction from the proposed November 2007 lease sale and similar projects in the Piceance Basin will have a deleterious impact on our ability to make significant progress in the recovery and eventual delisting of these species across the Western Slope.
- Surface disturbance of soils by occupancy and development can result in the addition of significant quantities of sediment to the river during times of critical fish activity.
- Accidental release of condensate, drilling fluid or other contaminants to the river would likely cause significant fish mortality.
- An 800 meter protective buffer (each side of the river from the river center line) would significantly reduce the potential threat to the survival of these fish from human activities as long as onsite methods to prevent the excursion of spilled materials into the buffer zone are used effectively. Many of the proposed lease blocks cross the Yampa River which could result in an increase of unimproved low water river crossings.

- Chemical spills have already occurred at river access points within critical habitat on the Yampa River which have required significant effort by state and local agencies to remediate. Additional river access points will complicate deterrence and enforcement efforts.
- Late summer water levels in the Yampa River already approach critically low flows for the maintenance of fish species. Additional water depletion for drilling activities will further compromise fish health and survival.

Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker:

- The roundtail chub, bluehead sucker and flannelmouth sucker are found in the Yampa and Dolores rivers and are Colorado species of special concern. They are also BLM-designated sensitive species.
- CDOW and BLM are signatories to the *Rangewide Conservation Agreement for Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker* (Utah Department of Natural Resources Division of Wildlife Resources, Publication Number 06-18, 2006).
- Several lease blocks in Moffat County encompass portions of the Yampa River important to the maintenance of these three species. Degradation of the Yampa River's water quality, quantity, and ability to support naturally reproducing native fish will have severe consequences for the listing status of these species.

- Several lease blocks in Montrose and San Miguel Counties encompass portions of the Dolores River Canyon and areas adjacent to the Dolores River. The roundtail chub, bluehead sucker, and flannelmouth sucker in the Dolores River are declining and are particularly sensitive to water depletions in the Dolores River Basin. Development of the parcels in the November 2007 lease sale may affect these species if the water necessary for oil and gas drilling and production operations is obtained from the Dolores River or its tributaries. The impacts to these species from oil and gas development operations may be additive to the impacts resulting from mining related depletions on the existing uranium leases in the area. Reductions in water quality would also affect these species.
- Leasing parcels adjacent to the Yampa and Dolores rivers is contrary to this agreement, which calls for implementing conservation actions to protect and enhance these species and their habitats, and for significantly reducing and/or eliminating threats to the persistence of these species that: 1) may warrant or maintain their listing as a sensitive species by state and federal agencies, and 2) may warrant their listing as a threatened or endangered species under the ESA.

Colorado River Cutthroat Trout:

- The Colorado River Cutthroat Trout (CRCT) is a Colorado Species of Special Concern. CDOW and BLM are signatories to the *Conservation agreement for the Colorado River cutthroat trout in the states of Colorado, Utah, and Wyoming* (CRCT Conservation Team 2006).
- Designated Cutthroat Trout Habitat Areas are officially designated watersheds containing core conservation and conservation populations of cutthroat trout. Lists of Designated Cutthroat Trout Habitat areas are maintained within CDOW Chapter 0 regulations.

- Lease parcels in the Hot Sulphur Springs/Granby area overlap Designated Cutthroat Trout Habitat areas. Kinney Creek and Antelope Creek contain core conservation populations of Colorado River cutthroat trout. The Designated Cutthroat Trout habitat areas for these waters are overlapped by proposed November 2007 BLM lease parcels. Lease deferral north of U.S. Highway 40 and west of Highway 125 partially addresses this concern.
- Lease blocks near Telluride contain Elk Creek, a tributary to the San Miguel River that is habitat for the Colorado River Cutthroat Trout. Elk Creek is contained within a Designated Cutthroat Trout Habitat area.
- Leasing of blocks that overlap Designated Cutthroat Trout Habitat areas is contrary to the conservation agreement, which calls for implementing conservation measures and eliminating or reducing threats to this species that might contribute to listing under the ESA.

Wild and Scenic River Suitability

- The Little Snake Draft RMP preferred alternative calls for sections of the Yampa River affected by November 2007 lease parcels to be considered and managed as suitable for recreational and scenic classifications. Development in these lease blocks could hamper the ability of these river reaches to maintain this suitability.
- Portions of the Dolores River are considered suitable for designation under the Wild and Scenic Rivers Act. Development of leases in these portions could hamper the ability of these river reaches to maintain this suitability.

In summary, the leases proposed in the November lease sale are extensive and are focused in crucial wildlife habitats that are currently undergoing planning document revision. Significant and substantial new information on the quantity and intensity of development and the impacts of development on wildlife has been recently developed. This information was not available during the NEPA analysis in the existing plans. CDOW believes this combination of factors makes it prudent for the BLM to withdraw lease parcels until RMP revisions are complete.

We appreciate your staff taking the time to meet with representatives from DNR and CDOW on October 17, 2007 and appreciate your willingness to consider these additional issues. We understand the constraints your agency is under and the challenge of multiple use management of public lands. Thank you for your time and consideration of these comments with respect to the State of Colorado November 2007 oil and gas lease sale.

Sincerely,

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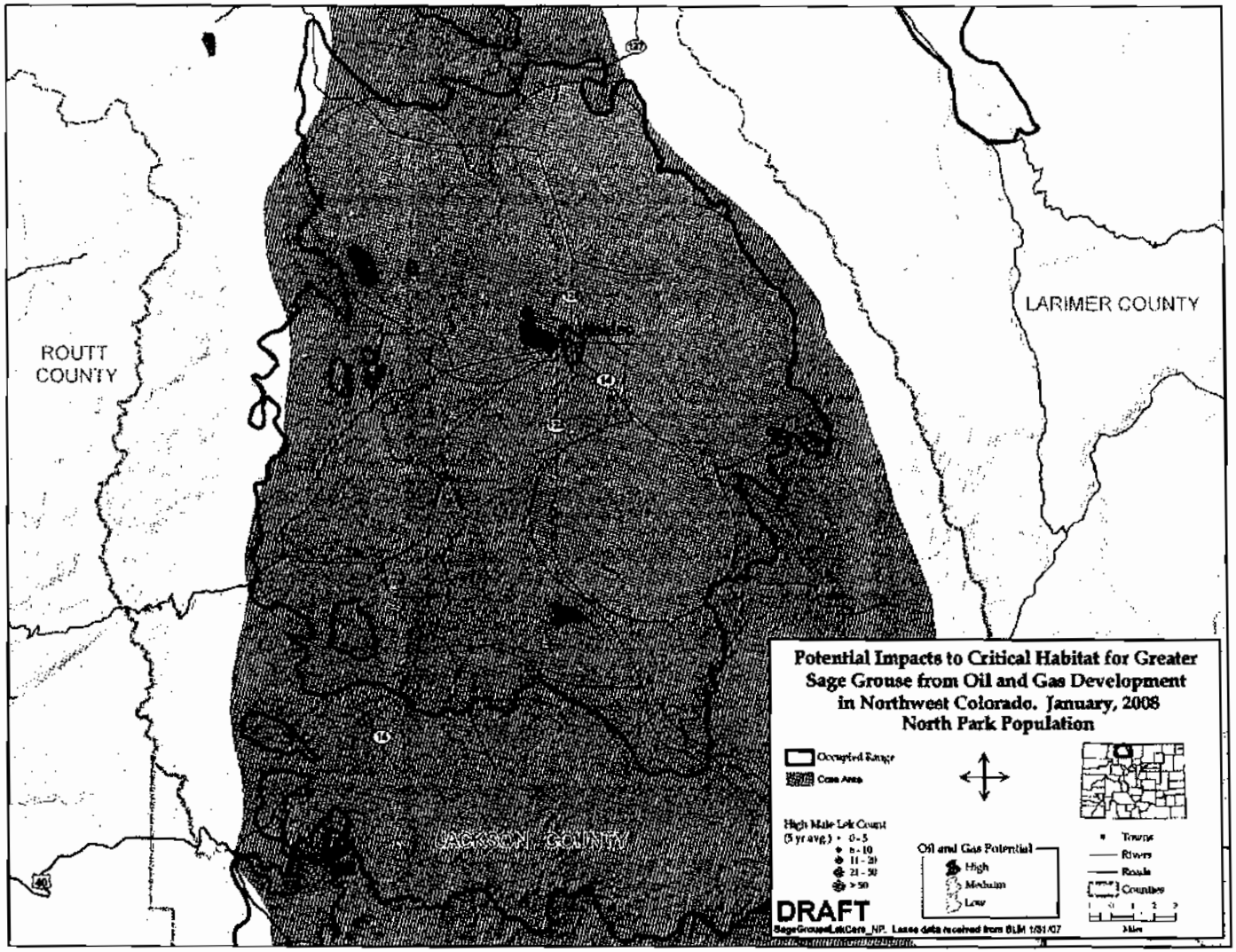
Colorado Division of Wildlife
711 Independent Ave.
Grand Junction, CO 81505


ROUTT COUNTY
LARIMER COUNTY
JACKSON COUNTY
Potential Impacts to Critical Habitat for Greater Sage Grouse from Oil and Gas Development in Northwest Colorado. January, 2008
North Park Population
Occupied Range
Core Area
High Male Lek Count (3 yr avg.)
0 - 5
6 - 10
11 - 20
21 - 30
> 30
Oil and Gas Potential
High
Medium
Low
Towns
Rivers
Roads
Counties
DRAFT
SageGrouse_LekCore_NP. Lease data received from BLM 1/31/07